

# 3

## Inauguration 1950–60: Feldman, Brown, Wolff, Cage

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 and of itself.

Cage (1955)

I imagine that as contemporary music goes on changing in the way that I'm changing it what will be done is to more and more completely liberate sounds from abstract ideas about them and more and more exactly to let them be physically uniquely themselves. This means for me: knowing more and more not what I think a sound is but what it actually is in all of its acoustical details and then letting this sound exist, itself, changing in a changing sonorous environment.

Cage (1952)

Cage's *Music of Changes* was a further indication that the arts in general were beginning to consciously deal with the 'given' material and, to varying degrees, liberating them from the inherited, functional concepts of control.

Earle Brown

It appears to me that the subject of music, from Machaut to Boulez, has always been its construction. Melodies of 12-tone rows just don't happen. They must be constructed . To demonstrate any formal idea in music, whether structure or stricture, is a matter of construction, in which the methodology is the controlling metaphor of the composition . Only by 'unfixing' the elements traditionally used to construct a piece of music could the sounds exist in themselves – not as symbols, or memories which were memories of other music to begin with.

Morton Feldman

One day I said to myself that it would be better to get rid of all that – melody, rhythm, harmony, etc. This was not a negative thought and did not mean that it was necessary to avoid them, but rather that, while doing something else, they would appear spontaneously. We had to liberate ourselves from the direct and peremptory consequence of intention and effect, because the intention would always be our own and would be circumscribed, when so many other forces are evidently in action in the final effect.

Christian Wolff

### The Early Fifties

These statements by Cage and the three younger composers who, along with the pianist David Tudor, were closely associated with him in New York in the early fifties, show an almost uniform, common urgency-practical, not polemical, in motivation – for a music which should be allowed to grow freely from sound at its very grass roots, for methods of

discovering how to ‘let sounds be themselves rather than vehicles for man-made theories, or expression of human sentiments’ (Cage, 1957).

The immediate desire to deal with what sound is, rather than what the composer may think it is or decides he wants it to be, was held communally; the philosophical and aesthetic motivations were as personal and characteristic of each composer as their music initially was and still is. It would be misleading to talk of a ‘school’ or package aesthetic, for it was rather what Cage, in another context, referred to as a ‘field situation’, a creative climate that Cage had helped to bring about, in which all four composers worked and to which they all contributed. And to talk of the ‘influence’ of Cage is an oversimplification. Dick Higgins wrote of Cage’s teaching at the New School of Social Research in the late fifties that ‘he brought out what you already knew and helped you become conscious of the essence of what you were doing’; and for Feldman (in those early days) Cage ‘liberated me in terms of self-permission to go on with what I had decided I was going to do’.

Cage’s adoption of chance and random procedures, his use of the *I Ching* as a means of making compositional decisions, his pre-indeterminacy method of ‘letting sounds be themselves’, were as much the logical outcome of his earlier methods as they were evidence of his deepening attachment to the Zen philosophy of non-involvement. He had begun attending D. T. Suzuki’s lectures in 1947, and maintains that ‘without my engagement with Zen I doubt whether I would have done what I have done’ (1961). The apparent will-lessness and quietude of Feldman’s music appear to be more in tune with what one imagines to be the ‘Zen spirit’, but Feldman has denied any interest in Zen, which to him is just another ‘think system’, no better and no worse than any other (he once said ‘my whole debt to Oriental culture is Chinese food’). And Earle Brown arrived at his ‘objective’ attitude towards sound largely from his study between 1946 and 1950 of the completely European music system of Joseph Schillinger, which was based on the qualitative and quantitative analysis of the physical material of music (i.e. sound). Brown claimed that Schillinger’s system suggested bases for objectively controlling and generating the material ‘whatever “aesthetic” context one chooses’.

But equally, Brown’s musical ideas were affected by the recent developments in the visual arts, especially the work of Jackson Pollock and Alexander Calder, for visual artists had created an environment which must have been encouraging to innovation in the other arts. In fact Feldman has written:

Anybody who was around in the early fifties with the painters saw that these men had started to explore their own sensibilities, their own plastic language with that complete independence from other art, that complete inner security to work with what was unknown to them. That was a fantastic aesthetic achievement. I feel that John Cage, Earle Brown, Christian Wolff and I were very much in that particular spirit.

It must have been pure instinct which led Feldman to the impressively simple method of working directly with sounds unhindered by pitch relationships, and (incidentally) to be the first composer to put into practice what Cage called music ‘which is indeterminate with respect to its performance’, and the first to use non-representational graphic notation. His *Projections of 1950–1* are aptly named since his aim was ‘not to “compose” but to project sounds into time, free from a compositional rhetoric that had no place here. In order not to involve the performer (i.e. myself) in memory (relationships), and because the sounds no longer had an inherent symbolic shape, I allowed for indeterminacies in regard to pitch.’

To counteract the functional, structuring and connecting power that pitch relations had assumed in Western music (either in a pitch/harmony system – as in tonal music, or a pitch/permuation system – as in serialism) Feldman simply divided up the range of each instrument into three registral areas – high, middle and low – whose boundaries were to be determined by the player who is allowed to select any pitch from each area. These ranges are indicated by boxes arranged vertically (originally on graph paper), the length of each box in terms of a four-pulse time ‘bar’ indicating how each sound is to extend in time. So that, as David Behrman has pointed out, pitch is (relatively) free while time of occurrence, timbre, number and dynamics are (relatively) fixed.

By asking the performer to make a separate decision for each box in these and subsequent graph pieces, *Marginal Intersection* and the *Intersection* works (where occasional concurrences ‘intersect’ the single notes), Feldman succeeds in unfixing the melodic continuity, in dissolving the ‘logical’ connections between one sound and the next. Each individual note, for each player, arises from a ‘blind’, unprepared situation where the so-called pitch logic of serialism is automatically ruled out; each note is heard (as far as is possible) as a separate, isolated timbre, since pitch has now become a secondary characteristic of instrumental timbre, reversing the traditional relationship.

Feldman’s attempts to release a series of individual timbral ‘weights’ is not, however, confined to any one notation method. ‘Feldman’s conventionally notated music is himself playing his graph music’ said Cage; and his method goes against all the ‘laws’ of traditional structural planning. Each note, each chord, is a separate weight, composed and heard separately, having no priority over the one coming before or after: ‘I make one sound, and then I move on to the next’ says Feldman. The poet Frank O’Hara wrote of Feldman’s conventionally notated music: ‘Notation is not so much a rigid exclusion of chance, but the means of preventing the structure from becoming an image, and an indication of the composer’s personal preference for where unpredictability should operate.’

The notated pieces thus preserve exactly the same values as the graph pieces, and present very soft, short sounds, with occasional eruptions of

And it was the new painting that, Feldman maintains, made him 'desirous of a sound world more direct, more immediate, more physical than anything that had existed before'

### Morton Feldman – I

To conjure up this new sound world Feldman kept himself untainted by European think and write systems – more so than the other three composers. While the meticulousness of Cage's chance determinations, Brown's analytical total sound continuum, and Wolff's permutations of minimal 'rows' could be lined up with the current European methods (even though intentions differed radically), Feldman's ability to escape from methodology as 'the controlling metaphor of the composition' was accomplished through a reliance on instinct, at a time when European composers were more than ever before seeking refuge in methodology and denying the force of the instinctive. Feldman has described Cage's reaction to a youthful string quartet he had written (at roughly the same time as Boulez was writing to Cage 'I must know everything in order to jump off the carpet'). Cage 'looked at it for a long time and then said, "How did you make this?"' In a very weak voice I answered, "John, I don't know how I made it." The response to this was startling. John jumped up and down and, with a kind of high monkey squeal, screeched, "Isn't that marvellous. Isn't that wonderful. It's so beautiful, and he doesn't know how he made it." Feldman adds: 'Quite frankly, I sometimes wonder how my music would have turned out if John had not given me those early permissions to have confidence in my instincts.'

#### 15 Morton Feldman Intersection 3

$\square = 176$

*Morton Feldman*

5	1	7	4	2	9		1	3	11	4	3	7	2		1
3	6	4	3	1	4	1	3	2	11	3	2	3	5		
4			1	3	5	1		4	5	1	5	1	4	1	6

	11		4	6	5	2	3	1	11	3	9	7	11	2	1	3	6	1	9
7	11		8	3	1	5	8	1	2	1	3	3	2	5	4	5	1	5	1
7	2		1	5	3	1	6	4	1	2	6	3	7						4

5	1	11	8		1		5	5	1	5		3	2	6	3	2	2	5	3	3	9	6	11
3	1		5	3			3	2	4	6		2	9	1	7	3	4	8	3	5	3	8	1
3			4				4	1	1	3		8	5	4	5	1	1	1	4	1	4	3	



16a Morton Feldman  
16b Christian Wolff



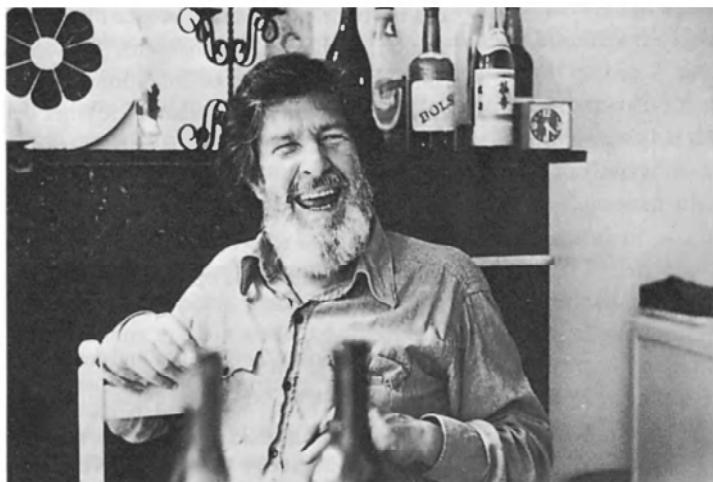
loud sounds, unmotivated, a-causal and non-symbolic. A single sound is 'named' and shown as a discrete object in its own right, surrounded by silence:

Silence surrounds many of the sounds so that they exist in space unimpeded by one another, yet interpenetrating one another for the reason that Feldman has done nothing to keep them from being themselves. He is not troubled about continuity, for he knows that any sound can follow any other [he is] not involved with the idea of making a construction of a logical nature. (Cage)

Occasionally, too, in pieces like *Structures* for string quartet (1951) and *Intermission V* and *Extensions 3* (both for piano) fragile patterns of sound are repeated some 40 or 50 times like clockwork tape loops, appearing and disappearing, in the same way as the loud sounds, without apparent logic. Feldman once said that his music should be approached 'as if you're not listening, but looking at something in nature'; the loud and repeated sounds are akin to any unexpected natural features that might suddenly appear out of nowhere on a country walk.

These early pieces also expose some of the more obvious insensitivities of serialism: we hear (as if for the first time) a high F sharp as a particular sonority, and when this is followed by an F sharp at some

6c Earle Brown, with his  
December 1952 on the wall.  
6d John Cage



other octave, we are made acutely aware that this is a very different sonority, even though it has the same 'name' as the other note and, in serial terms, precisely the same functional value. And just as refreshing is Feldman's 'withdrawal' from a dramatically striving, rhetorical style. He has written: 'A modest statement can be totally original, where the "grand scale" is, more often than not, merely eclectic.'

#### Earle Brown – I

Feldman has written of Earle Brown that what is unique about him is 'that while he possesses a mind superbly geared towards the analytic, he



has nevertheless rejected the idea of system' (unlike that other musical analyst, Karlheinz Stockhausen). 'What interests me,' Brown has said, 'is to find the degree of conditioning (of conception, of notation, of realization) which will balance the work between the points of control and non-control . . . There is no final solution to this paradox . . . which is why art is.'

Brown's interest in the work of Calder and Pollock, which he first saw in 1948 or 9, accounts for the two important aspects of his own work: spontaneity and open-form mobility. In Calder's mobiles Brown saw the

creative function of 'non-control' and the 'finding' aspects of the work within the process of 'making' the work, the integral but unpredictable 'floating' variations of a Calder mobile and the contextual rightness of Pollock's spontaneity and directness in relation to the material and his particular image of the work. Both show an awareness of the 'found object' tradition as well as established unique and personal conditions of control of the totality. The momentary resolution of this dichotomy seems to me to be the 'subject' (as distinct from object) of today's art, common to all of the arts.

The fully-notated pieces Brown wrote between 1950 and 52, such as *Music for violin, cello and piano*, exhibit a Calder-like mobility in that, as the units of a mobile undergo 'constant and virtually unpredictable but inherent change', so Brown constructed units of rhythmic groups, assembled them 'rather arbitrarily' and accepted the fact that all possible assemblages were inherently admissible and valid. The result is 'one static version of compositionally mobile elements'.

The 1952-3 works, assembled under the overall title *Folio*, are of greater significance since they move directly into performance indeterminacy

by introducing ‘invented notations of a highly ambiguous graphic nature’ which provide for a permanent mobility from one performance to another, designed specifically ‘to encourage conceptual “mobility” in the performers’ approach to the score’. If one describes an indeterminate piece as one in which the performer has an active hand in giving the music form, then Brown’s are indeterminate in the literal sense. Both Brown and Cage dramatize the structural aspect of process, as Feldman has noted, but whereas Cage fixes the structure temporally and either suggests the material or (in his earlier pieces) used the I Ching to let the content decide itself, Brown composes the content and allows, as he says, the ‘human element to operate by opening up the form’. Brown has more recently written that he sees ‘form as a function of people acting directly in response to a described environment. It seems reasonable to consider the potential of the human mind as a collaborative creative parameter.’

Coupled with the opening up of form and of the responses of the performer, Brown also realized in his early works that time was an inherently flexible component. In the prefatory note to his Folio collection of 1952 Brown wrote: ‘Time is the actual dimension in which music exists when performed and is by nature an infinitely divisible continuum. No metric system or notation based on metrics is able to indicate all of the possible points in the continuum, yet sound may begin or end anywhere along this dimension,’ and, elsewhere, that the liberation of time was a more important project than the liberation of sound. Since time is an unmeasurable variable, Brown developed what he called ‘time notation’ (which has since become a standard part of today’s compositional technique). With such a notation Brown would indicate precise pitch, loudness and note grouping, but would allow the durations to be in a relatively flexible visual-temporal relationship to one another – not metric and countable as in traditional notation. Consequently ‘time is not indicated mechanistically, as with rhythm. It is articulated for the performer but not interpreted for him’ (Feldman), being geared to counteract the discrepancy between the written page and the realities of performance. The first score in this time notation – Brown’s first ‘open form’ work – is *Twenty-Five Pages for 1 to 25 pianos*, written in June 1953. Here all the sound material is composed but the ultimate form, the organisation of the given material, is left open. This introduces what Brown calls ‘inherent variability of the pitch content of the material’. And the pages themselves may be played in any sequence and, because of a characteristic of the time notation, in either inversion of the page.

However, the most open works that Brown conceived in the early fifties were two that fixed the structure but left the material unspecified. December 1952, for one or more instruments and/or sound-producing media, is completely graphic and consists of 31 horizontal and vertical

blocks, of different lengths and thicknesses spaced over a single sheet. *Four Systems* (1954) is similar except that here the rectangles are placed in four equal divisions – the systems. Both these scores are related to Cage's rhythmic structures, with the difference that Brown presents the performer not with given lengths of time or number of bars, but with actual spaces which are to be filled or represented by any type or combination of sounds, according to any chosen time scale.

The initial impression of these two scores is that the blocks should represent chords or clusters, or sustained sounds of some sort. But this is not necessarily so. A version John Tilbury made some years ago of December 1952 treats the horizontal rectangles as melody, with thickness as intensity and length duration; the vertical blocks are represented by harmony, with width again as intensity and height frequency. And a performance which Brown himself directed in 1969 was filled with sounds which were very much in accordance with the musical taste of the late sixties. (By providing musicians with blank forms, Dick Higgins once pointed out, 'the most relevant materials for a given time and mentality can be filled in, thus avoiding the appalling irrelevance of perishable materials that are no longer relevant.' This is not necessarily true either, since the values and concepts embodied in the blank form may become equally perishable, out-of-date and irrelevant.)

What is especially relevant about December 1952 and *Four Systems* is that, so early in the inauguration period of experimental music, they allow the performers the freedom to ask (and answer) for the first time in musical history such questions as: What are the units of time? And how do they relate to the total time, the time of individual rectangles, the time of the silences between them? Should the intensity range refer outside the piece or not? Given that all the rectangles fall within a fairly narrow range of widths, should the gradations of loudness be within a similarly narrow dynamic range – that is, soft – or could one use a total continuum of very soft to very loud corresponding to the scale of thinnest to thickest rectangles? And should the relating of musical elements to the rectangles be logical or arbitrary, consistent or inconsistent? The score itself is mobile, too: 'The composition may be performed in any direction from any point in the defined space for any length of time and may be performed from any of the four rotational positions in any sequence.'

### Christian Wolff – I

Christian Wolff said of the early days in New York, when he, Feldman and Cage brought their latest pieces round to show each other: 'Sounds were treated as self-contained counters, and fitting them together was a bit like making moves in a game of chess.' Wolff was only 16 when he first met Cage, and unlike Cage, Feldman and Brown had no pre-

viously acquired musical culture to ‘unlearn’. At the same time as Cage and Feldman were discovering performance indeterminacy (in *Imaginary Landscape No. 4* and *Projections I* and *IV* respectively) Wolff had found his own methods of de-systematization which allowed the chance element to emerge in performance. One piece involved writing notes down the page in vertical columns while the player read and played them across the page in the normal fashion. He also wrote pieces for voice in which no actual notes were given: there was just a line moving up and down across the page which indicated the general direction that the sung pitches should move in. Wolff’s intention was to treat the voice in the same way as a non-pitched percussion instrument where it is impossible to determine exactly the pitch that will result from the notation.

But Wolff’s major preoccupation in 1951 and 2 was with completely written-out pieces which revolved around a very restricted number of pitches. The *Trio* for flute, clarinet and violin uses only three pitches (a ‘tonal’ E, B and F sharp), *Trio I* for flute, trumpet and cello uses four pitches (an ‘atonal’ G, A, A flat and C) while the *Duo for Violins* of 1950 uses three notes covering only a tone – D, E flat and E natural. These go on for six or seven minutes, and what interested Wolff was not so much the notes themselves as their overlapping and combination. This is a kind of minimal serialism, used without any perceptible system, by which the selected pitches were shaken up in as many different patterns, rhythms, dynamics and timbres as possible. Wolff’s motive was simply to discover how free he could be within very narrow limits. He has pointed out that a piece with two violins playing at slow speed, using only two or three pitches, could take what seemed like hours although it lasted only a few minutes ‘because of the narrow band of differences and the fact that the ear wasn’t used to hearing differences of that kind’ (These are perceptual areas that composers like La Monte Young and Steve Reich have recently begun to explore systematically.)

By shuffling fixed pitches around (there is no ‘octave transposition’) in a circumscribed range (*Trio* covers just over an octave) all traces of functionalism seem to have been removed – they don’t ‘go anywhere’ melodically or harmonically – so that they can be heard more as sounds in their own right, the ear being led to hear minute timbral differences. These pieces may perhaps be viewed as ‘extractions’ from the European tradition, but when this technique is applied to the piano, as it is in *For Piano I* (1952), where only 9 different pitches are arranged in constellations whose inner details change on each occurrence, separated from one another by notated silences, the result is noticeably non-European in spirit. The silences may serve as focusing points for the sounds, but equally they are openings which let the sounds of the environment mingle with and perhaps even obliterate the composed sounds. Cage

tells the story of a performance Wolff gave where the sounds of traffic and boat horns coming through the open window were louder than the piano sounds. Someone asked him to play it again with the windows closed to which Wolff replied ‘that it wasn’t really necessary, since the sounds of the environment were in no sense an interruption of those of the music’ As Wolff remarked (of the early experimental music in general) ‘the work is at once itself and perspicacious.’

### John Cage

Silence was perhaps as important a feature of the early experimental music as performance indeterminacy and chance procedures. For, as Cage indicates, ‘when silence, generally speaking, is not in evidence, the will of the composer is.’ Inherent silence is equivalent to denial of the will, and (in 1958) he spoke of the need for discontinuity having the effect of ‘divorcing sounds from the burden of psychological intentions’. Hence, as an extreme case, Cage’s silent piece, *4'33"*, made public in 1952 but conceived some years earlier. What is important about the rhythmic structure of *4'33"* is that it is expressed not in numbers of bars but in actual clock time, that the published durations could be replaced by any others and were determined by chance operations. Chance first cropped up in Cage’s work when he was writing *Sixteen Dances* and the *Concerto* for prepared piano and orchestra in 1951; in the course of his work he started using squares on which he set out the musical material at his disposal—which resembled the gamuts of the *String Quartet*. As he started wondering how to get from square to square Cage saw chance procedures as the way out of this predicament. These charts, according to Christian Wolff, were ‘a stage in a particular method of serial composition, associated with Cage’s growing belief in a philosophy of non-involvement and purging the idiosyncrasies of one’s own personality’. Cage has said that both he and Boulez were using similar techniques at this time: Boulez had turned the series into a chart arrangement while Cage used charts first as magic squares and then later in relation to the mechanics of using the *I Ching* for chance operations. The letters they exchanged at the time showed, according to Cage, ‘agreement between us at the beginning, and then divergence exactly on this point of total control and renunciation of control’. And certainly Cage’s opinion that chance procedures bring about ‘a musical composition the continuity of which is free of individual taste and memory (psychology) and also of the literature and “traditions” of the art’ sounds not dissimilar from Boulez’ intentions behind *Structures Livre Ia* for two pianos (1952) to ‘eliminate from my vocabulary absolutely all trace of heritage’.

Yet however centreless, structureless, featureless, hierarchiless the first book of *Structures* may sound, however much harmonic and thematic

writing may have been dissolved, however much Boulez may have resorted to quasi-automatic ‘external’ procedures, his methods are, contrary to Cage’s, a supreme reinforcement of the type of unity described by Webern (see p. 33), since all sound parameters – rhythm, intensity, modes of attack and pitch content – have all been related to the ‘ideal’ model of the 12-note chromatic scale.

Boulez emphasized the need to purge his music of any remnants of a tradition he considered dead. With their methods of ‘unfixing’ the continuity Cage and Feldman had no desire or need to be as restrictive, as obsessed with language and purity of style as Boulez. In fact tonal chords and intervals pass naturally through all of Feldman’s music and in *Water Music* (1952) Cage deliberately re-introduced ‘sounds that were, just from a musical point of view, forbidden at that time . . . banal musical sounds’ such as octaves, 5ths and dominant 7ths: ‘I’ve always been on the side of things one shouldn’t do and searching for ways of bringing the refused elements back into play.’

Where Feldman and Wolff had restricted themselves to a minuscule range of sounds, in *Music of Changes* of 1951 Cage’s non-restrictive philosophy led him to explore sound-as-totality by selecting a vast amount of piano material which he put together according to the answers which resulted from his consultation of the *I Ching* (by the method established for obtaining oracles – that of tossing three coins six times). The materials were laid out in charts which governed superpositions (how many events are happening at once during a given structural space), tempi, durations, dynamics and sounds (of which half contain silences). The categories from which the material was drawn were single sounds, aggregates (like the mixed timbre sometimes obtained on a prepared piano when a single key is depressed), complex situations in time (constellations) and sounds of both definite and indefinite pitch (noises).

*Music of Changes* is based on the same square root principle as Cage’s earlier work, but this is expressed not in numbers of bars or time periods, but in lengths that exist only in space, the speed of travel through which is unpredictable. Since the shape of the piece is determined by the changing tempo indications the player must first estimate the length of each line or each page in seconds, and then follow the graphic spacing of the score. Consequently two silences that look the same length, for instance, are moved through at a different pace and thus last different lengths of time. The chance operations also threw up various impossible notations (such as  $1/7+2/3+1/5$  of a crotchet to be played within a second) which cannot be taken literally; according to John Tilbury they are as much a notation ‘directed at the performer as a description of the sound to be heard. They suggest a style of performance: neat, crisp, precise, cool.’

For David Tudor (who gave the first performance) *Music of Changes* was a great discipline, because you can't do it unless you're ready for anything at each instant. You can't carry over any emotional impediments, though at the same time you have to be ready to accept them each instant, as they arise. Being an instrumentalist carries with it the job of making physical preparations for the next instant, so I had to learn to put myself into the right frame of mind. I had to learn how to be able to cancel my consciousness of any previous moment, in order to be able to produce the next one. What this did for me was to bring about freedom, the freedom to do anything, and that's how I learned to be free for a whole hour at a time.

But the situation where such freedom was most useful was not to be brought about by chance operations which may identify 'the composer with no matter what eventuality' but whose notation 'is in all respects determinate and does not permit the performer and such identification,' as Cage wrote of *Music of Changes*. For a full and logical implementation of Cage's philosophical position, however, a shift had to be made from chance operations where 'one knows more or less the elements of the universe with which one is dealing,' to indeterminacy where Cage felt that he was 'outside the circle of a known universe, and dealing with things that I literally don't know anything about,' a transition in which Cage's views gradually changed from 'particular ideas as to what would be pleasing' toward no ideas as to what would be pleasing – a position where all results are acceptable and accepted and 'an error is simply a failure to adjust immediately from a preconception to an actuality.'

*Imaginary Landscape No. 4* for 12 radios, composed in the same year as *Music of Changes*, moves closer to performance indeterminacy. Chance operations were used to determine the loudness levels, durations and station tunings on the 12 radios. Here unpredictability is guaranteed by the fact that although the timings, wave-lengths and volume control changes are common to all performances, the piece will never sound the same since the music broadcast on the given wave lengths will differ on each occasion and depend on factors beyond Cage's immediate control.

## The Later Fifties

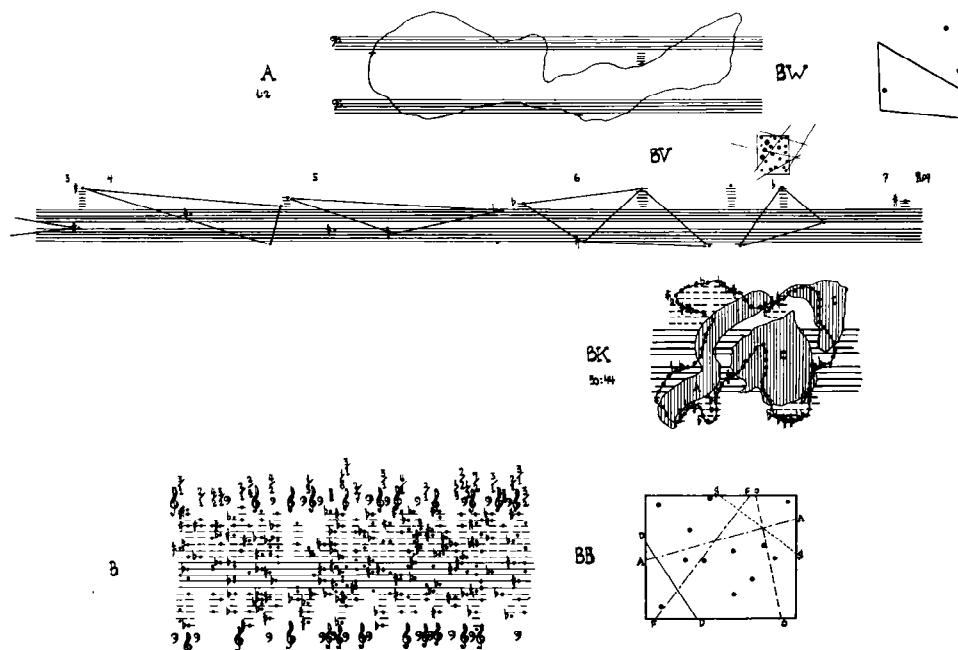
Between 1952 and 6 Cage worked on two large projects – *Music for Piano 1–84* and the series of pieces for various solo instruments whose titles are expressed in time lengths (4'33" is the first of this series). In *Music for Piano* Cage turned to the imperfections on sheets of paper as a randomizing method and sound source. Just as Cage had found that 'silence' is full of (unintentional) sounds which may be of use to the composer and listener, so a 'blank' sheet is also already alive with prospective sounds. Cage asked the *I Ching* as to how many notes should be used from each page; whether they are to be played normally, or are muted or plucked; whether they are sharp, flat or natural, or are

noises to be produced by hand or beater, inside or outside the piano construction. The corresponding number of imperfections on a blank sheet of transparent paper were then marked out, and registered on a master page on which stave systems had been drawn.

What resulted was a series of single notes and flurries of notes. The pieces may be played alone or together in an endless number of superimpositions, combinations, overlaps and successions. Another new feature for Cage is the fact that nothing is determined as far as performance time is concerned. Performers may move through the space-time at speeds of their own choice: 'Such space may be interpreted as moving, not only constantly, but faster or slower,' says Cage who recommends, as regards total duration, that 'given a programmed time length, the pianists may make a calculation such that their concert will fill it.'

The 'time-length' pieces, 31'57.9864" and 34'46.776" both for a pianist (1954), 26'1.1499" for a string player (1955) and 27'10.554" for a percussionist (1956), all share the same numerical rhythmic structure which through the application of chance operations differs in actual time-lengths in each case. This is definite evidence of the 'hospitality' of a rhythmic structure to any kinds of sounds – Cage also used this rhythmic structure as the basis of a verbal composition, 45' for a Speaker (1954–5), a text which deals with many of the ideas and methods behind these works. In this series Cage makes further inroads into traditional attitudes towards content and identity. Richard Toop has written:

17 John Cage's Concert for Piano and Orchestra



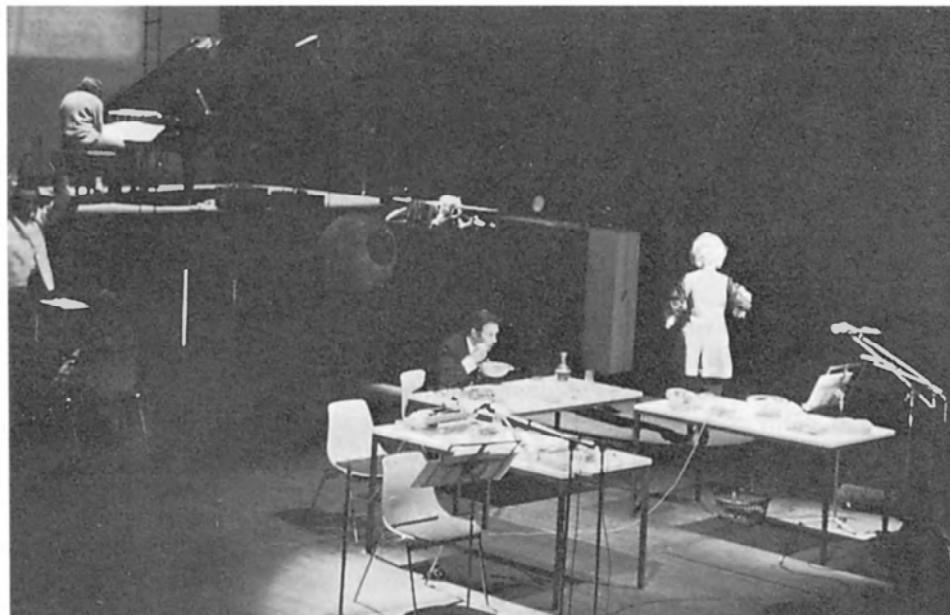
The striking feature of these pieces is not their individual content, but their unlimited capacity for combination with other pieces, which theoretically allows for the obliteration of every distinguishing characteristic of each individual piece, and thus undermines any attempt to view any one of them as a self-contained unit.

One of the performing instructions for these pieces runs: 'The notation may be read in any "focus", as many or as few of its aspects as desired being acted upon.' This is a crucial test not so much of the player's technique (though force, distance and speed of attack are graphed above the main notation: Cardew remarked that he sees these things flashing past as he plays, wishing he had time to pay attention to them) as of his sensitivity to the 'ethos' of the piece as implied in this permission.

However much experimental music may appear to be uninterested in the idea of achievement, a composition of the scope and comprehensiveness of Cage's *Concert for Piano and Orchestra* can be viewed as nothing less than a genuine, old-fashioned achievement. Cage's work on *Concert* during 1957 and 8 consisted of 14 solo parts of which the piano part is a gigantic 'composition' in its own right. Each may be performed in whole or in part, for any length of time, as a solo or in combination with any other solo part or parts, or simultaneously with a number of pieces that Cage has written since – with *Solos for Voice* (1958 and 1960) and their continuation of 1970 *Song Books*, *Fontana Mix* (1958) or *Rozart Mix* (1965).

Cage assembled the material for the wind and string parts by working closely with the players themselves so as to discover as many different

**18 Non-harmoniousness 1970-style:**  
a simultaneous performance of *Concert for Piano and Orchestra* and *Song Books* (world première) in Paris, October 1970. (The performance also included *Rozart Mix*.)  
John Cage, and Cathy Berberian, right.



methods of sound production as possible – many of these have since passed into the standard instrumental repertory – which he subjected to a variety of different chance procedures. Cage's intention with this 'total spectrum' was 'to hold together extreme disparities, much as one finds them held together in the natural world, as, for instance, in a forest or on a city street'. But, the compositional glue having been removed, things had to hold themselves together of their own accord especially as Cage recommends that the orchestra should be split up and the players freely distributed around the performing space, even amongst the audience. This put into practice Cage's ideas about non-harmoniousness (to which I referred in Chapter 1) which helped to bring about two conditions he desired – unimpededness and interpenetration. These are oriental concepts which D. T. Suzuki saw as distinguishing European thinking where 'things are seen as causing one another and having effects', from oriental thinking where 'this seeing of cause and effect is not emphasized but instead one makes an identification with what is here and now' Cage further describes unimpededness as 'seeing that in all of space each thing and each human being is at the centre and furthermore that each one being at the centre is the most honored one of all,' and adds: 'Interpenetration means that each one of these most honored ones of all is moving out in all directions penetrating and being penetrated by every other one no matter what the time or what the space,' so that 'there are an incalculable infinity of causes and effects, that in fact each and every thing in all of time and space is related to each and every other thing in all of time and space.' (1958)

In normal circumstances the more complex the music the more the function of the conductor becomes that of policeman (as demonstrated by Boulez the traffic cop at the beginning of his *Pli selon Pli*) beating time to unify the proceedings, to achieve harmoniousness. The conductor in Concert (if one takes part – he is not essential) 'by his actions represents a watch which moves not mechanically but variably,' relating not to a score (there isn't one – no master plan) but only to his own part, so that 'his actions will interpenetrate with those of the players in the ensemble in a way which will not obstruct their actions'.

Each player makes his own programme from the not unspecific materials provided, calculated to fill an agreed-upon performance time. Time however becomes a variable commodity since the conductor has to transform 'real' clock time into a 'musical' time by (literally) altering the length of the minutes; each player moves independently within this temporal structure without any reference to, or coordination with, the other players.

The colossal piano part contains 84 'different kinds of composition' and is a highly diverse accumulation of the majority of notations Cage had invented up to that time along with new ones, the seeds of notational concepts. Each individual notation has its own specific instruction. Some notations are highly complex, impracticable or idealistic, others are

directly stimulating or – to a greater or lesser extent – precise: some need to be measured exactly, in the David Tudor manner, others may be read at sight, in any focus. Many of these notations move further along the road to a completely non-representational situation – no longer is a particular sound heard and translated into a graphic symbol which represents the ‘image’ of the sound to be reproduced. Many in fact represent a certain kind of work to be done so as to arrive at a point of being able to make an action (or actions) to produce a sound (or sounds)!

Concert deals with a universe still known to some extent to Cage. He first managed to step completely outside this universe with *Variations I* (1958) and the subsequent *Fontana Mix* and *WBAI*, which move into the area of variable, blank structures. These put in the hands of the performer himself the means to create his own personal random and to select his own sounds to line up with the results of these processes. Performers are given a number of transparent sheets, printed with shapes of various kinds, which are to be overlaid in an unplanned fashion.

The randomizing materials for *Variations I* – the first of a series of seven *Variations* composed between 1958 and 1968 – are six large squares of transparent plastic, one with points of various sizes, the others with intersecting lines. The size of each dot shows whether each event should consist of one, two, three or four or more sounds. The lines represent lowest frequency, simplest overtone structure, greatest amplitude, shortest duration and earliest occurrence within a decided-upon time. A sheet of lines is placed in any position over the sheets of points, and perpendiculars drawn from a point to a particular line ‘give distances to be measured or simply observed’ – that is the distances are read in relation to any scale of values which the performer has chosen to give each line. *Variations I* is thus a score which deals with the unique interpenetration of all aspects of a sound event, since a different spatial arrangement of points to lines would bring about a different combination of characteristics.

This leaves the player free to use any kind of sound, from any kind of sound source, and the final transition has been made from the musical work as object to the work as process. With performance indeterminacy, as Cage said at the time, ‘one can just work directly, for nothing one does gives rise to anything that is preconceived, though everything may be later minutely measured or simply taken as a vague suggestion. This necessitates of course, a rather great change in the habits of notation.’

### Christian Wolff – II

While Cage was moving towards this kind of indeterminacy involving pre-performance determinations (rather like traditional composition, but with shifted emphasis) Christian Wolff was evolving an indeterminacy in which all the decisions were to be made during performance, not by

providing sound material to be realized on the spot (like Feldman and Brown) but by creating a chain of unpredictable situations which would only be brought about through the act of performing.

Although after his early days with the Cage group Wolff left to study Classics (he earns his living teaching Greek at Dartmouth College, New Hampshire) he carried on writing pieces for David Tudor. In the mid-fifties he was getting back to indeterminacy by writing pieces which were impossible to play due to aspects of rhythm, fingering or keyboard layout. The impossibilities would force the player to discover a solution of his own, or force Wolff himself to find a compositional way out by declaring tempo as zero – that is, any duration. Having to write a piece quickly for Frederic Rzewski and himself to play at a concert in 1956 he drew up a kind of ‘shorthand’ notation which laid out certain spaces of time and groups of notes from which the players could select, with a wide range of instructions which would bring about situations ‘from nearly fixed to nearly free’.

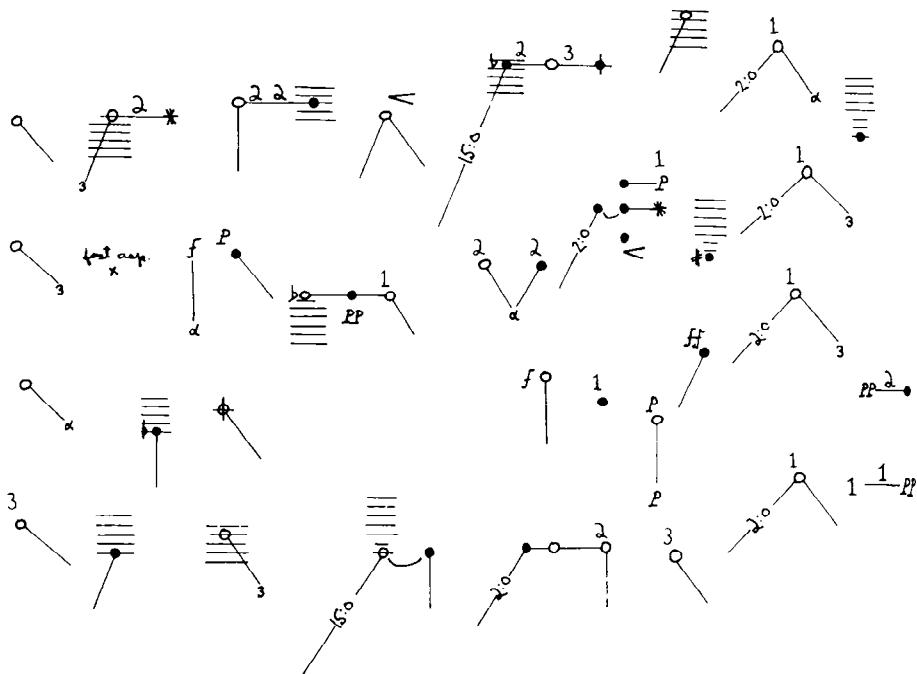
This was the source of the indeterminacy that Wolff has since developed which places ‘chance completely outside the performer’s control by making his ear the vehicle’

$\text{1}\frac{1}{2}:\text{0}/\frac{1}{4}:\text{3}$  a b  
x- x-

In this example from *Duo for Pianists II* (1958) the figure to the left of the colon gives the time, in seconds, during which one has to play, and the figure to the right the number of notes that are to be played anywhere within the indicated time. Thus for the first unit the player is to produce no sounds for a second and a half, while for the second unit he must play within a quarter second three notes from a given pitch source ‘a’ (in which there are, say, 4 pitches), in any higher or lower octave than the one in which they appear originally (this is indicated by x-). (In his analysis of this passage in *Die Reihe 7*, Wolff goes on to say that any three of the four available pitches can be chosen, or one may be chosen and repeated three times, or two, one of which is played twice.) Along with these one must play two notes from source ‘b’, and how these five pitches are disposed – singly, or in chords, their dynamics, and their individual durations – is left to the performer, who must, however, act within a quarter of a second.

But one player does not move through these events regardless of what the other player is doing (as is the case in Cage’s music). What one player does depends for its initiation precisely on what he hears the other performer playing. Each musical unit in Wolff’s score is preceded by one often cues (in this case five seconds of silence). Each player makes his own particular continuity of structural units out of the common reservoirs of pitch materials and timed rhythmic structure, and what he plays, and when, depends on which cue he hears, or perhaps fails to hear. But the rules are not to be followed at all costs: if both players are waiting for cues at the same time then, instead of remaining silent for ever, they have to work out a solution on the spot.

## III



19 Christian Wolff's *For One, Two or Three People*

Wolff has said of this type of notation that it allows for 'precise actions under variously indeterminate conditions' Both fluidity and exactness of performance are possible. And no structural whole of totality is calculated either specifically or generally in terms of probabilities of statistics. The score makes no finished object, at best hopeless, fragile or brittle. There are only parts which can be at once transparent and distinct.'

This contingency process works very well for two or more instruments, but is obviously difficult to apply to a solo situation (which Wolff wanted to do in pieces he wrote for David Tudor, partly as a 'reaction against Tudor, who would always work out a piece fully beforehand'). Consequently in *For Pianist* (1959) Wolff makes the cue system dependent on factors beyond the player's control – either accidents or errors he makes, or particular acoustical conditions that may arise. Thus the pianist may have to jump from a low note to a high note as quickly as possible; if he hits the correct note he is to continue in one way, if he misses it he is given a different path to take. When he has to play a note 'as soft as possible' there are three different continuations depending on whether he manages to play very softly and audibly, plays too loudly, or plays so softly that nothing can be heard at all. And there are similar

alternative routes to take, for instance, after a specified note begins to produce harmonics, or dies away.

But these notations are highly complex and demanding, and in subsequent pieces like *For 5 or 10 People* (1962), *In Between Pieces for Three Players* (1963), *For 1, 2 or 3 People* (1964) and in more recent scores such as *Edges and Pairs* Wolff dispenses with the elaborate timing scheme, a specific number of people playing specific instruments, rhythm and the pitch gamuts. This might seem like a relaxation until one realizes that these pieces make far greater demands on the performer's ability to hear (and to act on what he hears) than on his ability to work out complicated musical problems on the spot; the continuity depends more than before on paying very close attention to the sounds produced by the other players or in the environment.

Wolff has said that this kind of 'aural' indeterminacy was the only way of 'producing sounds I could see no other way of producing Actions are indicated directly and simply. Their results, the sound and rhythm of the pieces (the rhythm, for instance, produced when one no longer knows where one is) could, as far as I know, be brought about in no other way.' And the player, apart from listening for cues, is so involved in the act of preparing, timing and releasing sounds that, as John Tilbury has said, 'you have no chance of emotional self-indulgence; you have a job to do and it takes all your concentration to do it efficiently – i.e. musically. With this music you learn the prime qualities needed in performing: discipline, devotion and disinterestedness.'

In moving from symbol to symbol the player has to shift his attention continually from one aspect of what he does to another. The acute differentiation of sound which Wolff asks for forces the player to discover new means of producing vibrato, attack and release, articulation, timbre-alteration and distortion. *For 1, 2 or 3 People*, for instance, specifies twenty-two different types of sound production, from 'anything' to a 'sound involving friction' and 'slight alteration of a sound'. The technical equipment needed to play Wolff's music are extreme presence of mind, a mental as well as physical agility and an acute grasp of the capabilities of your instrument. In performance the players seem to be in a state of perpetual crisis, yet the music sounds calm, relaxed and unruffled, unlike the avant-garde variety which often sounds as though it is actually the expression of crisis.

### Earle Brown – II

In the later fifties Brown did not continue to work with the type of notation one finds in *December 1952* and *Four Systems*; these were not what Brown considered to be 'works' since they were devoid of content. *December 1952*, he said, was 'an "activity" rather than a "piece" by me because of the content being supplied by the musicians'. (This was,

of course, precisely the kind of situation that Cage spent the whole of the fifties trying to achieve.)

In his later work – such as *Available Forms* for orchestra (1961), *Corroboree* for 3 (or 2) pianos (1964) and *String Quartet* (1965) – Brown attempts to combine the ‘graphic’ and improvisational ‘mobile’ qualities of the 1952 works in *Folio*, with the ‘composed-material, open-form’ conditions of *25 Pages of 1953*. These are both methods of intensifying the ‘ambiguity inherent in any graphic representation and possible composer, performer and audience response to it’. A ‘mobile’ score is subject to physical articulation of its components, which results in an unknown number of different, integral and ‘valid’ realizations. This is distinct from a ‘conceptually “mobile”’ approach to basically fixed graphic elements, which is subject to an infinite number of realizations in performance ‘through the involvement of the performer’s immediate responses to the intentionally ambiguous graphic stimuli relative to the conditions of performance involvement’.

Finally, of course, the identity of the work remains in Brown’s hands:

There must [he says] be a fixed (even if flexible) sound-content, to establish the character of the work, in order to be called ‘open’ or ‘available’ form. We recognize people regardless of what they are doing or saying or how they are dressed if their basic identity has been established as a constant but flexible function of being alive.

### Morton Feldman – II

After several years of writing graph music Feldman began to discover its most important flaw. He found it was not only allowing the sound to be free, but was also liberating the performer. He had never thought of the graph as an ‘art of improvisation’ but more as ‘a totally abstract sonic adventure’. This realization was important ‘because I now understood that if the performers sounded bad it was less because of their lapses of taste than because I was still involved with passages and continuity that allowed their presence to be felt.’

Between 1953 and 1958 he abandoned the graph; but this left him equally dissatisfied with precise notation: ‘It was too one-dimensional. It was like painting a picture where at some place there is always a horizon. Working precisely, one always had to “generate” the movement – there was still not enough plasticity for me.’ But whatever method of notation adopted the purpose was the same – the exploration of sound as sound. The ‘image’ of Feldman’s music remains the same, his preoccupation with ‘surface’ as the ‘subject’ of his music: ‘In that sense my compositions are not “compositions” at all. One might call them time canvases in which I more or less prime the canvas with an overall hue of music. I have learned that the more one composes or constructs the

more one prevents Time Undisturbed from becoming the controlling metaphor of the music.'

In the late fifties Feldman discovered a highly effective method of specifying the sounds and controlling the image of the music, while allowing the performers themselves to ensure the necessary 'plasticity' of movement. *Piece for Four Pianos* (1957) is the first to be set in motion by means of what I have called a 'people process'. Feldman provided only one part made up of chordal 'weights' of characteristic delicacy; each performer reads from this part. All four players start together and then proceed at their own speeds, free to choose their own durations within an agreed-upon tempo. The result is 'like a series of reverberations from an identical sound source ... The repeated notes are not musical pointillism, as in Webern, but they are where the mind rests on an image – the beginning of the piece is like a recognition, not a motif, and by virtue of the repetitions it conditions one to listen,' said Feldman. The repetitions arise, of course, from the fact that the pianists play the same chords but, because of the variations in tempo, they occur at different times, this variability ensuring that the repetitions are always irregular.

Feldman extended this principle in the series of five pieces he wrote in the early sixties called *Durations*. These are for varied groups of instruments, and each instrument has a different part so that it lives out 'its own individual life in its own individual sound world'. Subsequently Feldman evolved yet another means of introducing plasticity while preserving the image, of which *De Kooning* (1964) is the most remarkable example. Here the 'working-through' process is coupled with a special type of contingency process: instruments (as always in Feldman's music) play with an absolute minimum of attack. As the sound of one instrument fades and decays so another instrument takes over: a kind of slow-motion tag game.