1. Morton Feldman: *Intersection 3* (1953)

Michael Gallope

The score for Morton Feldman's *Intersection 3* (1953) is exemplary among Feldman's graph pieces of the 1950s, and it stands as an early instance of experimental notation among figures of the postwar avant-garde. In this composition for solo piano, Feldman distributes numbers in seven horizontal staves, each three squares tall and spanning the length of an eleven-inch-long piece of graph paper (fig. 1.1). On the horizontal axis, one graph space equals one beat at 176 beats per minute (BPM). Vertically, the notation directs the performer to play the number of notes indicated by the numbers in each box. The three rows of boxes correspond to three registers: low, medium, and high. The exact pitches are left for the performer to decide.

David Tudor gave the piece's premiere. Tudor and Feldman had first met in 1950 through their mutual acquaintances, the modernist émigrés Irma Wolpe Rademacher and Stefan Wolpe. Feldman had studied composition with Stefan, and Tudor had studied piano with Irma. Tudor's friendship with Feldman could be considered formative (at least indirectly) for nearly all the works in *The Scores Project*, for it was through Feldman that Tudor properly met John Cage. In the early 1950s, the association of Feldman, Cage, and Tudor, along with that of Earle Brown and Christian Wolff, became known as the New York School of composition, a group of independent-minded formalists interested in chance, indeterminacy, experimentalism, and graphic scores. They harbored philosophical interests that ranged from the classics of philosophy to occult theosophy, Jungian psychoanalysis, and Zen Buddhism. Not always

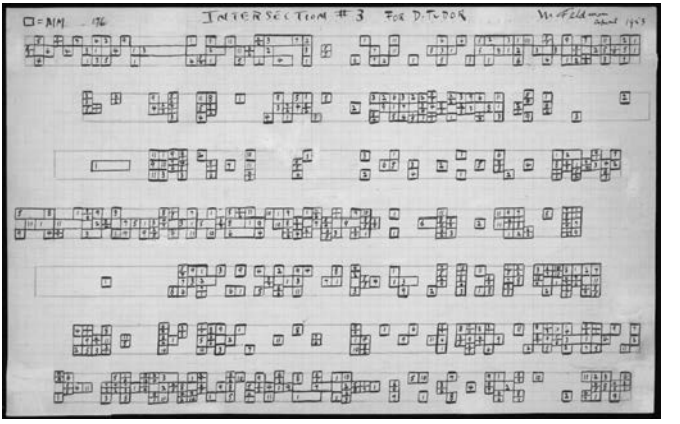

Fig. 1.1 Morton Feldman (American, 1926–87). *Intersection 3* with a dedication to David Tudor, 1953. Getty Research Institute, David Tudor Papers, 980039, box 9, folder 1. *Intersection 3* by Morton Feldman © 1962 by C.F. Peters Corporation, New York. Permission by C.F. Peters Corporation. All rights reserved.

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welcome within traditional musical institutions and social circles, they also allied themselves with figures in the avant-garde wings of the visual arts, theater, and dance. From about 1951 through the early 1960s, Tudor functioned as their iconic virtuoso, premiering nearly one hundred avant-garde compositions to great acclaim (and frequent controversy) across the United States, Europe, and Japan.

The origins of *Intersection 3* can be traced to December 1950, when Feldman first devised an early form of indeterminate graph notation during a now legendary dinner consisting solely of wild rice at Cage's "Bozza Mansion" apartment on the Lower East Side. Based on the descriptions and memories of this event, scholars now presume that the graph notation was some embryonic form of Feldman's *Projection 1* (1950) for solo cello, one of his earliest graph scores. In this score, there are three staves—the highest indicating sounds played as harmonics, the middle as pizzicato attacks, and the bottom as bowed or *arco* notes. Rhythm is read proportionally from left to right, and pitches are relatively open; Feldman implies a loose sense of register, with each horizontal line designating the lowest possible pitch (fig. 1.2).

For his premiere of *Intersection 3*, Tudor addressed the openness of the graph notation by producing his first of many "realizations"—a handwritten, personalized performance score drafted on staff paper in relatively traditional notation. In this realization, Tudor interpreted each of Feldman's boxed numbers (see fig. 1.1) as a punctuated attack and added his own grace notes and accessories. He translated the grid into traditional notation horizontally, the jumping chords spread across the page without bar lines (fig. 1.3).[1] In the coming years, Tudor would create many such realizations to facilitate his performance of works compositions that broke with the familiar conventions of Western musical notation.

The blistering tempo of 176 BPM makes *Intersection 3* especially challenging for performers. Tudor's hands had

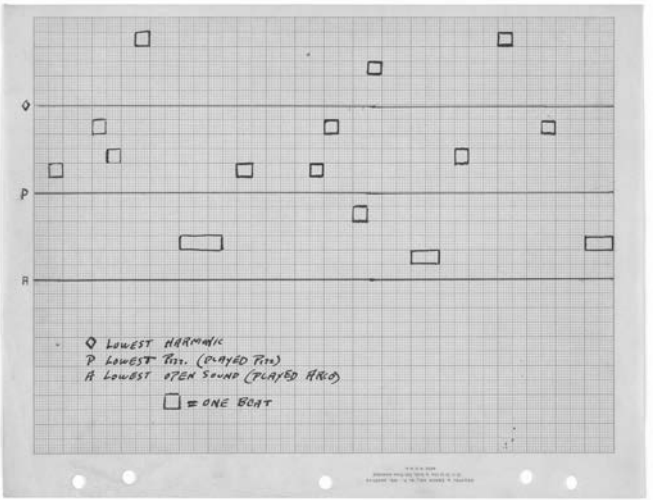

Fig. 1.2 Morton Feldman (American, 1926–87). Embryonic graph score, likely for Feldman's *Projection 1*, early 1950s. Getty Research Institute, David Tudor Papers, 980039, box 9, folder 30. *Projection 1* by Morton Feldman © 1961 by C.F. Peters Corporation, New York. Permission by C.F. Peters Corporation. All rights reserved.

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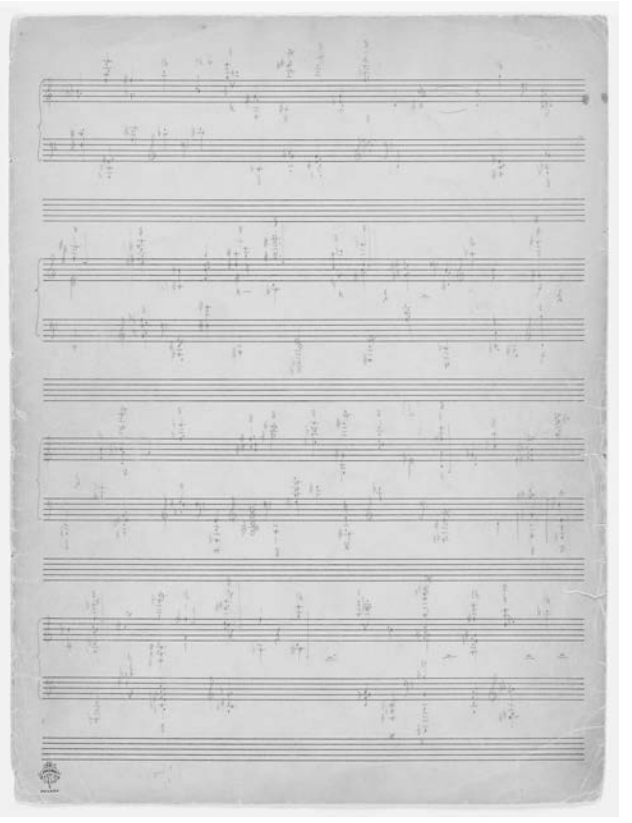

Fig. 1.3 David Tudor (American, 1926–96). Realization of Morton Feldman's *Intersection 3*, 1953. Getty Research Institute, David Tudor Papers, 980039, box 9, folder 1. *Intersection 3* by Morton Feldman © 1962 by C.F. Peters Corporation, New York. Permission by C.F. Peters Corporation. All rights reserved.

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to jump wildly across the keys in a manner than can only be called virtuosic. During the 1950s, Tudor's realization of this piece exemplified his self-proclaimed aesthetic of "non-continuity."[2] Each musical attack was jump-cut from the prior; no temporal or expressive linearity joined the vertical sonorities across time. Only numbers and squares, devoid of precise meaning or expressive power, guided Tudor's choreography. Given that the music has no traditionally audible syntax like tonal harmony and melody, his style of performance exhibited a paradoxical drama for the audience: never playing from memory, and always focused squarely on the notation at the piano, he demonstrated his fidelity to the score in part *because* there was no language-like or traditionally expressive connection between these sounds. Tudor's way of doing so was deadpan, unfazed; he had a flair for making the most mechanically disjointed sequence of sounds dramatic by maintaining a cool and dispassionate presence. He gave the audience numbered structures but delivered them with a magnetic stoicism.

Both Feldman and Cage had concerns about leaving things open to the performer.[3] If performers are given choices or multiple options, to what expectations would they be held? Would an indeterminate score enhance the performer's agency at the expense of the composer and their ideas, or of any regulative principle of discipline? This worry was real for Cage and Feldman. In the case of a 1950s lead sheet in jazz, a performer is expected to improvise variations and manipulations of the head (the original melody and harmony of the source song), but in Feldman's avant-garde works, improvisation was *not* the aim. Feldman wrote of his use of indeterminacy:

> I 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.[4]

It was a tension that would haunt Cage's indeterminate scores as well. A performer's taste-driven improvisation was considered dangerous; instead, the performer should remain at one with the "abstract sonic adventure" of the work. Feldman took a measure of responsibility for ensuring against improvisation. In his works, the indeterminacy should not leave space for "passages and continuity" that would allow the work to lapse into anything considered traditionally expressive. An interest in guarding against expressive improvisations was reflected in the composer's use of impersonal formalisms in his titles: projections, intersections, extensions, durations, structures, and the like.

This is why it is all the more surprising to discover that the composer's approach to composition was in fact quite nonsystematic, a quality that made him unusual among modernist composers at midcentury. In the early 1950s, composers such as Cage, Pierre Boulez, and Milton Babbitt made use of elaborate pre-compositional materials, some of which involved complex calculations, transformations, manipulations of tone rows, and matrices of numbers. By contrast, Feldman eschewed each of these methods; there are no intricate preconceived compositional procedures lying behind *Intersection 3*. Famously, Feldman claimed to be guided primarily by intuition. As Cage once affectionately remarked: "Isn't that marvelous. Isn't that wonderful. It's so beautiful, and he doesn't know how he made it."[5]

What influenced Feldman's intuitionism? A creature of New York's burgeoning downtown scene, in the early 1950s he became closely acquainted with an array of abstract expressionist painters. Engaging in repeated happy hours with Cage at the storied Cedar Tavern in Greenwich Village, Feldman became friends with figures such as Philip Guston, Willem de Kooning, Franz Kline, and Jackson

Pollock. The abstract expressionists were formalists, but in a way that was more or less consonant with Clement Greenberg's conception of modernism, a position that emerged in Greenberg's writings throughout the 1950s. That is, their pictures allowed paint to be paint—to let the medium speak its own *sui generis* language—while still maintaining a dialectical link to properties of the subject: expression, intuition, and so forth. In interviews and essays, Feldman's formalism emphasizes a similarly Greenbergian conception of sound. In a way that was equally indebted to the work of one of his mentors, Edgard Varèse, Feldman was interested in the materiality of letting sounds be themselves and not imposing anything too systematic on them (including narrative, tonality, expressive intentions, or any kind of harmonic or melodic "representation" of emotion).

In retrospect, Feldman saw vivid parallels between the compositional approach to the graph and Pollock's "allover" approach to painting—both of which reflected a "visual rhythmic structure." As he put it later in his career:

> I realize now how much the musical ideas I had in 1951 paralleled [Pollock's] mode of working. Pollock placed his canvas on the ground and painted as he walked around it. I put sheets of graph paper on the wall; each sheet framed the same time duration and was, in effect, a visual rhythmic structure. What resembled Pollock was my "allover" approach to the time-canvas. Rather than the usual left-to-right passage across the page, the horizontal squares of the graph paper represented the tempo—with each box equal to a preestablished ictus; and the vertical squares were the instrumentation of the composition.[6]

Pollock and Feldman's shared "allover" aesthetic holds for the composer's traditionally notated works in a different manner, perhaps more outwardly. Many of Feldman's subsequent works were quiet, long, and built

upon delicately undulating repetitions of colorful sonorities. In particular, the composer's iconic use of a steadily quiet dynamic level—something that applies not often to *Intersection 3* but to most of his other work—could be taken as a sonic analogue to Greenbergian flatness. His colleague and friend Earle Brown described it evocatively:

> It strikes me that Feldman's music is the music of an imagist. His music from the early fifties until now has—kind of—the same image as Rothko's paintings, working with different colors and orchestrations of a singular and single image.[7]

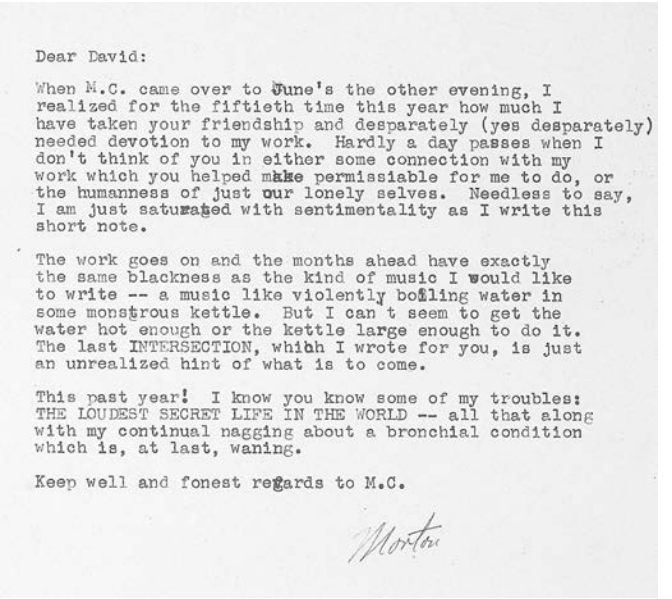
The visuality of Feldman's Greenbergian formalism could have philosophical significance in echoing the midcentury fashion for non-intentionality, expression, and the rejection of all that was tainted by traditional practices of composition. Feldman, like Pollock and many others at the time, had taken up an interest in Jungian psychoanalysis. And Cage himself once described Feldman's interest in strikingly metaphysical terms as a deep unconscious flux akin to the cyclical and ephemeral temporality of nature. In his 1958 lecture "Indeterminacy," Cage imaginatively fuses the two together by describing Feldman's creativity as akin to a "dead" state or "deep sleep" devoid of the ego's intentionality:

> One evening Morton Feldman said that when he composed he was dead; this recalls to me the statement of my father, an inventor, who says he does his best work when he is sound asleep. The two suggest the "deep sleep" of Indian mental practice. The ego no longer blocks action. A fluency obtains which is characteristic of nature. The seasons make the round of spring, summer, fall, and winter, interpreted in Indian thought as creation, preservation, destruction, and quiescence. Deep

sleep is comparable to quiescence. Each spring brings no matter what eventuality.[8]

Feldman's creative method may have been allied with a metaphysical drive toward quiescence, but the surrounding social world was loud. During performances of avant-garde works like *Intersection 3*, audiences and critics could become irate at the loss of reliability, and at the looming threat of fraudulence, at the general threat of abstract techniques, technologies, and new forms of art eliminating traditionally expressive goals and any shared criteria for judging good from bad. Scores such as *Intersection 3* (alongside the occasional explanatory program note) confronted audiences and critics with a shocking emptiness: the impersonal yet idiosyncratic language of formalism. As a result, many people publicly debated what was left of the score's normative boundaries. In the process, the thoughts expressed by these observers became much less perfunctory. Those with a conservative orientation toward music, such as the critic and musicologist Paul Henry Lang—who once described a 1960 concert by Tudor of avant-garde works as an "outrageous travesty"—could find themselves in an outright moral panic.[9]

This confrontational reception was far from an accidental by-product of Feldman's notational experiments. In a letter to Tudor, Feldman describes his compositional thinking around *Intersection 3* in stark terms: he writes that it embodies an Artaud-like "blackness"—"like violently boiling water in some monstrous kettle" (fig. 1.4). If by "violently boiling water" Feldman is intentionally referring to the clamor he heard in Tudor's legendary American premiere of Boulez's wildly aggressive and dissonant *Second Sonata* (1948), one certainly hears echoes of it in *Intersection 3*. Like Boulez's music, Feldman's is impersonally formalized and disciplined, almost as if one is disciplining oneself into insanity. Maintaining those tensions—violence and impersonal order fused together in the form of a prestigious



Dear David:

When M.C. came over to June's the other evening, I realized for the fiftieth time this year how much I have taken your friendship and desparately (yes desparately) needed devotion to my work. Hardly a day passes when I don't think of you in either some connection with my work which you helped make permissiable for me to do, or the humanness of just our lonely selves. Needless to say, I am just saturated with sentimentality as I write this short note.

The work goes on and the months ahead have exactly the same blackness as the kind of music I would like to write -- a music like violently boiling water in some monstrous kettle. But I can t seem to get the water hot enough or the kettle large enough to do it. The last INTERSECTION, which I wrote for you, is just an unrealized hint of what is to come.

This past year! I know you know some of my troubles: THE LOUDEST SECRET LIFE IN THE WORLD -- all that along with my continual nagging about a bronchial condition which is, at last, waning.

Keep well and fonest regards to M.C.

Morton

Fig. 1.4 Letter from Morton Feldman to David Tudor, 15 June 1953. Getty Research Institute, David Tudor Papers, 980039, box 53, folder 7. Courtesy of the Morton Feldman Estate.

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and sober event—captures a key theme of their aesthetic. It makes plain why Tudor was so important to the history of the midcentury avant-garde. His pianism kept the ship moving, and the legitimacy of his performances steadied it in a hurricane of norm-breaking. Composers, critics, and audiences came to trust him amid the chaos.

Notes

1. In this realization of *Intersection 3*, Tudor's interpretation of low, medium, and high is somewhat loose; his chosen pitches don't always fall within three mutually exclusive registers. He also used this realization for two commercial recordings, as well as for subsequent performances between 1954 and 1960.
2. See Antonin Artaud, "Affective Athleticism," in *The Theater and Its Double* (New York: Grove Press, 1958), 133–41.
3. Feldman's use of indeterminacy was a radical proposition when one recalls that Cage would not risk producing a thoroughly indeterminate score until his *Winter Music* (1957).
4. Morton Feldman, "Liner Notes" (1962), in *Give My Regards to Eighth Street* (Cambridge, MA: Exact Change, 2000), 6.
5. Cage, quoted in Feldman, "Liner Notes," 5.
6. Morton Feldman, "Crippled Symmetry" (1981), in *Give My Regards to Eighth Street*, 147.
7. Earle Brown, interview by Peter Dickinson, 1 July 1987, Rye, New York, in *CageTalk: Dialogues with and about John Cage*, ed. Peter Dickinson (Rochester, NY: University of Rochester Press, 2006), 141.
8. John Cage, "Indeterminacy" (1958), in *Silence: Lectures and Writings by John Cage* (Middletown, CT: Wesleyan University Press, 1961), 37.
9. Paul Henry Lang, "What Is Offered by the Electronic Age?," *New York Herald Tribune*, 10 April 1960.