MUSIC FROM THE TUDORFEST: SAN FRANCISCO TAPE MUSIC CENTER, 1964

80762-2 (3 CDs)

DISC 1 [TT: 72:37] 1. John Cage (1912–1992) 34'46.776'' for two pianists (1954) 35:05 David Tudor, Dwight Peltzer, pianos

2. Pauline Oliveros (b. 1932)
Duo for Accordion and Bandoneon with Possible Mynah Bird Obbligato (1963–64)
16:45
Pauline Oliveros, accordion; David Tudor, bandoneon; Ahmed (mynah bird loaned by Laurel Johnson)

3. Toshi Ichiyanagi (b. 1933) Music for Piano No. 4 (1960) 20:37 Pauline Oliveros and David Tudor, pianos

Track 1 recorded March 30, 1964. Tracks 2 and 3 recorded April 6, 1964. 34'46.776" for two pianists © 1954 C.F. Peters Corp. Duo for Accordion and Bandoneon with Possible Mynah Bird Obbligato © 1963–64 Deep Listening, Inc. Music for Piano No. 4 © 1960 Toshi Ichiyanagi

DISC 2 [TT: 46:16] 1. Toshi Ichiyanagi *Music for Piano No. 4, Electronic Version* (1960) 15:23 David Tudor, piano

2. John Cage Variations II (1961) 20:30 David Tudor, piano, live electronics

3. John Cage Music Walk (1958) 10:13
(for 1 or more pianists who also play radios and produce auxiliary sounds by singing or any other means)
Michael Callahan, John Chowning, Stuart Dempster, Warner Jepson, Douglas Leedy, Robert Mackler, Pauline Oliveros, Dwight Peltzer, Ann Riley, Loren Rush, Ramon Sender, Stanley Shaff, Linn Subotnick, Morton Subotnick, David Tudor, Ian Underwood, Jack van der Wyck

Tracks 1 and 2 recorded April 8, 1964. Track 3 recorded April 3, 1964. Music for Piano No. 4, Electronic Version © 1960 Toshi Ichiyanagi Variations II © 1961 C.F. Peters Corp. Music Walk © 1958 C.F. Peters Corp. DISC 3 [TT: 67:43]

1. John CageAtlas Eclipticalis with Winter Music, Electronic Version (1961)30:19

Michael Callahan, electronics; John Chowning, percussion; Stuart Dempster, trombone; Warner Jepson, piano; Douglas Leedy, horn; Robert Mackler, viola and viola d'amore; Pauline Oliveros, horn and tuba; Dwight Peltzer, piano; Ann Riley, piano; Loren Rush, double bass; Stanley Shaff, trumpet; Linn Subotnick, viola; Morton Subotnick, clarinet; David Tudor, piano; Ian Underwood, flute and piccolo; Jack van der Wyck, timpani; Ramon Sender, conductor

2. John Cage

Concert for Piano and Orchestra (1957–58)

26:07

David Tudor, piano; Stuart Dempster, trombone; Warner Jepson, piano; Douglas Leedy, horn; Robert Mackler, viola and viola d'amore; Pauline Oliveros, horn and tuba; Loren Rush, double bass; Linn Subotnick, viola; Morton Subotnick, clarinet; Ian Underwood, flute and piccolo; Ramon Sender, conductor

3. John Cage Cartridge Music (1960) 11:07

David Tudor and other Tudorfest performers, live electronics

All tracks recorded April 3, 1964. *Atlas Eclipticalis* © 1961 C.F. Peters Corp. *Cartridge Music* © 1960 C.F. Peters Corp. *Concert for Piano and Orchestra* © 1957–58 C.F. Peters Corp. *Winter Music* © 1957 C.F. Peters Corp. In a review that appeared in the San Francisco Chronicle on April 5, 1964, Alfred Frankenstein described "a concert in the stars." This was not an outdoor event, but an evening featuring music by John Cage, performed by David Tudor and members of the San Francisco Tape Music Center. Frankenstein was inspired by Cage's Atlas Eclipticalis (1961), an ensemble work composed by placing transparent paper over a series of star charts compiled by the Czechoslovakian astronomer Antonin Bečvář:

A small orchestra of wind, string, and percussion instruments played *Atlas Eclipticalis*, while David Tudor, at the piano, simultaneously performed *Winter Music*. All of the instruments were equipped with contact mikes so that their tone qualities were altered, and their sounds frequently came from speakers at a considerable distance from the stage.

The music consisted almost of individual points, spots, and spurts of sounds: they frequently overlapped and built up large densities, but there was seldom as much as a two- or three-note phrase.

The total effect was of great majesty, solemnity, and grandeur. . . . I think the newness of this music lies not so much in its compositional methods or its treatment of the instruments as in its substitution of measured clock time for recurrent metric pulsation. Because recurrent pulsation is absent, one feels a lack of line, which, of course, is intentional. But no music, not even Webern's, turns every note into so important an event or plays so much on anticipation as a prime factor in the musical experience.

Frankenstein's insightful comments are especially noteworthy if one considers the notorious performances of *Atlas Eclipticalis* (also played simultaneously with *Winter Music* in its electronic version) by Leonard Bernstein and the New York Philharmonic at Lincoln Center two months earlier as part of a series of concerts titled "The Avant-Garde." In contrast to the performances at the Tape Music Center, the reception of the same work was far from favorable. As reported by Calvin Tomkins, shortly after the first amplified sounds emitted from the loudspeakers, audience members muttered angrily and left their seats; roughly half of the audience had left the hall by the time the work ended. Taking his bows after the work's second performance Cage heard what he first thought was "the sound of escaping air," which he quickly realized was hissing by members of the orchestra. During the third performance some of the musicians whistled into their contact microphones, played scales, and purportedly smashed electronic equipment.

The confrontation between Cage and the New York Philharmonic was inevitable, given the musicians' lack of experience with experimental music, an unsympathetic conductor, and a conservative musical institution and its audience. *Atlas Eclipticalis* never had a chance in New York, but as Frankenstein's remarks show, this was not the case in San Francisco. The concert, part of a series called the Tudorfest, took place at a unique venue during a dynamic period in the history of arguably one of America's most forward-looking cities.

Although there were parallel developments around the world, during the 1960s California, and especially San Francisco, provided fertile ground for an ambitious reassessment of cultural values, which historians have termed the "counterculture." The region has a unique physical setting, situated at the western edge of the continent and enclosed by great expanses of desert and mountains on the east. As literary critic Michael Davidson has observed, this isolation has traditionally provided fertile breeding ground for "rascally and anarchistic types" from a variety of political, social, and artistic circles.¹

¹ Michael Davidson, The San Francisco Renaissance (Cambridge: Cambridge University Press, 1989), 11.

During its five-year existence, the San Francisco Tape Music Center provided an ideal environment for a significant interaction between the counterculture and the West Coast avantgarde, which not only had a dynamic impact upon the evolution of the group's aesthetics and the reception of their work, but also was part of a larger trend in the 1960s as the intellectual framework developed in avant-garde arts communities, which endorsed anti-establishment and experimentalist agendas, later took root on a much larger scale. Founded by Pauline Oliveros, Ramon Sender, and Morton Subotnick in order to provide a group of local composers with a studio and a venue for the presentation of their works, the Tape Music Center began in 1961 at the San Francisco Conservatory, where Sender created an electronic music studio in the conservatory attic. Sender and Oliveros presented a series of concerts called "Sonics," the first of which took place on December 18, 1961, and included compositions by Sender, Oliveros, Phil Winsor, and Terry Riley. When the conservatory administration refused to let the composers remain another year, they moved to a new venue, located at 1537 Jones Street in San Francisco's Russian Hill. After only a single season the building burned down and the Tape Music Center moved yet again, this time to 321 Divisadero Street, formerly a California Labor School on the eastern edge of Haight-Ashbury. The building contained two auditoriums, one of which was sublet to the Ann Halprin Dancers' Workshop, the other to KPFA, the Bay Area's listenersponsored progressive public radio station. The facilities in the third-floor electronic music studio were modest, culled together from used equipment and military surplus. The Tape Music Center lacked the financial backing that allowed electronic studios at state-sponsored radio stations and academic institutions to purchase expensive equipment. But the lack of institutional affiliation guaranteed composers working at the Tape Music Center a certain degree of artistic autonomy.

The founders of the Tape Music Center defined themselves in terms of a new musical subculture, an alternative to what they viewed as reactionary musical institutions across the country. As Ramon Sender explained in a report written in 1964:

There is a growing awareness on the part of young composers all over the country that they are not going to find the answers they are looking for in analysis and composition seminars of the academies. Some retreat from the "avant-garde" music environment, live marginally on the fringe of the community, or attempt to work isolated from musicians and concert groups. They have insulated themselves by this isolation from the sickness of culture, but too often also from their own creative potential. Others have banded together and have produced concerts of their works outside of the usual organizations.²

Sender and his colleagues envisioned the Tape Music Center as

a community-sponsored composer's guild, which would offer the young composer a place to work, to perform, to come into contact with others in his field, all away from an institutional environment. Each composer would, through his contact with the Center, be encouraged to fulfill his own musical needs and develop his own personal language. He would have the advantage and support of all the facilities of the Center, for rehearsals and performances of his music, for contact with other musicians and composers, [and] for work in the electronic music studios. He would be encouraged to involve himself in the musical life of the community-at-large. The community in turn would be offered the services of the Center as a music-producing agency for films, for plays, for churches, and [for] schools. Such a program, carried through in detail, could produce a revolution. It

² Ramon Sender, "The San Francisco Tape Music Center—A Report (1964)," *The San Francisco Tape Music Center: 1960s Counterculture and the Avant-Garde*, ed., David W. Bernstein (Berkeley: University of California Press, 2008), 43.

would, I believe, in five years' time, create a new cultural environment in at least our local area. Working closely with musicians' organizations and cultural and civic groups, it could break up some of the stagnant areas of our own local cultural environment, such as the traditional repertory of symphony and opera, the pork-barrel city band, the entrenched conservatism of some of the chambermusic organizations.³

During its three seasons at 321 Divisadero, the Tape Music Center evolved into the most prominent venue for experimental art in San Francisco, gaining a national reputation for musical innovation. It also continued to develop a unique artistic mission. The nucleus of composers who formed the San Francisco Tape Music Center shared a predilection for spontaneous musicmaking. Oliveros's interest in free improvisation dates back to the 1950s. In 1958, along with Riley and Loren Rush, she formed a group that met weekly at KPFA and recorded their improvisations. According to Oliveros, the improvisations began without pre-determined guidelines or structures. The three musicians recorded each session, later listening critically to the results in order to improve their improvising skills. As Riley recalled, the improvisations reflected "the kind of compositions we were doing in those days . . . [and] were quite free," comparing them to a form of "musical abstract expressionism rather than jazz." ⁴ The 1958 KPFA improvisation later gained momentum during the 1960s, inspired by the indeterminate scores and "open forms" of John Cage and others as well as the omnipresent background of the jazz tradition.

Composers at the Tape Music Center participated in interdisciplinary experiments in what Michael Kirby called the "new theater." A hallmark of the 1960s avant-garde, the historical roots for this genre lay in early twentieth-century Dadaist and Futurist performance art and more recently in works by John Cage. Cage had used theatrical elements in Water Music (1952) and in his legendary Black Mountain Piece (1952), a staged performance recognized as an important precursor of the "happenings" that became popular in avant-garde circles during the following decade. There was a proliferation of "happenings" and other forms of performance art in the 1960s, beginning with Allan Kaprow's 18 Happenings in 6 Parts (1959) and the Fluxus "events" by George Brecht and others. San Francisco at the time had a particularly rich tradition in experimental theater. The Committee, an improvisational satirical theater group from North Beach had been active since the 1950s; the San Francisco Mime Troupe, founded by R. G. Davis in 1959 (as the R. G. Davis Mime Troupe), incorporated diverse elements ranging from commedia dell'arte to Artaud's "Theatre of Cruelty" and Brecht's "Epic Theater" in order to advance a radical political agenda. The Actor's Workshop, a community-based organization like the Tape Music Center, was known for its performances of Beckett and Genet. Across the Bay in Berkeley, a former member of the UC Berkeley Drama Department, Ben Jacopetti, and his wife, Rain, founded the "Open Theater," a group known for their light projections on nude bodies, which they called "Revelations."

During the 1960s, light shows, an outgrowth of the "polysensorial" environments associated with the "Acid Tests," became a major component of the psychedelic rock scene and were regularly featured at many dance and concert venues such as the Fillmore Auditorium, the Matrix, and the Avalon Ballroom. Seymour Locks, an art professor at San Francisco State University, was a major influence on the development of this medium. Locks had studied experiments with light projection in the early twentieth century. In the 1950s he devised a method for creating light

³ Ibid., 43–44.

⁴ "Terry Riley, Interviewed by David W. Bernstein and Maggi Payne," *The San Francisco Tape Music Center*," 207.

shows by using an overhead projector with hollow slides and plastic dishes filled with pigments that could be stirred and swirled, thus creating moving patterns of light. Elias Romero, a painter and a poet, learned the technique and began to present light shows at parties and other venues. Romero also collaborated with Bill Ham, another painter who became a light-show specialist. The two artists worked with floating colored emulsions, rotating color discs, and slide projections, all having the effect of a new form of kinetic art.

Several pieces in the Tape Music Center's 1963–64 program included light projections. *Improvisation No. 1*, a collaborative work with a tape by Subotnick accompanied by improvisations performed by Sender and Oliveros on two pianos, featured visual images by Romero. Subotnick's *Theatre Piece after Sonnet 47 of Petrarch* (1963) included a set by Judith Davis, dancers (John Graham and Sarah Harvey), and light projections by Romero. Anthony Martin, who had worked with Tape Music Center composers during the Sonics series, subsequently replaced Romero. A painter and a former student at the Art Institute of Chicago, Martin developed a beautiful repertory of visual imagery created with hand-painted slides, liquid projections, film footage, and other techniques. He was in essence a "visual composer" working in real time, using film, prepared slides, overhead projectors with various images and found objects, and liquids on plates to create a changing visual presentation.

In the spring of 1964 Oliveros organized a festival celebrating the work of pianist David Tudor which featured compositions by Oliveros, George Brecht, Toshi Ichiyanagi, Alvin Lucier, and John Cage. The Tudorfest was a watershed event in the brief history of the Tape Music Center, which not only provided its members with an opportunity to collaborate with Tudor, but also to promote their own work. As Oliveros later recalled, "it stretched the center at the time, pushing it into a new domain." Co-sponsored by KPFA, the Tudorfest demonstrated the artistic diversity of the avant-garde, from the minimalistic explorations of barely audible piano sounds (played by Oliveros and Tudor) in Ichiyanagi's Music for Piano No. 4 to the instrumental chaos of Cage's Concert for Piano and Orchestra (1957-58) and Atlas Eclipticalis (1961), the often thunderous electronic outbursts in Tudor's interpretations of Cage's Cartridge Music (1960) and Variations II (1961). Several of the works, Brecht's Card Piece and Lucier's Action Music for Piano, Book I (1962), a performance emphasizing the act of piano playing more than the actual sounds of the instrument, crossed the boundary between music and conceptual art. (Since their visual aspect is so crucial, both the Brecht and the Lucier, in addition to Cage's Music for Amplified Toy Piano and Ichiyanagi's Sapporo, are not included in this box set.) Oliveros's collaboration with Tudor, Duo for Accordion and Bandoneon and Possible Mynah Bird Obbligato (1963-64) combined theatrical elements (including a revolving seesaw, which in addition to its visual impact, allowed for a changing spatialization of the sounds), improvisation, and a mynah bird named "Ahmed."

The Tudorfest placed the Tape Music Center at the forefront of developments in new music around the country. Its success owed a great deal to David Tudor's influence. As Oliveros explained,

The experience of working with David Tudor had a large and lasting impact on me and all associated with the Tudorfest performances, David was a master musician. He taught patience, perseverance, and listening by his actions and preparations for the performances, and mostly without words.⁵

The success of the Tudorfest also draws our attention to the fact that scandals such as the New York Philharmonic debacle, no matter how notorious and newsworthy, should not solely determine reception history. There often exist counterexamples that take place within a more

⁵ Pauline Oliveros, Memoir of a Community Enterprise," *The San Francisco Tape Music Center*, 87.

favorable social and artistic environment, as was the case for *Atlas Eclipticalis*, which along with the other works in the Tudorfest received masterful interpretations by dedicated musicians, whose efforts were well received by both audiences and by the press.

—David W. Bernstein

David Bernstein is Professor of Music at Mills College. His publications include books and essays on John Cage, Pauline Oliveros, the San Francisco Tape Music Center, Frederic Rzewski, Arnold Schoenberg, and the history of music theory.

For more than a decade, David Tudor had been the cardinal pianist of the experimental avantgarde. Composers in the United States and, beginning in the mid-1950s, in Europe found in Tudor a unique virtuosity—imaginative no less than technical—that led them to assume, in the words of Christian Wolff, that they were writing their music "for an instrument that was a symbiosis of the piano and David Tudor." But Tudor became increasingly dissatisfied with this role (the metaphor is Tudor's own: "I felt like an actor playing the same role," he would later say more than once). As early as 1962, his neighbor John Cage, long used to the sounds of the piano coming from his nearby studio as Tudor worked late into the night, could write, "Nowadays I hear nothing from his studio." By that time, Tudor's meticulous preparations of indeterminate scores by Cage and other composers meant that much of his work was done not at the piano but at his work table. There was also another reason for the silence: "with the performance of electronic works," Cage added, "it is useless to practice at home."

Tudor nevertheless continued to perform at the piano, if with diminishing frequency, and in early 1964 he found himself on another tour, this one of the U.S., with Karlheinz Stockhausen. Stretching over the first five months of the year, the tour effectively marked the end of a professional and personal relationship that began in the fall of 1954, when Tudor told Stockhausen, "I like your music 'the best', [...] will devote myself to it and play it wherever possible." That devotion had long been in decline when Pauline Oliveros arranged a series of concerts for Tudor at the San Francisco Tape Music Center in the spring of 1964. Coming near the end of the tour with Stockhausen, the Tudorfest was a much-needed respite: "more & more," Tudor told Oliveros when the tour—some nineteen all-Stockhausen concerts played around the country—was over, "his music seems a weariness to the flesh & to the spirit." Columbia Records had scheduled him to record Stockhausen's piano pieces after the tour (actually, to re-record them: Tudor had recorded *Klavierstücke I-VIII* and *XI* for Columbia in 1959, but tape print-through resulting from his enormous dynamic range prevented their release). He canceled the sessions.

Tudor and Oliveros met in San Francisco in the summer of 1963. They found common ground in their love of free-reed instruments—Oliveros is an accomplished accordionist and Tudor, who began his career as an organist, had recently taught himself to play the accordion's Argentine cousin, the bandoneon—and a fascination with the possibilities of electronics, but their friendship soon moved to another level: "there was a deep understanding between us," Oliveros said later. "I don't know what it was. I can't tell you. It was more telepathic, I think, or merely that there was something understood."⁶ Observing the two friends in conversation, one colleague recalled, was to see them "just communicating on some other plane." They talked about performing together, and before the year was out Oliveros was making plans for what would become the Tudorfest.

⁶ Pauline Oliveros, interview with the author, Kingston, New York, 4 October 2010.

There were six concerts, three programs each given twice. Throughout his career, and despite his profoundly private personality, most of Tudor's performances were collaborative, and of the thirteen works at the Tudorfest, eleven were either duos or ensemble performances. Tudor selected the programs, sent scores and parts to Oliveros to distribute to the other performers, and, during stops or short breaks in the Stockhausen tour, bought parts and components to use in the electronic works he would play (where he found time while on the road to prepare his own performances for the festival is not known).

The music of Cage figured prominently, including an all-Cage program as the second concert. 34'46.776" for a Pianist—the number denotes the piece's duration—was commissioned by the Donaueschingen Music Festival in 1954, as was the companion piece Cage wrote for himself, 31'57.9864" for a Pianist. Tudor's part soon dropped out of his repertoire, but he resurrected it nine years later for a concert with the cellist Charlotte Moorman, who, for her part in the duo, played 26'1.1499" for a String Player, one of the additional works Cage wrote using the same compositional means. The two performances of 34'46.776" at the Tudorfest, with Dwight Peltzer playing 31'57.9864", marked the last time Tudor played this dazzling score.

As he mastered the bandoneon, Tudor asked composers to write pieces that would expand the traditional uses of the instrument. In the fall of 1963, Oliveros began work on such a piece, a duo that quickly took another direction, as she explained to Tudor: "Our duo will be a trio for Accordion, Bandoneon and Mynah Bird as Ahmed has made a definite bid to be a member of this performance. Every time I pick up the squeeze box or play the tape he joins in very positively." Ahmed belonged to Oliveros's housemate, and his persistent participation during rehearsals persuaded the composer to include him in her Duo for Accordion and Bandoneon with *Possible Mynah Bird Obbligato*. Oliveros asked her friend, the choreographer Elizabeth Harris, to stage the performances at the Tudorfest. Taking her cue from the work's original medium, Harris designed a see-saw that moved simultaneously up and down and in a circle. Unsurprisingly, this created problems for the two human performers. "The challenge of the movements occupied our attention," Oliveros later put it drolly. "I had to be strapped into my chair with a safety belt, while David sat centered and free with his well-balanced bandoneon. Because of its free bellows, the weight can be equally distributed from the center of the body during performance."⁷ The sounds of the accordion and bandoneon were reflected off the walls of the Tape Music Center auditorium as Tudor and Oliveros swirled around the stage, improvising on the basis of the score they were forced to discard when their positioning on the see-saw made it impossible to use. "Long-held tone clusters were contrasted with jagged, disjunct pitch and rhythm[ic] relationships. During each section of movement we concentrated on an overall feeling—either pitch, rhythm, texture, or quality. The original notated score remained as an influence or reference point." Another Tudorfest participant, the artist Tony Martin, "worked with lighting changes designed to produce huge shadows and highlights." The unusual setting and lighting kept Ahmed rather silent in the first performance. In the second, heard here, he had overcome his stage fright, and his obbligato, beginning around seven and a half minutes into the recording, is particularly memorable.

Toshi Ichiyanagi was part of the remarkable group of students in Cage's experimental music course at The New School in New York City, and Tudor first played his *Music for Piano No. 4* in January 1961 during the series of performance events held in Yoko Ono's Chambers Street loft in lower Manhattan. It is not an easy piece to perform: two of its three instructions read "No attack should be made" and "Use sustaining sounds and silence(s) only." Tudor addressed these challenges by rubbing various objects (most of them made of soft materials) along the exterior of

⁷ Quoted in Ray Wilding-White, "David Tudor: 10 Selected Realizations of Graphic Scores and Related Performances," unpublished typescript, the David Tudor Papers, Accession No. 900039, Series IIa., Box 19, Folder 3, Getty Research Institute, Los Angeles, California.

the piano, thereby avoiding the strings, and at the Tudorfest he enlisted Oliveros as his performance partner for this version. For the second concert, Tudor made an electronic version of the piece by attaching contact microphones to the twelve fricatives, ranging from a sponge glove to a cork coaster to a pair of sink stoppers, he applied to the piano case. The sounds that resulted were sent through a four-channel mixer and projected through loudspeakers. The full title of Ichiyanagi's piece, echoing the other composers who saw in Tudor a fusion of performer and instrument, reads *Music for Piano No. 4 for David Tudor*.

Variations II was a high-water mark in the Cage-Tudor collaboration, "a piece entirely due to his presence on earth," Cage said in wonderment. Tudor turned Cage's score—a set of plastic transparencies, some containing lines, some containing points, and instructions using them—into a plan for electronically modifying and altering the sounds he produced around and inside the piano. *Variations II* remained a staple of Tudor's repertoire for years, even for decades (it became one of the few works he went back to on the rare occasions when he appeared as a pianist), and although a few keyboard sounds can be heard in his early performances of the work, by the time of the Tudorfest *Variations II* had been fully transformed into live electronic music.

Completed in the first days of 1957, *Winter Music* was Cage's first extension of indeterminacy from the composition of his music to its performance; consequently, it was the first time Tudor wrote out his own performance score, or realization, of a Cage work, a practice he had already applied to music by Morton Feldman and Earle Brown. A few years later, Cage composed a pointillistic piece for orchestra he called *Atlas Eclipticalis*. It was first performed in Montreal in August 1961, and for that occasion Tudor made an electronic version of *Winter Music*, again by using contact microphones. The piano became part of the larger ensemble, and the recording here shows how easily and effectively the two works meshed.

Tudor once described *Winter Music* to Stockhausen as "completely static" to contrast it with Cage's *Concert for Piano and Orchestra*: "exactly opposite, I think, very wild." Early performances of the *Concert* were wild in ways hardly keeping with Cage's instructions for using his innovative notations: the premiere in May 1958 and a second performance in Cologne later that year were marred by high jinks in the orchestra, and at a 1959 performance in Vienna, a woman in the audience blew on a whistle as Tudor and the small orchestra played. Even some of the Tudorfest musicians succumbed to the temptation to see Cage's freedoms as license, and Tudor had to remind at least one of them of a performer's responsibility to the composer's score, no matter how unusual its appearance. Tudor made two realizations of the piano part, writing them on small sheets of paper he placed in a homemade ring binder, a format that allowed him to vary their order from one performance to the next, and to combine pages from both realizations, as he does here, in a setting with nine other instruments (including a second piano) and a conductor who does not direct them but instead only signals the passage of time.

Cartridge Music, one of the early instances of live electronic music, was a consequence of Tudor's suggestion that Cage "make use of amplification and microphones where you don't really need them, to make things louder." It was first performed at the Cologne atelier of the artist Mary Bauermeister in October 1960 by a large ensemble that included Tudor, Cage, Wolff, Nam June Paik, and Bauermeister herself. Tudor and Cage performed it regularly in the years that followed, and in January 1962 they recorded it (four times, combining the takes into a single version denser in texture and twice the length of normal live performances, such as those given at the Tudorfest). The appeal of *Cartridge Music* lay in its transformation of sounds made by everyday objects such as pipe cleaners, toothpicks, matches, wires, and similar materials inserted into phonograph cartridges on their way to amplification and transmission. At the Tudorfest, Tudor performed *Cartridge Music* with five partners. "That gets to be quite complex visually as well as aurally," he said, a few months later, "because when you have six people, and they're all following

indeterminate material, they sometimes all come together at one point in space, and you [still] have to produce some sound, and they get in each other's way. And that's quite interesting to watch, and see who wins."⁸

Music Walk, "for 1 or more pianists, at a single piano, using also radios and/or recordings," was first performed in Düsseldorf in October 1958 by Tudor, Cage, and the young English composer Cornelius Cardew. A few days later, Tudor described the scene in a letter to his companion, the writer and ceramist M.C. Richards: "3 pianists at one piano & 4 radios around the room. very entertaining." Entertaining, too, to judge from the audience's reactions, was the version heard here. Involving seventeen performers in all, it made *Music Walk* a kind of *finale tout ensemble* to the all-Cage concert at the Tudorfest.

"I remember this period as a lot of fun," Oliveros said in looking back on her work at the San Francisco Tape Music Center, "as well as very important in my development as a composer." At the same time, the Center was a cooperative venture and so had its share of inefficiency, obstruction, and aggravation, and at times Oliveros jokingly referred to it as "the Snake Center, because I couldn't get things done that I wanted to get done there, sometimes. There was a certain amount of frustration in the collective, so to speak." Tudor helped her keep things in perspective. After the Tudorfest was over, he wrote, "needless to say the festival was a great joy for me too—pleasure & pain!—& some of the best performances ever."⁹

—John Holzaepfel

John Holzaepfel received his Ph.D. in historical musicology from the City University of New York, where he wrote his dissertation David Tudor and the Performance of American Experimental Music, 1950-59. He is currently completing a biography of David Tudor.

David Tudor (1926–1996) was born in Philadelphia; his first professional activity, at age sixteen, was as an organist. He became a leading avant-garde pianist, with highly acclaimed first performances of compositions by contemporary composers, before moving in the mid-1960s to the composition and performance of "live electronic music." In the early '50s, at Black Mountain College and in New York, he formed relationships with radical artists with whom he continued to work during his entire career-John Cage, Merce Cunningham, Robert Rauschenberg, Christian Wolff and others. He became the pianist for the Merce Cunningham Dance Company and he and John Cage toured during the '50s and early '60s with programs of Cage's works. In the late '50s he also had an important presence at Darmstadt, where he worked with and influenced Karlheinz Stockhausen, Cornelius Cardew, and other members of the European avant-garde. His own compositions began to appear in the mid-1960s: Bandoneon ! (1966), a composition for New York City's Nine Evenings, a project of Experiments in Art and Technology (E.A.T.); design and composition for the Pepsi Pavilion, Expo '70, Osaka, Japan, also an E.A.T. project; and, from 1974, as a founding member of Composers Inside Electronics, a music ensemble whose members perform compositions for which they have built the electronic circuitry. Tudor's first composition for the Cunningham Dance Company was for Merce Cunningham's Rainforest in 1968. On Cage's death in August 1992, Tudor assumed the post of Music Director of MCDC. Tudor's last work for Cunningham was Soundings: Ocean Diary, the electronic component of the score for Ocean (1994). He died in Tomkins Cove, NY, on August 13, 1996.

⁸ David Tudor, interview with Stefan Olzon, Stockholm, September 1964.

⁹ Idem, letter to Pauline Oliveros, 19 May 1964. New York Public Library, the Pauline Oliveros Papers— 1994, Box 27, Folder 27.

SELECTED DISCOGRAPHY

David Tudor

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Francis Goelet (1926-1998), In Memoriam

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