

Previously we have used the metaphors of tangled chaos and the blank page to represent the multiplicity of choices that faced composers in the twentieth century; Cage demonstrated how much more could be brought into the musical experience by erasing the pages of a score almost entirely.

#### 4' 33"

One of the most influential works of art in the twentieth century, Cage's *4' 33"* was premiered in 1952 in a small open-air concert hall in the Catskills near Woodstock, New York. It was part of a recital of contemporary piano music that included Henry Cowell's *The Banshee* and works by Boulez and others. But nothing prepared the audience for the experience of Cage's piece: Each of the three movements consisted of the pianist David Tudor lowering the cover over the keyboard to begin the movement, then lifting it to signal the conclusion (Fig. 10.1). Throughout the performance of the three movements, which added up to 4 minutes and 33 seconds, he sat quietly, gazing at a stopwatch and occasionally turning pages of music paper on which no notes were written.

As Cage made clear in later accounts of the performance and the audience's perplexed response, the blankness of *4' 33"*, far from engendering silence, allowed the sounds of the world to rush in:

What they thought was silence, because they didn't know how to listen, was full of accidental sounds. You could hear the wind stirring outside during the first movement. During the second, raindrops began pattering on the roof, and during the third the people themselves made all kinds of interesting sounds as they talked or walked out.

But the audience had not yet learned to listen in the way Cage had in mind, and the premiere of *4' 33"* cost him friends and supporters. Cage acknowledged that it had taken him many years to formulate the piece and work up the courage to present it. He experimented with several different forms of notation, including regular staff notation with empty staves, and time-scale notation, with each page representing a number of seconds. In the final version, he simply lists three movements, each marked "Tacet," the musical indication for silence.

#### CAGE'S PATH TO *4' 33"*

Cage came to the idea of *4' 33"* by way of an extraordinary range of influences. Born in Los Angeles, he headed to New York at age 22, where he studied with Cowell and with Schoenberg's pupil Adolph Weiss. In 1935 he returned to Los

I

TACET

II

TACET

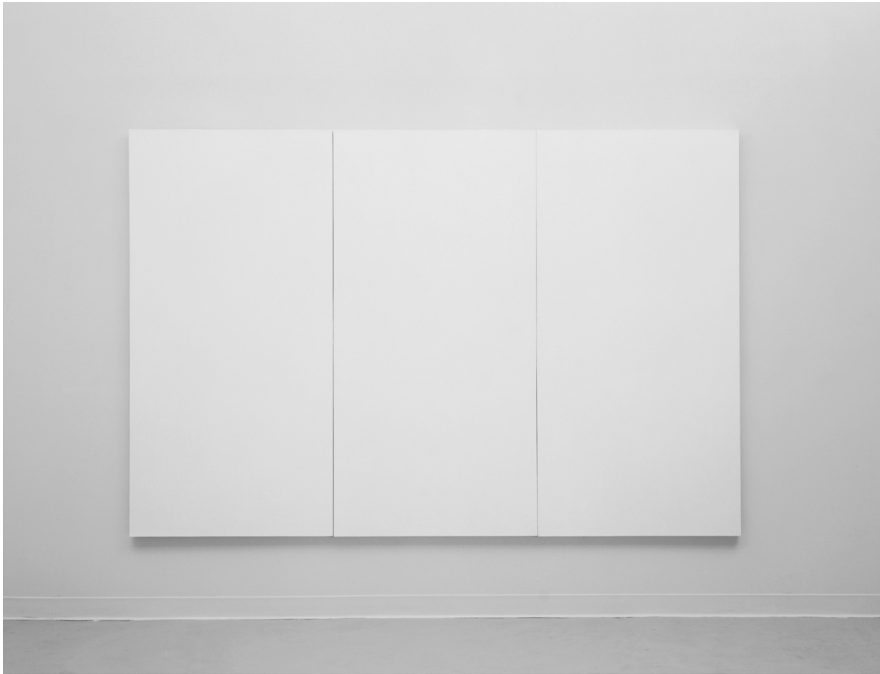
III

TACET

Figure 10.1: John Cage, 4' 33"

Angeles to study harmony with Schoenberg. After a period in Seattle, where he began his lifelong personal and artistic relationship with the choreographer Merce Cunningham, Cage moved back to New York in 1942 and immersed himself in an artistic environment dominated by Beat writers and the Abstract Expressionist painters of the New York School. It is no coincidence that Cage's friend Robert Rauschenberg began his series of monochromatic *White Paintings* (Fig. 10.2) in 1951, a year before *4' 33"*. In Cage's eyes, Rauschenberg's seemingly empty canvases focused the viewer's attention on the play of light and shadows in the room, and even the particles of dust moving through the air.

In his early works, Cage explored the idea of measuring time in systematic ways and then allowing a wide range of sounds to inhabit those spans of time. In addition to tone rows, Cage used other elaborate precompositional techniques to determine form and rhythm. His *First Construction in Metal* (1939), for example, is based on a 16-measure unit symmetrically divided into groups of 4, 3, 2, 3, and 4, with 16 rhythmic motives and 16 instruments. Many aspects of the piece, including its overall form, are based on this numerical series. The work



**Figure 10.2:** Robert Rauschenberg, *White Painting (Three Panel)* (1951)

also illustrates Cage's interest in expanding the sound world through the use of percussion instruments and found objects, such as brake drums and lengths of metal piping.

A similar experimental impulse led Cage to invent the prepared piano, an outgrowth of the extended piano techniques that Cowell had pioneered before World War II. In *Bacchanale* (1940), Cage placed bolts, screws, and other materials between the strings to create richly clangorous sounds that evoked the percussion instruments of the Balinese gamelan. Cage also was drawn to electronic sounds, and in 1952 he worked with Louis and Bebe Barron (see Chapter 11) on *Williams Mix*, which consisted of minutely spliced fragments of recorded sounds of the city, the natural world, and electronics. A series of pieces titled *Imaginary Landscapes* (1939–52) featured turntables, radios, and other devices. The experience of manipulating lengths of magnetic recording tape profoundly shaped Cage's sense of the temporal dimension of music: In 1957 he wrote that since "so many inches or centimeters equal so many seconds," counting was no longer necessary: "magnetic tape music makes it clear that we are in time itself, not in measures of two, three, four, or any other number."

During these years, free jazz emerged in New York and elsewhere, embracing extended instrumental techniques and a new style of improvisation, while

expanding the definition of meter, texture, melody, and harmony. The parallel with the development of Cage's thinking is clear in the words of jazz saxophonist James Moody: "Any sound makes sense to me. Any sound at all. You fall on the floor—it makes sense. You fell, didn't you? Music is supposed to represent a feeling." Yet in contrast to art forms like free jazz or the Abstract Expressionist paintings of Jackson Pollock, Cage sought to move away from music as a representation of the artist's psyche.

#### CHANCE PROCEDURES AND THE LIBERATION FROM LIKES AND DISLIKES

Around 1950, inspired by his studies of Indian, Japanese, and Chinese philosophy, Cage began integrating elements of chance into composition and performance as a way of making music that was "free of individual taste and memory (psychology) and also of the literature and 'traditions' of the art." Drawing on the centuries-old Chinese book of divination, the *I Ching* (Book of Changes), he began composing through elaborate processes of tossing coins or throwing dice. (Aleatory music, another term for chance composition, comes from *alea*, the Latin word for "dice.") In *Music for Piano 21–36/37–52* (1955), Cage selected pitches by placing a sheet of transparent paper over the staves and marking notes where there were imperfections. Chance procedures also figured in his prose and lectures, such as a series of talks given at Harvard in 1988–89 in which he used the *I Ching* to extract excerpts from writings by Thoreau, Wittgenstein, and others.

The first major work that Cage composed in this way was the piano piece *Music of Changes* (1951; Ex. 10.5). In a painstaking year-long process, he first wrote out a set of charts containing pitch material, innovative piano sounds, dynamics, rhythms, tempos, and textures. Then he tossed coins to determine the selection of items from the charts, while basing the piece's form on a series of proportions similar to those he had used in *First Construction in Metal*. The result was a constantly changing music marked by irregular rhythms, abrupt dynamic changes, and a fractured, pointillistic texture that allowed the sounds to float freely.

As Cage explained to Boulez, who was then composing his rigorously serial *Structures I*, "By making moves on the charts I freed myself from what I had thought to be freedom, and which was only the accretion of habits and tastes." Up to this point, Cage had focused on readjusting only the composer's and listener's relationship to sounds; musicians were still asked to perform a score as written. Even *4' 33"* is prescriptive to a considerable degree: the performer can, in principle, do anything during the piece *except* make a sound. But Cage didn't stop there. Still more radical, and the ultimate cause of his break with Boulez, was his introduction of elements of Indeterminacy into performance.

**Example 10.5:** *John Cage, Music of Changes, Book I, mm. 1–4*

**MUSIC OF CHANGES**

John Cage

The image shows a page of a musical score for John Cage's 'Music of Changes, Book I'. The score is written for piano and consists of two systems of music. The first system starts at measure 69, which is marked '69 = 4 = 2 1/2 cm. ACCEL.'. The second system ends at measure 176, which is marked '176' and 'RITARD.'. The notation is highly complex and indeterminate, featuring various symbols, accidentals, and dynamic markings such as 'MD EP SUSTAINED'. The score is titled 'MUSIC OF CHANGES' and the composer's name 'John Cage' is written in the top right corner.

#### INDETERMINATE NOTATIONS IN CAGE'S AND FELDMAN'S MUSIC

As we have seen earlier in Boulez's agitated response, Cage's use of graphic and indeterminate notations to give the performer wide latitude in shaping the work was new and unsettling. The score of *TV Köln* (TV Cologne, 1958), for example, consists of four systems of equal length, indicating the relative placement of a set of sounds, with the position above or below a line to be interpreted in terms of pitch, duration, or dynamics. As explained in the score, the symbols I and O in Figure 10.3 refer to sounds made on the inside or outside of the piano; K instructs the player to use the keyboard and shows the number of keys to be depressed; and A is any kind of auxiliary noise. Cage left the meaning of P undefined, perhaps to demonstrate the limits of the composer's control. The duration of *TV Köln* varies depending on how long the performer makes each system last. While available recordings range from one and a half to four minutes, it is possible to make the piece much longer, as with the ongoing performance in a German church of Cage's *Organ<sup>2</sup>/ASLSP—As SLOW as Possible* (1987), which is intended to last 639 years.

Boulez was troubled by Cage's abrogation of control in such scores, which illustrated what he called the "seduction of graphism alone." Composers, Boulez complained, "are musicians and not painters, and pictures are not made to be performed." Ironically, a large number of Cage's scores have been

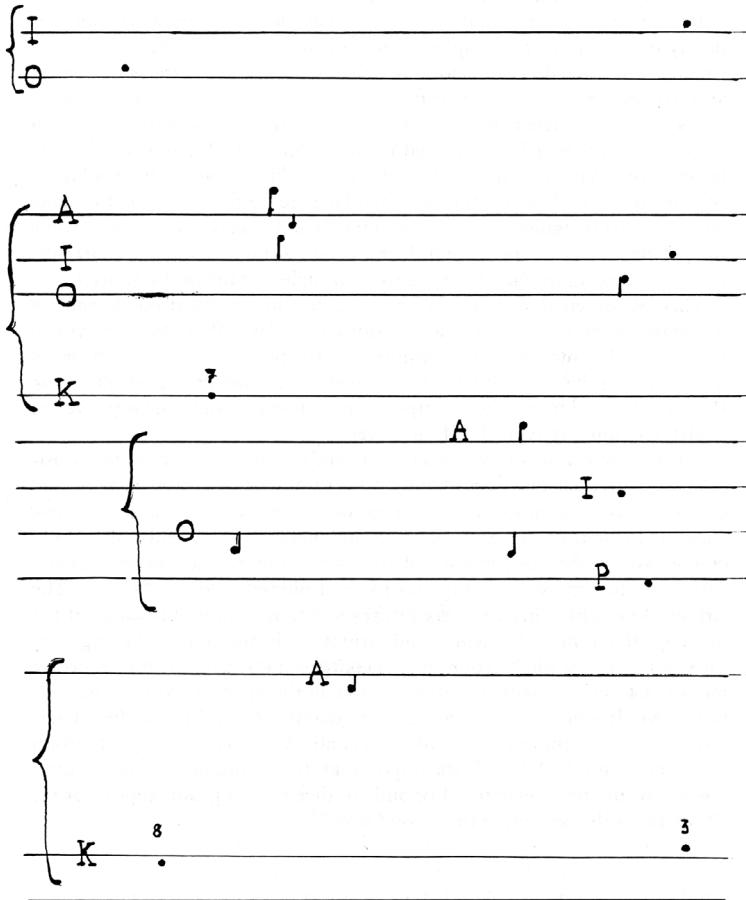


Figure 10.3: John Cage, TV Köln

valued as artworks in themselves and can be found in museum collections around the world. Many composers explored new forms of notation in the late 1950s and 1960s as ways to stimulate performers and themselves to reconceptualize the act of making music. In 1969 Cage edited *Notations*, a collection featuring excerpts from pieces by hundreds of composers, ranging from fairly traditional scores to maps, diagrams, charts, written directions, and completely abstract drawings.

Morton Feldman (1926–1987), a major figure in Cage’s circle in New York, used indeterminate graphic notation in a series of works composed in the early 1950s. The score of *Intersection 3* (1953), for example, consists of three systems of



## CONTROLLING CHANCE

Obviously, a great deal is left to the performer's judgment in works such as *Intersection 3* and *TV Köln*. For example, the three notes on the keyboard that conclude *TV Köln* and the two groups of three pitches in the middle register that launch *Intersection 3* could both be C-major triads. In his "Experimental Music" essay, Cage indicated a certain openness to traditional musical sounds in his pieces: "It goes without saying that dissonances and noises are welcome in this new music. But so is the dominant seventh chord if it happens to put in an appearance" (SR 173:1304; 7/4:34). But in Cage's circle there was a clear preference for a performance practice that would exclude such recollections of "the literature and 'traditions' of the art." In David Tudor's recorded performance of *Intersection 3*, of which Cage was the dedicatee, there are no triads at any point.

There was, in fact, a surprisingly authoritarian element in Cage's thought. The kind of freedom that interested him depended on a strict renunciation of the self, and thus, to his way of thinking, was not for everybody:

When this freedom is given to people who are not disciplined and who do not start—as I've said in many of my writings—from zero (by zero I mean the absence of likes and dislikes), who are not, in other words, changed individuals, but who remain with particular likes and dislikes, then of course, the giving of freedom is of no interest whatsoever.

Cage's complaint that the audience at the first performance of *4' 33"* "didn't know how to listen" suggests that he believed that there were correct and incorrect ways to hear the piece. Are there also correct and incorrect ways to perform it? It is not clear how Cage would feel about performances of *4' 33"* today that include the pattering sounds of people texting, the blare of stereos from passing cars, or the eruptions of cell phone ringtones. Indeed, Cage's earlier idea for a "Tacet" piece called *Silent Prayer* suggests that there was an element of actively silencing music and sounds that troubled him. In a surprising inversion of Satie's notion of Furniture Music (see Chapter 6), Cage imagined selling *Silent Prayer*, which was to be a silent piece the standard three- to four-minute length of a popular song, to the Muzak Corporation to interrupt the constant stream of music filling up elevators and public spaces.

The rich and contradictory legacy of *4' 33"* includes official and unofficial cover versions by musicians including Frank Zappa and John Lennon and Yoko Ono; the Cage estate has successfully pursued legal action against groups that have violated the copyright by placing silent tracks on their recordings. In 2010 a sanctioned recording of Cage's *4' 33"* by a group of pop



all-stars (under the name Cage Against the Machine) reached number 21 on the British pop charts. Recalling Cage's censorious intent with his *Silent Prayer*, their unfilled goal was to seize away the number 1 spot from the winner of the *X-Factor* talent search.

#### BECOMING FLUENT WITH LIFE

Notwithstanding his attempt to control certain aspects of the musical experience, Cage espoused throughout his life a kind of apolitical passive resistance. This stance may have been linked to the Cold War and McCarthyism, wherein silence seemed the only way to make an alternative space for his anarchic political beliefs and homosexual identity. Works like *TV Köln* and *4'33"* emphasize the performers' and listeners' actions much more than the composer's intentions. Cage attributed his interest in breaking down the boundaries between art and life to Asian philosophy: "Our business in living is to become fluent with the life we are living, and art can help this." In a lecture from 1958, published the following year in *Die Reihe*, he took issue with the typical concert situation in which an audience member is put in the position of having to figure out what the composer is trying to say through music:

I said that since the sounds were just sounds this gave people hearing them the chance to be people, centered within themselves where they actually are . . . I said that the purpose of this purposeless music would be achieved if people learned to listen; that when they listened they might discover they preferred the sounds of everyday life to the ones they would presently hear in the musical program; that that was alright as far as I was concerned.

Inspired by Cage, a number of composers, performers, and artists pursued the notion of merging art and life. Many were associated with the loosely organized interdisciplinary movement known as Fluxus, founded in 1962. Drawing on both Cage and the Dadaists (see Chapter 5), Fluxus emphasized communally produced "happenings" rather than individual works of art. An important figure in the New York scene was Yoko Ono (b. 1933), who created conceptual art and experimental films and also offered her loft as a Fluxus meeting place and performance space. Fluxus activities also flourished in Cologne, West Germany, thanks to the artist Mary Bauermeister (b. 1934), who brought Cage and his circle together with European and Asian avant-garde artists, including Stockhausen, whom Bauermeister would marry in 1967. After attending a performance at Bauermeister's house of *Poem for Chairs, Tables, and Benches* (1960) by the American composer La Monte Young (see Chapter 14), David Tudor described it to Cage as "a live friction sound piece" that used "1 piano stool, 1 scrub-brush

on wall, 1 piece of rubber-tire on wet glass, 1 wooden stool in corridor, and 1 wooden chair upstairs.”

The American composer Pauline Oliveros (b. 1932) has been a leader in the use of improvisation and Indeterminacy to connect music-making with meditative practices, ritual, and theater. Many of her scores, such as *Traveling Companions* for percussion ensemble and dancers (1980; see Anthology 18), include graphic elements that shape the sounds or indicate location and movements for the participants. The piece is designed to allow the performers, in close interaction with the audience, to model different possibilities for social interactions ranging from cooperation to conflict.

After her early involvement with the San Francisco Tape Music Center, Oliveros developed the idea of “deep listening” whereby musicians and listeners can focus on a profound experience of sound. She traces the idea back to her earliest childhood in Texas, where the noises of insects and animals “seemed to float in the air.” Her participatory work *Sonic Meditations* (1971) consists solely of written directions for making, imagining, listening to, and remembering sound. The purely textual score of *Sonic Meditation I* indicates the connection of “deep listening” to the experience of our living and breathing bodies:

Any number of persons sit in a circle facing the center. Illuminate the space with dim blue light. Begin by simply observing your own breathing. Always be an observer. Gradually allow your breathing to become audible. Then gradually introduce your voice. Allow your vocal cords to vibrate in any mode which occurs naturally. Allow the intensity to increase very slowly. Continue as long as possible naturally, and until all others are quiet, always observing your own breath cycle.

The performance artist and composer Meredith Monk (b. 1942) has similarly created a large number of works that combine extended vocal techniques with theater, dance, and multimedia. Monk has described works like *Turtle Dreams* (1983), for four voices and four organs, as offering liberating occasions for exploring different models of human interaction, “as a sort of microcosm of what could be possible. John Cage always used to say that what art can provide is a behavioral alternative in nonmanipulative situations.” The way such performance art by Monk and others engages the whole person—their voice, body, gestures, and character—in the creation of a work is a powerful realization of Cage’s vision of music-making as a way of becoming “fluent with life.”

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Given how strongly Boulez criticized Cage’s exploration of chance procedures in the early 1950s, it may come as a surprise that by the end of the decade he,

Stockhausen, and other European serialist composers had come to embrace Indeterminacy as an important element of their work. After first meeting Boulez in Paris in 1949, Cage made several visits to Europe that brought him wide attention, including a course he taught at Darmstadt in the summer of 1958, filling in for Boulez on short notice. Although Boulez critiqued Cage in his 1957 essay *Alea*, he also admitted the limits of Integral Serialism and the impossibility of achieving complete control:

One seeks desperately to dominate the material by arduous, sustained, vigilant effort, but chance desperately subsists, introducing itself through a thousand crevices that it is impossible to stop up. . . . “And it is good that way!” Nevertheless, will the composer’s ultimate ruse be to *absorb* this chance? Why not tame this potential and force it to an account of itself, an accounting?

Ultimately, Boulez came to see his experiments in using Integral Serialism to control all the musical parameters as futile; they had merely proven his inability to control anything. He recognized that the “effects of chaos” he had created lasted “only for a limited time,” because the listener’s perception could not “be disoriented for too long without the interest collapsing completely.” Boulez began to incorporate indeterminate elements in works like the Piano Sonata No. 3 (1957), which allows the performer to chart multiple pathways through its various sections. Likewise, Stockhausen’s Piano Piece XI (1956) is structured like a mobile, with 19 sections arrayed on a large sheet of paper that the pianist can play in any order.

According to the Italian novelist and critic Umberto Eco, such “open” works charted a middle course between Serialism and Indeterminacy by inviting the performer to complete the composer’s work within a “given *field of relations*.” As Eco wrote in 1962, “The author is the one who proposed a number of possibilities that had already been rationally organized, oriented, and endowed with specifications for proper development” (SR 212:1503–1504; 7/43:233–234). As we will see, the question of how to work with the new possibilities of sound opened up by the trajectories of order and chance has occupied musicians working in many styles ever since.