David Tudor (1926-1996) was best known as one of the great avant-garde pianists of the twentieth century, a leading champion of new directions and a preeminent interpreter of experimental works during one of the most radical periods in the history of music. His name will be forever linked with that of John Cage (1912-1992), if only for the fact that he took part in the premières of virtually every important Cage work through the end of the 1960s, including such landmarks as *Music of Changes*, *4’33”*, and the multimedia extravaganza *HPSCHD*. It is fitting that this particular compact disc brings Cage and Tudor together again, in a historic collaboration—a 1972 radio broadcast, in which both of these legendary figures participated, as composers and as performers.

David Tudor's long association with John Cage dates back to the early 1950s; at that time they were both teaching at Black Mountain College in North Carolina, and collaborated on performance events which may have been the first “happenings.” In 1953, by which time both had left North Carolina for New York City, Tudor joined the newly founded Merce Cunningham Dance Company, working closely with Cage and Cunningham for many decades. (In fact, after Cage's death Tudor succeeded him as music director of the company). He quickly became identified with the informal “New York School” of composers who gathered around Cage—in particular, Earle Brown, Morton Feldman, and Christian Wolff—and, as their chief interpreter, became an invaluable member of the group. It was precisely at this time—the early 1950s—that Cage began to move away from his previous style, which had been defined primarily by unusual performing forces (percussion ensemble, prepared piano, live electronic sound sources), to explore the use of chance operations in the course of his composition. Along these new lines, Cage was devising scenarios for virtuosic improvisatory realization, and unusual ways of notating, to suggest performance possibilities rather than dictating outcomes. Tudor's presence and influence were undoubtedly important factors in facilitating these new developments in Cage's work.

We may think primarily of David Tudor the pianist performing works by his colleagues of the “New York School,” Cage in particular. However, Tudor also played a great deal of new music outside the Cage circle; he programmed music by Pierre Boulez (whose Second Piano Sonata he introduced to America in 1950), Sylvano Bussotti, Mauricio Kagel, Karlheinz Stockhausen (Tudor was the dedicatee of the 1955 *Klavierstücke VI*), Stefan Wolpe (who had been his early composition teacher) and LaMonte Young. During the early1960s, Tudor gradually became less active as a pianist and more concerned with the creation and performance of his own live electronic music. His first composition—for which contact microphones were attached to 250 fluorescent light bulbs on the ceiling—was performed at the Stockholm Modern Art Museum in 1964. Given what we now know of Tudor's future directions as a composer, this piece/performance was significant in two respects: one, its creation focused on instrument design, and two, it took place within a larger visual-theatrical context, in collaboration with other artists (in this case, the Cunningham Dance Company and Robert Rauschenberg). Those patterns were to remain constant. David Tudor emerged as a brilliant designer of modular electroacoustic devices and—equally important—the interconnections between them. He constructed these “instruments,” or vehicles used for
altering the sounds of other “instruments,” so that they would define parameters of both composition and performance—electronic scenarios which could affect the course of sonic events, usually in a larger (visual, theatrical, spatial) context.

Three comments might be made regarding Tudor as composer. One, his work was as much “evolutionary” as “revolutionary.” He was well aware of the tradition of processing environmental sound for electroacoustic musical purposes, and the creation of multi-channel textures to surround or envelop audience members. There are many precedents for both tendencies, going back to Pierre Schaeffer’s musique concrète experiments of the early 1950s, Edgard Varèse’s classic 1958 Poème Electronique, and Cage's work with radios and collage tapes. (We should also note Cage's own forays into instrument design, such as his creation of the prepared piano.) Tudor was masterly in his expansion and extension of these traditions. Second, his singular absorption in instrument design reflects his own remarkable identification (during his performing days) with his instrument, probing every aspect of the piano's mechanical, technical, and expressive potential. Cage suggests as much when he notes (of Tudor) that “. . . when Bussotti wrote a piece for him, he didn't say 'for piano;' he said 'for David Tudor,' meaning him as an instrument.”

Third, Schoenberg’s oft-quoted comment about Cage, that he was “. . . not a composer, but an inventor, of genius,” is especially appropriate when applied to the later career of Tudor. We don't mean to suggest that either Cage or Tudor should be considered a non-composer! (In this respect, Schoenberg was mistaken.) But certainly David Tudor, perhaps even more so than Cage, was a remarkable inventor—of sophisticated hardware, and of ingenious interconnections. For him, instrument design, performance, and composition (or “art” and “technology”) were one. Among Tudor's live electronic compositional ventures, the best known may be the series of pieces collectively entitled Rainforest. There are four versions, the first created in 1968 and the last, Rainforest IV, in 1973. In each version, fairly familiar sounds are transmitted through various physical materials; by virtue of that process, the original sounds are transformed, amplified, sent through various speaker channels and scattered about the performance space. Over the course of the series Tudor varied the sources for his fundamental sonic material. For example, warbling sine-wave oscillators are used for Rainforest I, a work created for dance, but, by contrast, Rainforest II is designed for vocal input.

The fourth and final version of the Rainforest series is intended to encourage interactive audience performance in a museum or gallery space. For this piece, electronic speaker drivers are attached to a variety of found objects, creating an “orchestra” of familiar-looking but unusual-sounding bodies. As one walks through the sonic environment, these objects function as loudspeakers or, at times, as filters. Any performance of Rainforest IV is, therefore, a spatial, visual, multimedia adventure—an “installation” in which space, architecture, found objects, and a body of human beings moving through them interact with one another.

The 1960s, which witnessed David Tudor going through the changes in his career noted above, were pivotal for John Cage as well. During that decade he became much more interested in a return to quasi-traditional staff notation, and began to focus his attention on the use of pre-existing material for purposes of “collage.” Nineteen sixty-nine saw the creation of two Cage works that typified these new directions, HPSCHD and Cheap Imitation—based on materials by Mozart and Satie respectively, although
One author whose work held special interest for him was Henry David Thoreau (1817-1862). Cage was introduced to Thoreau's journals in 1966, was reading his work intensively by 1967, and enrolled as a life member in the Thoreau Society in 1968. It is not difficult to see why he would have been so attracted to this author. Cage may have been drawn to Thoreau's idealism, his dedication to a life of simplicity, his distrust of institutions (including governments), and his reflections on the virtue of “Civil Disobedience”—all told, an anarchic life-view rather similar to Cage's own. In addition, there was Thoreau's way of perceiving, and responding to, music and sound in general. (Cage quotes Thoreau has having described music as “bubbles on the surface of silence”—an aphorism that Cage himself might have coined, and closer to the sensibility of Japanese haiku than New England.) In 1970 Cage composed the piece called *Mureau*, in which phrases from Thoreau's journals (in particular, passages which touch on the subject of music) are used as the springboard for an elaborate collage. The resultant fabric combines elements of sense and nonsense, as it veers between contextual meaning and a sort of abstract, linguistic vocalise. In discussing *Mureau*, the composer noted that the work “. . . departs from conventional syntax. It is a mix of letters, syllables, words, phrases, and sentences. I wrote it by subjecting all the remarks of Henry David Thoreau about music, silence and sounds . . . to a series of I Ching chance operations. The personal pronoun was varied according to such operations and the typing was likewise determined.” In fact, the printed text (or score!) of *Mureau* presents a dazzling, bewildering array of typefaces, with individual letters or letter-groups offset in italics and/or boldface. It offers a uniquely Cageian middle-ground between music and poetry. Significantly, despite the work's striking visual character, it is meant to be read aloud—performed—rather than perceived only as a visual pattern. A further level of ambiguity can be found in the work's title, which links the first syllable of *Music* to the last of *Thoreau*. (Ten years later, in a similar vein, Cage would compose *Muoyce* or *Music-Joyce*, subjecting passages of Joyce to even more elaborate chance operations.) In Cage's public readings of *Mureau*, he explored a number of performance variables—differences in tempo, vocal timbre, pitch, register, and dynamics. A similar range will be apparent, in fact, when listening to this recorded performance.

That last phrase leads us directly to a discussion of the music recorded here: a collaborative production of Cage's *Mureau* and Tudor's *Rainforest II* performed simultaneously, under the auspices of the Pro Musica Nova Festival for Radio Bremen (Germany) on May 5, 1972. The joint performance of *Mureau* and *Rainforest II* took place in a large concert hall before an audience, rather than privately in a recording studio. Whereas in other performance realizations (such as their legendary Indeterminacy collaboration) the two men had been placed in separate isolation booths, here the two
shared the same performance space, so that each could hear and see the other person's activity. In fact, Cage and Tudor sat quite close to one another at the center of the stage, Cage performing *Mureau* as a four-channel realization—one live channel against three pre-recorded tracks, all of them his own voice—and Tudor actively engaged in real-time processing of Cage's vocal material, using it to generate electronic loudspeaker-filter events. Compared with other *Rainforest* installations, in which visual and theatrical elements may predominate, the Bremen production of *Rainforest II* offered only two such experiences: the sight of the two composer-performers activating their "instruments," and the antiphonal-directional use of eight loudspeakers around the hall.

For anyone listening to this CD, however, questions of theatricality are secondary. The act of experiencing this disk is that of perceiving its sounds, and the relationships—successively (horizontally) and texturally (vertically)—between the sounds. And one must go beyond the individual sounds to consider the full impact of Cage's revolution in the area of continuity. In his passionate belief in the beauty of sound—all sound, even noise—for its own sake, Cage was convinced that the connective tissue between one sound and the next—that which traditionalists call "form," or "harmony," or "development"—had to be broken. What sets this music apart from the mainstream of Western art music (even the most hard-edged example of dissonant atonality) is Cage's embrace—Tudor's, too—of extreme discontinuity on both the horizontal and vertical levels. This approach to musical discourse, derived from Ives by way of photographic "multiple exposure," was prophetic in ways that Cage, Tudor and their "New York School" colleagues could only hint at. Every time we of the twenty-first century channel-surf in front of our TV sets, or hit the "scan" button on our car radio, or enjoy the simultaneous, antiphonal polyphony of a dozen boom-boxes on a sunny day at the beach, we're experiencing high levels of Cageian discontinuity—and often relishing the experience immensely.

If, even after altering your listening focus, you find the music overly long, consider that you may be approaching it with inappropriate expectations—or, as the composers might have said, asking the wrong questions of it. Consider, too, what Cage replied when he was asked which traits he would like his listeners to have when they go to a concert. He noted that "they should be ready for a new experience," and that this ideal state could be best reached by listeners being "attentive" and "empty"—empty in the sense of being open. ("The like and dislike of the ego doors should be down," as he put it.) Cage also suggested that people who feel his pieces are too long are "... thinking of art as entertainment, and that isn't what art is about. I would say, to put it as simply as I can, that art changes our minds.” —*Elliott Schwartz*

Elliott Schwartz is the Robert K. Beckwith Professor of Music at Bowdoin College. He is the author of *Electronic Music: A Listener's Guide*, co-author of *Music Since 1945*, and co-editor of the anthology *Contemporary Composers on Contemporary Music*. His compositions may be heard on CRI, New World, and several other labels.

In 1970 I had been able to convince the board of music experts at the EBU (European Broadcasting Union) in Geneva that it would be a very good idea (and also overdue) to finally organize a concert with John Cage, especially for his sixtieth birthday. As a joint effort of all the European broadcasting corporations, this concert could then be aired live
by all the stations— which in fact happened on August 5, 1972 with Cage's *Mesostics Re* Merce Cunningham* and Tudor's *Untitled*. It became evident as well that the smallest of all the public stations, Radio Bremen, would be given the opportunity to organize an additional concert with Cage and Tudor as an opener for our festival program “pro musica nova 1972.” However, during my preparations for the event I received the following letter from John Cage:

“... However, circumstances are greatly changed: David Tudor is now a composer in his own right, and he concentrates beautifully on circuitry both audio and video, rarely touching the piano. We are the best of friends but we don't give concerts together as we did formerly...”

Thus the idea came about to simultaneously perform two works by two composers who were separated and united at the same time, documenting this new and, according to Cage, so important situation. Cage contributed *Mureau*—its title blends the term music with Thoreau—a work that vocalizes Thoreau's verbal material, and Tudor, *Rainforest II,* a live electronic composition where Tudor utilizes different circuits and feedbacks while allowing the sounds to travel around the concert hall.

This open-ended performance lasted about three hours and took place in the large, empty (the seats had been removed) concert hall of the Bremen Glocke on May 5, 1972. The audience came in droves and listened with considerable attention to the varied vocal and electronic sounds, an occurrence that was by no means common in these early days of New Music. They had a great deal of admiration for these two endearing spirits who were so instrumental in the development of New Music. One couldn't have imagined a better opening for the festival and the chance we took led to great recognition.

A few years later I came up with a little alphabet of some central terms that are characteristic of Cage:

- Absichtlosigkeit - Unintentionality
- Achtsamkeit - Carefulness
- Aufmerksamkeit - Attentiveness
- Beharrlichkeit - Perserverance
- Disziplin - Discipline
- Einssein - Be One
- Erkenntnis - Realization
- Flexibilität - Flexibility
- Freundschaft - Friendship
- Gegenwart - Presence
- Gelassenheit - Calmness
- Geräusch - Noise
- Gleichzeitigkeit - Simultaneousness
- Heiterkeit - Cheerfulness
- Hingabe - Devotion
- Klang - Sound
- sein Lachen - His Laughing
- Leben - Life
Loslassen - Release
Momentum - Momentum
Mut - Courage
Natur - Nature
Null - Zero
Nutzlichkeit - Usefulness
Offenheit - Openness
Prozess - Process
Raum - Space
Simultaneität - Simultaneity
Stille - Silence
Johns Stimme - John's voice
Umwelt - Environment
Unabhängigkeit - Independence
Unvorhersehbarkeit - Unpredictability
Vertrauen - Confidence
Wachheit - Alertness
Wahrnehmung - Perception
Wandel - Change
Weisheit - Wisdom
Wirklichkeit - Reality
Zeit - Time
Zen - Zen
Zufall - Chance

And for David Tudor I found the following words:

Remembering David Tudor
means
remembering
a friend
an exceptional musician
whom to meet
I had the great chance
already here in Bremen in 1960
from him I learned
a totally new kind of interpretation
of music
this selfless way of playing
that did not place itself in front of
and certainly not behind the work
but at every moment
with every sound
enlivened the presence of the work	hanks to his unique concentration
on what is Now
and for which he always found
ew ways of articulation
not to mention his dynamics;
five different levels of a sound
in one hand!
and then the countless discoveries
of auxiliary sounds
inside and outside the piano
which he contributed
so clearly and prudent
and cautious
and with which he structured the
adventure “Time”
that’s the way
I saw and admired him
during all the years
during so many concerts and productions
here at our station
but also elsewhere
and I got to know him personally
he who was so eloquent
but withdrawn at the same time
he stayed overnight in my house
from time to time
and in talking with him
I got to know a wonderful and
caring person a man with a profound knowledge
and tremendous experience
last time I saw him
in New York three years ago
where he realized every evening
in the City Center Theatre
by means of countless electro-acoustic instruments
and appurtenances
live sound effects of different nature
for the productions of Merce Cunningham
and his group became reality
and then
some days later
I met him
by chance
on the street
in the middle of Manhattan
where he came towards me
as usual very friendly
but also very labored and
dragging himself along with difficulty
and there he told me
in a few words about his illness
and then we said good-bye

remembering
David Tudor
means
being grateful
for all that he gave
so plentiful
to all of us
in New Music.

The fact that this eventful evening with its two remarkable works is now being released on CD, thus being made available to a greater audience, can only be welcomed as it is a very special document in the history of music. —Hans Otte (translated from the German by Helga Grotjahn and U.K. Rattay)

Hans Otte was director of Radio Bremen's “pro musica nova” festival and the station's music director during the years 1959-1984.

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**DAVID TUDOR (1926-1996) - RAINFOREST II**
**JOHN CAGE (1912-1992) - MUREAU**
**A Simultaneous Performance** 80540-2 (2CDs)

Disc 1
1 Rainforest II / Mureau 43:02

Disc 2
1 Rainforest II / Mureau (continued) 51:17

David Tudor, live electronics
John Cage, voice, pre-recorded tape

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