DISC ONE
MUSIC FOR MERCE (1952–2009)
80712-2

1. Christian Wolff (b. 1934)
   For Magnetic Tape (1952) [pt. 1 of 4]  5:24
   Dance: Suite by Chance (1952)

2. Christian Wolff
   For Piano I (1952)*  5:19
   Dance: Untitled Solo (1953)
   David Tudor, piano

   Dance: Minutiae (1954)
   John Cage, David Tudor, pianos

   Indices (1955) [excerpt]  20:51
   piano reduction of Indices (1954)
   for flute, french horn, trumpet, percussion, piano, amplified guitar, violin, violoncello, double bass
   (ballet version)
   Dance: Springweather and People (1955)
   David Tudor, piano

5. Bo Nilsson (b. 1937)
   Quantitäten (1958)***  12:31
   Dance: Night Wandering (1958)
   David Tudor, piano

TT: 60:53

* Recorded on tour in 1972
** Recorded in 1954
*** Recorded on tour in 1968

For Magnetic Tape © 1952 Christian Wolff
For Piano I © C.F. Peters Corp.
Music for Piano 1–20 © C.F. Peters Corp.
Indices © C.F. Peters Corp.
Quantitäten © Universal Edition
DISC TWO
MUSIC FOR MERCE (1952–2009)

   \textit{Ixion} (1958)*  20:21
   Dance: \textit{Summerspace} (1958)
   John Cage, David Tudor, pianos

   Dance: \textit{Variations V} (1965)
   John Cage, David Tudor, Gordon Mumma, live electronics

3. Gordon Mumma (b. 1935)
   \textit{Mesa} (1966)***  19:38
   Dance: \textit{Place} (1966)
   David Tudor, bandoneon; Gordon Mumma, live-electronic cybersonic processing

4. Toshi Ichiyanagi (b. 1933)
   \textit{Activities for Orchestra} (1962)****  24:09
   Dance: \textit{Scramble} (1967)
   David Behrman, viola; John Cage, piano, voice, percussion; Gordon Mumma, horns, live electronics; David Tudor, piano, live electronics; Malcolm Goldstein, violin; Max Neuhaus, percussion

TT: 78:15

* Recorded in Stockholm for rehearsal late 1950s
** Recorded November 11, 1966, Paris
*** Recorded November 9, 1966, Paris
**** Recorded on tour in May 1968

\textit{Ixion} © C.F. Peters Corp.
\textit{Variations V} © C.F. Peters Corp.
\textit{Mesa} © 1966 Gordon Mumma (BMI)
\textit{Activities for Orchestra} © 1962 Toshi Ichiyanagi
DISC THREE
MUSIC FOR MERCE (1952–2009)

1. David Behrman (b. 1937)
   … for nearly an hour… (1968)* [excerpt] 3:23
Dance: Walkaround Time (1968)
Valda Setterfield, Carolyn Brown, Barbara Dilley Lloyd, Beverly Emmons, voices

2. Pauline Oliveros (b. 1932)
Dance: Canfield (1969)
John Cage, Gordon Mumma, Jean Rigg, David Tudor, voices, live electronics, acoustical-space sound-activators

3. Christian Wolff (b. 1934)
   For 1, 2, or 3 People (1964)** [excerpt] 12:07
Dance: Tread (1970)
David Tudor, baroque organ, live electronics

4. Christian Wolff
   Burdocks (1971)** [excerpt] 16:59
Dance: Borst Park (1972)
David Behrman, viola; John Cage, percussion; Gordon Mumma, horn, cornet; David Tudor, bandoneon; Garrett List, trombone; Frederic Rzewski, piano

   52/3 (1972)** [excerpt] 16:39
Dance: Landrover (1972)
John Cage, piano; Gordon Mumma, live electronics; David Tudor, live electronics

6. Gordon Mumma
   Telespos (1972)** [excerpt] 18:27
Dance: TV Rerun (1972)
Gordon Mumma controlling sounds activated by dancers with telemetry-accelerometer belts

TT: 77:58
* Recorded in 1968 in Buffalo, New York
** Recorded on tour in 1972
*** Recorded September 12, 1972, Venice

In Memoriam: Nikola Tesla, Cosmic Engineer © 1969 Deep Listening Publications
For 1, 2, or 3 People; Burdocks © C.F. Peters Corp.
52/3 © 1972 C.F. Peters Corp./Gordon Mumma (BMI)/Estate of David Tudor
Telespos © 1972 Gordon Mumma (BMI)
DISC FOUR
MUSIC FOR MERCE (1952–2009)

1. David Tudor (1926–1996)
_Toneburst_ (1975)* 17:45
Dance: _Sounddance_ (1975)
David Tudor, live electronics

2. Takehisa Kosugi (b. 1938)
Dance: _Squaregame_ (1976)
Takehisa Kosugi, violin, voice, live electronics

_Remainder_ (1976) [excerpt] 14:55
Dance: _Töse_ (1976)
Tape

4. Jon Gibson (b. 1940)
Dance: _Fractions I_ (1977)
Jon Gibson, flute and live electronics

_Inlets_ (1977)**** [excerpt] 10:17
Dance: _Inlets_ (1977)
John Cage, Paeder Mercier, Mel Mercier, conch shells with water; John David Fullemann, foghorn, tape

TT: 68:44

* Recorded March 12, 1976, Perth, Australia
** Recorded December 15, 1976, Tokyo
*** Recorded October 8, 1978, New York
**** Recorded October 27, 1983, Roubaix, France

_Toneburst_ © 1975 Estate of David Tudor
_S.E. Wave/E.W. Song_ © 1976 Takehisa Kosugi
_Remainder_ © 1976 Estate of Maryanne Amacher
_Equal Distribution_ © 1977 Jon Gibson
_Inlets_ © C.F. Peters Corp.
DISC FIVE
MUSIC FOR MERCE (1952–2009)

1. David Tudor (1926–1996)
Weatherings (1978)* [excerpt] 14:54
Dance: Exchange (1978)
David Tudor, live electronics

2. Yasunao Tone (b. 1935)
Geography and Music (1979)** [excerpt] 21:18
Dance: Roadrunners (1979)
John Cage, Takehisa Kosugi, voice; David Tudor, piano; Martin Kalve, qin;
Chinese text read aloud by Yoshiharu Suenobu

3. David Tudor
Phonemes (1981)*** [excerpt] 14:00
Dance: Channels/Inserts (1981)
David Tudor, live electronics

4. David Tudor
Sextet for Seven (1982)**** 18:15
Dance: Quartet (1982)
David Tudor, live electronics

TT: 68:52

*Recorded September 14, 1991, Paris
**Recorded October 20, 1983, Leuven, Belgium
***Recorded November 29, 1992, Tel Aviv
****Recorded March 24, 1990, New York City

Weatherings © 1978 Estate of David Tudor
Geography and Music © 1979 Yasunao Tone
Phonemes © 1981 Estate of David Tudor
Sextet for Seven © 1982 Estate of David Tudor
DISC SIX
MUSIC FOR MERCE (1952–2009)

1. Takehisa Kosugi (b. 1938)
   Spacings (1984)* 23:52
   Dance: Doubles (1984)
   Takehisa Kosugi, live electronics

2. John King (b. 1953)
   gliss in sighs (1985)** 16:19
   Dance: Native Green (1985)
   John King, pre-recorded and live electric prepared violin

   Dance: Points in Space (1986)
   Tape

   Dance: Shards (1987)
   David Tudor, live electronics

   Dance: August Pace (1989)
   Takehisa Kosugi, sitar, percussion; Michael Pugliese, percussion

TT: 74:12

*Recorded March 20, 1988, New York City
**Recorded March 12, 1985, New York City
***Recorded March 17, 1988, New York City
****Recorded November 13, 1990, Bangalore, India

Spacings © 1984 Takehisa Kosugi
gliss in sighs © 1985 John King (BMI)
Voiceless Essay © C.F. Peters Corp.
Webwork © 1987 Estate of David Tudor
Peace Talks © 1989 Estate of Michael Pugliese
DISC SEVEN
MUSIC FOR MERCE (1952–2009)

1. Takehisa Kosugi (b. 1938)
   *Spectra* (1989) 20:29
   Dance: *Cargo X* (1989)
   Takehisa Kosugi, live electronics, percussion with contact mics, voice; David Tudor, Michael Pugliese, live electronics, percussion with contact mics

   **Sculptures Musicales** (1989) [excerpt] 12:14
   Takehisa Kosugi, David Tudor, Michael Pugliese, various acoustic and electronic constant sounds

   ***Virtual Focus*** (1990) [excerpt] 15:15
   Dance: *Polarity* (1990)
   David Tudor, live electronics

4. John Cage
   ****Four³** (1991) [excerpt] 15:24
   Dance: *Beach Birds* (1991)
   Takehisa Kosugi, rainsticks, oscillator; David Tudor, piano, rainsticks; Michael Pugliese, piano, rainsticks; John D.S. Adams, rainsticks

5. David Tudor
   Dance: *Enter* (1992)
   David Tudor, Takehisa Kosugi, live electronics

TT: 77:22

* Recorded July 26, 1989, Cannes
**Recorded June 23, 1991, Zurich
***Recorded October 6, 1990, Paris
****Recorded June 26, 1992, McGill Recording Studios, Montreal (studio recording)
*****Recorded June 5, 1994, Lisbon, Portugal

*Spectra* © 1989 Takehisa Kosugi
*Sculptures Musicales* © C.F. Peters Corp.
*Virtual Focus* © 1990 Estate of David Tudor
*Four³* © C.F. Peters Corp.
*Neural Network Plus* © 1992 Estate of David Tudor
1. John King (b. 1953)
   Dance: CRWDSPCR (1993)
   John King, pre-recorded dobro guitar; live electronics; David Tudor, live electronics

2. Stuart Dempster (b. 1936)
   Dance: *Ground Level Overlay* (1995)
   Stuart Dempster, garden hose, conch; Chad Kirby, conch; Takehisa Kosugi, conch

   *Four 6* (1992)*** [excerpt] 11:17
   Paul DeMarinis, laptop; Takehisa Kosugi, percussion, contact mic, tape, live electronics, voice;
   Jim O’Rourke, laptop; Stuart Dempster, trombone

4. Takehisa Kosugi (b. 1938)
   Dance: *Scenario* (1997)
   Takehisa Kosugi, electric violin, live electronics

5. Christian Wolff (b. 1934)
   *Or 4 People* (1994)***** [excerpt] 6:16
   Dance: *Rune* (1959)
   Christian Wolff, piano, melodica; Takehisa Kosugi, live electronics, violin, harmonica; Jim O’Rourke, laptop; Stuart Dempster, trombone

TT: 67:20

*Recorded February 26, 1994, Madison, Wisconsin
**Recorded May 2, 1996, Seattle, Washington
***Recorded April 4, 1998, Berkeley, California
****Recorded November 27, 1999, Lyon
*****Recorded July 23, 1999, New York City

*blues ’99 © 1993 John King (BMI)
*Underground Overlays © 1995 Stuart Dempster
*Four 6 © C.F. Peters Corp.
*Wave Code A–Z © 1997 Takehisa Kosugi
*Or 4 People © C.F. Peters Corp.
108 and One® (1991)* [excerpt] 14:18
Dance: Interscape (2000)
Loren Dempster, cello; Orchestra del Teatro La Fenice, Arturo Tamayo, conductor

2. John King (b. 1953)
Dance: Fluid Canvas (2002)
John King, laptop

3. David Behrman (b. 1937)
Dance: eyeSpace (2007)
David Behrman, laptop; Takehisa Kosugi, electric violin; John King, electric guitar, viola; Christian Wolff, prepared piano

4. Annea Lockwood (b. 1939)
Dance: eyeSpace (2007)
John King, electric guitar, viola, live electronics; David Behrman, laptop, zither; Stephan Moore, live electronics

TT: 68:58

*Recorded September 29, 2000, Venice
***Recorded October 22, 2007, Melbourne
****Recorded January 26, 2008, Stanford, California

108 and One® © C.F. Peters Corp.
longtermparking © 2002 John King (BMI)
Long Throw © 2007 David Behrman (BMI)
Jitterbug © 2007 Annea Lockwood
## DISC TEN
### MUSIC FOR MERCE (1952–2009)
#### Events (1993–2009)

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Location</th>
<th>Time</th>
<th>Performers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Event</td>
<td>February 16, 1993</td>
<td>Red Wing, Minnesota</td>
<td>5:58</td>
<td>David Tudor, live electronics; Takehisa Kosugi, electric violin</td>
</tr>
<tr>
<td>2. Event</td>
<td>September 14, 1996</td>
<td>Annemasse, France</td>
<td>5:53</td>
<td>David Behrman, laptop, percussion; Takehisa Kosugi, electric violin, live electronics; Fast Forward, steel pan, objects</td>
</tr>
<tr>
<td>3. Event</td>
<td>June 5, 1997</td>
<td>Frankfurt</td>
<td>7:30</td>
<td>David Behrman, laptop, voice; Takehisa Kosugi, electric violin; Steve Lacy, soprano saxophone</td>
</tr>
<tr>
<td>4. Event</td>
<td>September 12, 1998</td>
<td>Minneapolis</td>
<td>5:22</td>
<td>Takehisa Kosugi, live electronics; Jim O’Rourke, laptop; Christian Marclay, turntables</td>
</tr>
<tr>
<td>5. Event</td>
<td>September 29, 2002</td>
<td>Oslo</td>
<td>4:12</td>
<td>Takehisa Kosugi, live electronics, percussion, voice; James Woodrow, electric guitar, live electronics</td>
</tr>
<tr>
<td>6. Event</td>
<td>October 30, 2002</td>
<td>Munich</td>
<td>6:51</td>
<td>Takehisa Kosugi, voice, live electronics; Christian Wolff, piano, melodica, percussion</td>
</tr>
<tr>
<td>7. Event</td>
<td>December 14, 2004</td>
<td>New York City</td>
<td>3:54</td>
<td>David Behrman, laptop, violin, psalter; John King, electric guitar, live electronics; George Lewis, trombone, laptop</td>
</tr>
<tr>
<td>8. Event</td>
<td>December 15, 2004</td>
<td>New York City</td>
<td>6:56</td>
<td>Christian Wolff, piano, melodica, percussion; Marina Rosenfeld, turntables, live electronics; Ikue Mori, laptop</td>
</tr>
<tr>
<td>9. Event</td>
<td>December 18, 2004</td>
<td>New York City</td>
<td>6:35</td>
<td>John King, electric guitar, live electronics; George Lewis, trombone, laptop</td>
</tr>
<tr>
<td>10. Event</td>
<td>June 14, 2005</td>
<td>London</td>
<td>5:21</td>
<td>John King, electric guitar, live electronics; Philip Selway, drum machine, live electronics; Robin Rimbaud (aka Scanner), laptop</td>
</tr>
<tr>
<td>11. Event</td>
<td>June 17, 2005</td>
<td>London</td>
<td>8:44</td>
<td>John King, electric guitar, live electronics; John Paul Jones, electric triple-neck mandolin, live electronics; Stephen Montague, prepared piano, percussion</td>
</tr>
</tbody>
</table>
David Behrman, laptop, recorder, guitar; John King, electric guitar, live electronics; Christian Wolff, electric guitar, melodica

Brenda Hutchinson, long tube, voice, live electronics; Ikue Mori, laptop; Robyn Schulkowsky, percussion; Christian Wolff, electric guitar, melodica

All works are excerpted from complete performances.

TT: 77:30
We are involved in a process of work and activity, not in a series of finished objects.

Merce Cunningham

A sound has no legs to stand on.

John Cage

Author’s Notes

27 July 2009

Last night Merce Cunningham died at age ninety. He outlived his partner John Cage by almost seventeen years. During a hot summer cloudburst this evening, I splashed past Cunningham’s longtime residence at the corner of Sixth Avenue and 18th Street. With his passing, I thought, something about this city will never be the same. Almost the last in a legacy that kept New York honest, artistically, for some six decades (excluding, of course, Christian Wolff, who is a key part of that legacy and still very much with us), Cunningham closes the stage door on The New York School’s legendary run.

1 August 2009

The stunning Merce Cunningham Dance Company dancers in Roosevelt Park, a beautiful warm Saturday, six days after their choreographer’s peaceful departure. They are rehearsing for their Event performances later this afternoon, and tomorrow. The park is populated with people enjoying the sun: napping, picnicking, embracing. Few seem to be paying much attention to the performance already in progress. The dancers, in their everyday rehearsal clothes, move like birds, their shirts and hair fluttering like feathers in the breezes coming off the Hudson River. No remorse here, no mourning. This unaccompanied dance is a true Event. In the middle of Everyday Life, the Work goes on. If there’s one thing we should have learned by now about the lives of Cage and Cunningham, it is that (in the words of Carolyn Brown) “work was everything.”

Dancer and choreographer Merce Cunningham (1919–2009) has been a decisive force in the creation, dissemination, and survival of contemporary American music since the mid-1940s. Having choreographed more than 150 dances by the time his partner John Cage died in 1992, Cunningham went on to create some twenty new works after that, making him one of America’s most prolific choreographers. Cunningham’s creations are breathtakingly beautiful, exhausting, surprising, and mysterious: How do the dancers move that way? How do they learn to internalize such clockwork-like precision? What in the heck are the musicians doing down there in the pit?


The title of my essay is taken from Cunningham’s 1994 essay titled “Four Events That Have Led to Large Discoveries”: “My work has always been in process. Finishing a dance has left me with the idea, often slim in the beginning, for the next one. In that way, I do not think of each dance as an object, rather a short stop along the way.”


What are the sources of these strange sounds? What does that enormous colorful wall hanging mean? Why do the costumes seem so incongruent, yet so sensuous and appealing? Why am I so deeply moved by this performance? All mysteries.

One of the most fascinating aspects of Cunningham’s dance repertory and performance practice is how music and movement shared space. Cunningham professed to allow things to occur as they do in life. This idea, consistent in his work since about 1950, seemingly contradicts the demanding and precise rigor of the choreography (a contradiction shared by Cage’s work). Why did he choose to use music at all? The centrality of this question is pointed to by a story Cunningham told:

Years ago, I gave two or three dances one evening in some small place on Martha’s Vineyard. There was no music at all. Afterward, a lady in the audience came up and asked how I could possibly do this dancing without music, because there was no rhythm. At that particular moment, in this funny, dark little place, a gorgeous moth flew in and began moving in the most spectacular way around one light. And I just pointed.¹

Cunningham’s conception of dance was fundamentally altered by the separation of movement from steady rhythm or pulse. As pianist, composer, and Company musician David Tudor explained: “He didn’t take cues from the music, but he had to know where he was in terms of time. I think this helped toward forming Merce’s discipline in later works.”⁵ “Music for Merce” (as this CD set is called), therefore, served a radically different function than music for most other dance throughout history. Liberated from the traditional relationship of prescribed temporal dependency, both disciplines were free to explore their respective boundaries with unprecedented abandon.

The present set of historical recordings, captured in this ten-CD set, explores the variety of sounds with which Cunningham and his Company, formed at Black Mountain College in 1953, danced. All of the recordings included in this anthology were chosen by the Company’s Music Director, Takehisa Kosugi, together with the Music Committee (David Behrman, John King, and Christian Wolff), with major assistance from Stephan Moore, Gordon Mumma, Jean Rigg, and David Vaughan.

Like the Russian impresario Sergei Diaghilev early in the twentieth century, Merce Cunningham embraced a multi-media collaborative approach to dance theater that allowed musicians and visual artists to excel with few creative restrictions. However, photographer James Klosty correctly reminds us that

Cunningham is no Diaghilev. He does not use dance, music, lighting and décor to achieve his purposes, but leaves them free to achieve their purposes within the time and space of a given performance. He is far more an ecologist than an impresario.

¹ Cunningham, as quoted in David Vaughan, Merce Cunningham: Fifty Years, Melissa Harris, ed. (New York: Aperture, 1997), 63.
⁵ Tudor, as quoted in Ibid., 63.
The unique liberties Cunningham allowed his collaborators is further articulated by self-proclaimed roadie-techie-composer-performer Gordon Mumma, a Company musician from 1966–74: “The minimal specifications between choreographer and composer, the blended sense of freedom and responsibility, and a pervading ambiguity about details and commitments were nourished by Cunningham’s immediate trust of his collaborators and his invitation to artistic risk.” The combination of trust and risk produced remarkable experiments and innovations. The composer-performers who accepted Cunningham’s invitations to contribute music to his productions embraced the idea of carefully considered abandon, and developed an unprecedented and unique ensemble performance practice. Mumma speaks to this issue in describing the collaboration between musicians during his years of work with the Company:

> We were an ensemble, the three of us [Cage, Mumma, and Tudor]. I should add a fourth, Behrman. Other people joined us from time to time. But we were an ensemble, like a good jazz ensemble. I mean, we didn’t do jazz, but what I’m saying is those are the people you know, you can take risks individually because you understand, you pay attention to what other people are doing. And when you get in trouble, you learn how to respond quickly, to adjust things, in performance.8

Many published sources on Cunningham’s legacy provide valuable discussions of the Company’s musical repertory. As a complement to those documents, this CD set explicitly emphasizes the significant contribution Cunningham made to contemporary music, as well as the contribution that music made to Cunningham. This music is primarily American, and, since the early 1960s, increasingly made with the inclusion of live electronics. For more than fifty years, the Merce Cunningham Dance Company has served as a type of alternative venue: first and foremost, for a core group of composer-performers, and occasionally, for a larger network of experimental and improvising musicians who use a wide variety of often homemade, interactive electronics.

The most recent *New Grove Dictionary of Music and Musicians* does not contain a separate entry on Cunningham, but includes him in its article on Ballet. In the section on “Modern Dance,” John Percival acknowledges the symbiotic relationship between the music and the dance, and the Company’s importance as a performance vehicle for several generations of experimental composers:

> . . . In collaboration with his musical director John Cage and artistic directors Robert Rauschenberg and Jasper Johns, [Cunningham] had the greatest influence, pioneering a dissociation of music and dance in which, though presented concurrently, each aimed at self-sufficiency instead of the dance taking its rhythms and structure from the music. Cage and some of his fellow musicians greatly affected the course of American modern dance. . . . In return, the musicians benefited through their scores having earlier and more frequent performances than if they had waited for concert presentation, and they were heard by an audience in sympathy with their radical experiment.9

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8 Mumma, interview with the author, February 18, 2010.

1
As to their relationship to contemporary technologies in the mid-1960s and beyond, Mumma explains that the Company musicians had access to the standardized, mass-produced electronic music equipment developed after 1965 (when the synthesizers of Robert Moog, Don Buchla and others became commercially available). But except for specifically practical devices such as tape recorders, mixers, and (from the 1980s) digital computers and sound-processing equipment, the Cunningham Dance Co. musicians preferred the challenge, risk, and reward of electronic instrument building and system design. This resulted in non-standard, often one-of-a-kind systems unique to each piece. The impetus of the explorer prevailed.10

Mumma further explains some of the decision-making practices within the group: “When a composer outside the Cunningham Company was commissioned to do music for a new production, the choice was usually made as a consensus between Cunningham and the regular musicians. If Cunningham had a specific person in mind at the outset, everyone else was likely to concur.”11 Over the years, those collective decisions have created a vast community of collaborators. The official Merce Cunningham Dance Company website (http://www.merce.org/) lists the following—no fewer than fifty-two individuals plus two rock bands—as “Repertory Composers”:


Dozens of other musicians and composer-performers have contributed to Cunningham performances, including Paul DeMarinis, Fast Forward, Brenda Hutchinson, Joseph Kubera, Steve Lacy, George Lewis, Christian Marclay, Jim O’Rourke, Larry Polansky, Eddie Prevost, Audrey Riley, Marina Rosenfeld, Keith Rowe, Robyn Schulkowsky, John Tilbury, Trimpin, and William Winant, to name just a few.

Cunningham’s relationship with musicians is an essential element in the trajectory of his career, and in the history of his Company. Cage, who had already worked with dancers in Los Angeles and Seattle at the time he and Cunningham first met, proved to be a sympathetic, and ultimately indispensable, partner. Since their earliest shared performances in New York City in the mid-1940s, Cage and Cunningham cultivated a constantly evolving network of artists and musicians

with which they collaborated. At the same time, they nurtured a deep artistic partnership: an online database lists over eighty compositions by Cage that were choreographed by Cunningham (see http://www.johncage.info/index3.html).

Aside from the music of the New York School (Cage, Brown, Feldman, Wolff, Tudor) and the American experimentalism to follow (much of which is represented on the present recordings), Cunningham also danced and choreographed to many other types of music. Sometimes this music was determined by other people. For example, Tudor chose nineteenth-century American music like Louis Moreau Gottschalk’s The Banjo for a program at Black Mountain College in the early 1950s; and Leonard Bernstein invited Cunningham to create new dances to Schaeffer and Henry’s Symphonie pour un homme seul and Stravinsky’s Les Noces for a summer festival at Brandeis University in 1952.\(^\text{12}\) With a few notable exceptions—excerpts from Symphonie pour un homme seul, Conlon Nancarrow’s Studies for Player Piano, Christian Wolff’s For Magnetic Tape, La Monte Young’s Two Sounds, a few others—all of Cunningham’s music is performed live. From the very beginning, Cage, Cunningham, and Tudor fervently agreed that live music was a foundational element of the type of experience they were trying to achieve. Over time, it became clear the composers most suited to working with the Company were those fluent in both traditional instrumental performance as well as electronics. The importance of electronic music in the progression of Cunningham’s practice should not be underestimated. He remarked that “with the paintings of Jackson Pollock, the eye can go any place on the canvas.” The new music of the 1950s allowed for an analogous situation to develop:

In music, the advent of electronics also brought about a great change. The possibilities for both the sounds to be used in composing, as well as the methods of composition, were radically enlarged. Time didn’t have to be measured in meter, but it would be measured in minutes and seconds, and in the case of magnetic tape in inches in space. The common denominator between music and dance is time. This brings up a new situation for dancers. If they are to involve themselves as dancers with a music measured not in beats but in actual time, how to work with it? . . . My work with John had convinced me that it was possible, even necessary for the dance to stand on its own legs rather than on the music, and also that the two arts could exist together using the same amount of time, each in its own way, one for the eye and the kinesthetic sense, the other for the ear.\(^\text{13}\)

James Klosty calls the results “noncollaborative collaborations.”\(^\text{14}\) (Cage, however, uses the phrase “Collaborative Process Between Music and Dance” as the title of a 1982 article he published in Tri-Quarterly.) Klosty also speaks to the differing reasons for using chance operations for both men:

Both Cage and Cunningham have chosen methods of composition that rely, to varying degrees, on chance procedures. Their reasons for using chance, like their

\(^{12}\) Though these collaborations would not turn out to be particularly stimulating for Cunningham, Bernstein became something of a patron of the Company, helping financially with the first world tour in 1964, and beyond. The Library of Congress holds six handwritten letters from Cunningham to Bernstein, personally thanking him for his support (Leonard Bernstein Collection, Library of Congress).

\(^{13}\) Cunningham, in The Dancer and the Dance, 140f.

methods, vary. For Cage chance is a way to disarm the power of individual will and elude the dictates of personal taste. For Cunningham, it is less a philosophical choice than a pragmatic, potent tool. Cunningham uses chance much as he might use a magnet, to draw possibilities to him from beyond his reach, and to arrange his materials, like iron filings, into relationships he might not otherwise have seen.

Many important works that have been used extensively in Cunningham dance performances are not included on this set. These include Cage’s Indeterminacy, Atlas Eclipticalis, Concert for Piano and Orchestra, Cartridge Music, Aria and Fontana Mix, Child of Tree, and Roaratorio, not to mention a wide variety of Cage’s pre-chance (i.e., pre-1951) pieces for prepared piano. Some other works of music-historical significance by other composers are also important in the Company’s repertory, even though they are not represented on these CDs. These included: Erik Satie’s Trois morceaux en forme de poire (for the dance Septet, 1953); La Monte Young’s notoriously loud Two Sounds (played continuously, at uncomfortable levels, for the dance Winterbranch, 1964); David Tudor’s Rainforest (for a dance of the same name, 1968); David Behrman’s Interspecies Smalltalk (for the award-winning dance Pictures, 1984); and many others.16 Beyond the realm of “avant-garde” composition (as Cunningham himself called his favored music), Cunningham and his Company also embraced contemporary vernacular culture, collaborating in later years with Brian Eno (Pond Way, 1988); with Radiohead and the Icelandic experimental rock band Sigur Rós (both for Split Sides, 2003); and Sonic Youth and Led Zeppelin’s John Paul Jones (with Takehisa Kosugi, for the dance Nearly Ninety, 2009). A piece using iPods set on shuffle mode (International Cloud Atlas, 2006) was created by composer Mikel Rouse as one of three soundscapes for the dance eyeSpace.

Given this variety, one might wonder what, if anything, this music has in common—or perhaps even more critically, if the choice of music even matters. Cage and Cunningham were fond of explaining that their music and dance were neither related nor unrelated, but were simply two things happening in the same space at the same time. (But how differently do we experience this music when we listen to it on recordings, completely separated from its collaborative context?) Further, Cage and Cunningham emphasized that personal feelings neither dictated their creativity, nor did the artistic activity itself aim to express psychological states of being. This was perhaps the most consequential of their aesthetic moves, since it disregarded the tenets of both European-American art music and commercial popular music. With the continuity of events established by chance, and temporality disrupted by a lack of pulse, narrative and psychological content fell by the wayside. This new emphasis on “each-thingness” left some audiences baffled, and others exhilarated.17 As Cage wrote in 1956:

We are not, in these dances and music, saying something. We are simple-minded enough to think that if we were saying something we would use words. We are

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15 Ibid., 12.
16 New World Records has a general policy of not reissuing works that are available in the marketplace elsewhere; versions of Rainforest have been issued on both New World itself and on Mode Records, and Interspecies Smalltalk is available on Lovely Music, for example.
17 “Each-thingness” is an idea that Cunningham places in quotation marks in his 1952 essay “The Impermanent Art,” and which he uses to highlight the novel nature of network independencies. “Each-thingness” might be considered an extension of what has been called “getting rid of the glue” (Henry Cowell) or “sounds come into their own” (John Cage).
rather doing something. The meaning of what we do is determined by each one who sees and hears it.\textsuperscript{18}

The choice of music did, in fact, matter. Atonal music lacking a toe-tapping pulse became more and more important, as did non-referential music without lyrics or clear associations—like recognizable non-musical sound sources. For these reasons (and others), electronic processing came to dominate the Company’s repertory compositions. The musicians’ instrumental setups, more often than not, abounded with tables and tables of machinery and snarls of cables. Only very rarely did non-abstract music enter into the performances, as it did on one occasion initiated by Christian Wolff, who has speculated about how the notion of “experimental” might simply depend on the recontextualization of \textit{any} music:

\begin{quote}
Once, as part of the accompanying music for a dance of Merce Cunningham and his company, I included along with usual music the informal and quite raucous singing of Woody Guthrie’s \textit{“Union Maid.”} The audience, most of whom routinely encountered Cunningham’s dances and more or less tolerated the most advanced kinds of music (notably Cage’s and Tudor’s), audibly gasped in shock. An unexceptionable tune and text with old and familiar, if assertive, labor movement sentiment had in the context of a modernist (and very beautiful) dance become experimental. We had had no deliberate intention of producing a shock.\textsuperscript{19}
\end{quote}

Wolff adds, however: “We did know we were taking a risk singing that song.” (Wolff recounts this and another “problematic occasion” in his essay written for this CD booklet.)

Cunningham’s 1982 essay titled \textit{“A Collaborative Process Between Music and Dance”} is an authoritative overview of Cage and Cunningham’s approach to the relationship between their work. Cunningham outlines the progression from proportionally-structured works in which the dance was coordinated with the form of the music during their first performances in the 1940s, to the chance-derived works of the early 1950s and beyond. He cites his \textit{Suite for Five} (1956) as being “one of the first dances where meter was completely abandoned, and we, the dancers, had to rely on our own dance timing to guard the length of any phrase, and the timing of a complete dance.”\textsuperscript{20} He also describes how indeterminate music contributed further to the disassociation between the music and the dance, since the sounds would always occur in different sequences, and thus no longer functioned as reliable cues: “The dancers’ unsupported time span was expanding.”\textsuperscript{21}

At the end of the article Cunningham describes his and Cage’s work with a group of choreographers, composers, dancers, and musicians, during the International Dance Course for Professional Choreographers and Composers at the University of Surrey in Guildford, England in 1981. The content of their daily workshops was chosen almost entirely through chance operations, and the material produced by the participants was similarly scrambled and therefore

\textsuperscript{18} John Cage, \textit{“In This Day . . .”} from \textit{“Four Statements on the Dance,”} 94.
\textsuperscript{19} Christian Wolff, \textit{“Experimental Music Around 1950 and Some Consequences and Causes (Social-Political and Musical),”} \textit{American Music} 27/4 (winter 2009), 435f.
\textsuperscript{20} Cunningham, \textit{“A Collaborative Process Between Music and Dance,”} 142.
\textsuperscript{21} Ibid., 143.
unpredictable: “Neither the choreographers nor the composers knew during the afternoon working period which music would be played with which dance.”\textsuperscript{22} Before the evening performances, chance operations decided what music would be heard with the dances. Cunningham sums up the results of the twelve-day workshop in typically hopeful terms:

The sharing of dancers, musicians, and ideas; the non-impinging atmosphere that resulted (as well as the extraordinary amount of music and dance that was made, rehearsed, and presented each day) was exhilarating, giving a feeling not of things finished, indexed, and catalogued, but of work that was being done, and could continue to be done and shared.\textsuperscript{23}

In terms of how the musical hierarchies have broken down over time, Mumma describes the “relatively simple and inspiring course” taken by the “social dynamics of the musical production.” During the 1940s, Cage was Cunningham’s sole pianist and composer; in the 1950s he was called the “musical director” and Tudor became the main pianist. In the 1960s, however, these categories became irrelevant, the functions were increasingly shared and complicated, and I joined the ensemble. When Cage became uncomfortable with the idea of being “musical director” all categories disappeared. By the 1970s, with the addition of Behrman (and others on occasion) we had evolved into a remarkable collaboration. We were not equal: each had specializations and some of these were not interchangeable. No one could imagine me reading Cage’s stories for \textit{How to Pass, Kick, Fall, and Run}, Cage (instead of Tudor) performing Bo Nilsson’s music for \textit{Night Wandering}, or Tudor (or anyone except Cage) performing Satie’s music for \textit{Nocturnes}. Everyone was worried if I wasn’t around when some complicated electronic problem had to be quickly solved, and I lost sleep over the prospect of Tudor’s not setting up his own electronic menagerie for \textit{Rainforest}. But with the \textit{Events} of the 1970s the musicians had reached a remarkable coexistence of specialization and comprehensivity.\textsuperscript{24}

The social dynamics of the musicians were, however, of little concern to the dancers, who often struggled to understand the value of non-pulsed, atonal, and electronic music. In a delightful and candid autobiographical account of her years with the Company, Carolyn Brown writes:

I won’t attempt to defend the music. Certainly some of it I disliked intensely, and among the company dancers I was not alone. If I found it unbearable, I tried to “turn it off,” tried to \textit{not hear it}, because it could be disruptive, painful, even violating. For me, those pieces did not coexist with the choreography, they competed with it, even attempted to annihilate it, like an insanely jealous lover. But I think there is no denying the paradox that some of the music, without having much distinction on its own, made a definite contribution to the work \textit{as a whole}. And occasionally the music was truly extraordinary—dynamic and

\textsuperscript{22} Ibid., 150.
\textsuperscript{23} Ibid.
\textsuperscript{24} Mumma, “From Where the Circus Went,” 72.
multifaceted.\textsuperscript{25}

Certainly not all listeners—nor even all Company dancers—agreed with Brown’s partially negative characterization of much of the music used for Cunningham’s work, but dancers, musicians, and audiences ultimately had to come to terms with Cage and Cunningham’s utopian idealism with regard to the unconnected connectedness of the music and dance. Brown went so far as to call it “The Gospel According to St. John,” but eventually reached a pragmatic conclusion: “One doesn’t have to like it, or agree with it, but one has to, in some way, accept it.”\textsuperscript{26}

\section*{A Gamut: Fifty-Six Examples of Music for Merce}

\textit{It is the music that complicates things . . .}

[dance review, 1954\textsuperscript{27}]

\textit{Asked what he thought music should do for the dance, Mr. Cunningham answered: “Leave it alone.”}

[dance review, 1957\textsuperscript{28}]

The first nine CDs in this box set contain forty-three pieces by eighteen composers. In addition, the tenth CD includes excerpts from thirteen different \textit{Events}, with primarily improvised music performed by nearly two dozen musicians. The music in this collection was made between 1952 and 2009, a historical period characterized by a rapid rate of social, cultural, and aesthetic change, as well as new forms of dependence on technology. Much of this music is electronic, or is music that interacts with electronic technology in some way. (It is worth noting again that Cunningham repeatedly emphasized the influence of electronic music on his changing perception of time with respect to performance.) With the exception of pieces by the Swedish composer Bo Nilsson and the Japanese composers Toshi Ichiyanagi, Takehisa Kosugi, and Yasunao Tone, all of the works included here were composed by American composers. Most of the compositions were created contemporaneously with the dance, though in many cases pieces were not chosen for performances until after they had been completed, sometimes at the last minute. Some works existed prior to the creation of the dance, as stand-alone concert works.

Not surprisingly, John Cage is most present, with nine works spanning the years 1954 to 1991; David Tudor follows with seven compositions of his own, though it should be noted that he is featured as a performer, as both a pianist and as an electronic musician, on nearly every recording included here that was performed live up until about 1994. Other regular Company musicians like David Behrman, John King, Takehisa Kosugi, Gordon Mumma, and Christian Wolff, are each represented here by two or more works. The remaining composers included in this set (Maryanne Amacher, Earle Brown, Stuart Dempster, Morton Feldman, Jon Gibson, Toshi Ichiyanagi, Anna Lockwood, Bo Nilsson, Pauline Oliveros, Michael Pugliese, and Yasunao Tone) are perhaps less well known as Cunningham collaborators but no less interesting than the

\begin{flushleft}
\textsuperscript{25} Carolyn Brown, \textit{Chance and Circumstance}, 172.
\textsuperscript{26} Ibid., 233; 172.
\textsuperscript{27} Margaret Lloyd, dance critic for the \textit{Christian Science Monitor} (in a review of Cunningham’s New York debut programs, published on January 8, 1954); as quoted in Brown, \textit{Chance and Circumstance}, 97.
\end{flushleft}
others. They were sought out over time by Cunningham and/or his Music Director and became a part of the extended Company family, and they are represented here by one piece each. What follows is neither a comprehensive analysis of the recordings nor a technical explanation of how these pieces were created; rather, I have tried to provide a few historical details and general observations as springboards for further investigations into this rich and largely under-examined body of music. Whenever possible, I have allowed the composers and musicians to speak for themselves. Given the length of many of Cunningham’s dances (and therefore their accompanying music as well), it would be both inappropriate and impossible to include complete performances of the music in many cases. (Please see track listings for indications of which pieces are excerpts only, and for complete performing personnel and instrumentation.)

**Disc One**

An apt opening for this historical set, Christian Wolff’s *For Magnetic Tape* (1952) accompanied Cunningham’s elaborate *Suite by Chance*, the first work he choreographed entirely with chance operations: “I subjected every single thing to chance. I made a series of charts of everything: space, time, positions, and the dance was built for four dancers going from one of these lists to the other,” the choreographer explains. Cunningham originally planned to use a piano score by Wolff, but upon Wolff’s suggestion he agreed to use this new work that existed only on magnetic tape. Wolff, an undergraduate student at Harvard University at the time, assembled a collection of sounds with the help of a graduate student in sound engineering. Wolff brought the tapes to New York, and gave them to Cage, Brown, and Tudor, who had been working in the studio of Bebe and Louis Barron on Cage’s seminal *Williams Mix* and several other works authored by Brown and Feldman for presentation on magnetic tape. Unlike the other pieces in this project, Wolff’s did not use prerecorded sounds from the Barrons’ archive; rather, his piece consisted entirely of sounds created by oscillators. Cage, Brown, and Tudor assembled Wolff’s piece using his score and the sonic source material he provided. *For Magnetic Tape* is very likely the first piece of purely electronic music to be used as dance accompaniment. According to Mumma, the first performance of *Suite by Chance* with *For Magnetic Tape* took place at the University of Illinois on March 24, 1953. Characterized by long pauses between the isolated events, *For Magnetic Tape* seems to illustrate Cage’s claim that the best new idea in music since Beethoven was that sound and silence were equals.

Wolff’s piece introduces one of the central mysteries of the Cunningham practice: how do dancers relate to electronic music? Cunningham, who initiated the practice of rehearsing with a stopwatch during his preparation for dancing with *For Magnetic Tape*, has said of this piece:

> The relationship between the dance and music is one of co-existence, that is, being related simply because they exist at the same time. The dance was constructed in and originally in rehearsals worked against a metrical beat. Mr. Wolff’s score was constructed in inches per second. So, during the course of rehearsing and performing the dance we changed our time relationship to seconds and minutes.

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29 Cunningham, in *Dancer and the Dance*, 90.
31 Cunningham, as quoted in *Merce Cunningham: Fifty Years*, 69.
The subsequent works on Disc One, which includes Wolff’s *For Piano I* (for *Untitled Solo*, 1952), Tudor’s subtly understated performance of Cage’s *Music for Piano 1-20* (for the dance *Minutiae*, 1954), Brown’s *Indices* (for *Springweather and People*, 1955), and Bo Nilsson’s *Quantitäten* (for *Night Wandering*, 1958), all reflect the pioneering sensibility of the 1950s, characterized by an uninhibited exploration of contradictions: choice versus chance, responsibility versus abandon, spontaneity versus structure. Music based on these principles fundamentally changed the way the dancers learned their phrases, and the way audiences perceived the relationship between the temporal arts.

The pointillistic and abstract complexities of Wolff’s *For Piano I*, for example, were challenging for Cunningham to understand, and this work was meant to accompany what he described as “a terribly difficult dance.” In preparing his *Untitled Solo*, he explained,

> David Tudor used to come to rehearse with me at Black Mountain College, not every day, of course, because it was done in a sense to the music, although it was not strict. I didn’t follow it note by note, because Christian’s music was so complex, and so difficult for me to hear—I mean even without dancing, and with dancing it was incredible, I just had to get some kind of cueing, so David would come and play it... He came every day for the last two weeks: I would do it, then he would very nicely play it again. It was inch by inch—I just couldn’t hear it, and do it. When he played it, I couldn’t hear it—but then when you’re doing it, doing two or three rhythms at once, and then the music is doing something totally different—you felt as if you were going to sail right off into space at any moment.

Despite the fact that Tudor called the prospect of a performance “clearly impossible” (“... but we’re going right ahead and do it anyway,” he concluded), Cunningham and the pianist premiered *Untitled Solo* with *For Piano I* at Black Mountain College in August 1952.32 The works were performed together again later that year at the New York City debut of Cunningham’s newly formed dance group. Carolyn Brown emphasized the powerful appeal of this particular dance: “When Viola Farber, Paul Taylor, and I were reminiscing about the early days some twenty-seven years later, we all agreed that *Untitled Solo* was, of all Merce’s solos, still our favorite.”33 During this period Cunningham choreographed three solos for himself, and all were performed with music by Christian Wolff.

Earle Brown’s *Indices* of 1955, for the dance *Springweather and People*, was the only piece he composed specifically for Cunningham. Wishing to explore chance procedures in a manner different from Cage’s established operations, Brown made use of a book that contained ten thousand random numbers. Brown described his compositional process in this way:

> It took me two or three months just to set up the “program” (in the computer sense) for *Indices*, and about eight months to carry it out. It is called *Indices* because that is what the two points on the abcissa and ordinate, the intersection of

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32 Ibid., 78.
33 Tudor, as quoted by Cunningham, in *Dancer and the Dance*, 79.
34 Carolyn Brown, *Chance and Circumstance*, 94.
perpendicular horizontal and vertical lines drawn from the two points, are called. The *Indices* “program” was intricate and terribly complex in all dimensions. The piece was not written from left to right (start to finish) but the “program” (of composing) was such that each sound was a completely self-contained “event,” each being able to appear anywhere within the 29-minute duration of the work as the program produced it . . . subject to the structural “stress” conditions. (There were 175 pages of ruled score paper, which equaled 29 minutes at mm. 120. According to “program” the first sound composed might have entered on page 107; the second sound might have entered on page 22; the third on page 136, etc.) It was a discontinuous process of composing the material and obviously the piece was not “finished” when I reached the “end” of it but when it became sufficiently “saturated” (event-full).^35

Originally conceived as a twenty-five-minute-long chamber orchestra score (excerpted here), *Indices* was performed with *Springweather and People* as a piano reduction for several years, and that is the version heard on this recording. Brown described the “literal reduction” as extremely difficult for Tudor to play, “in that there were long accumulations of notes of long duration all over the keyboard (orchestra) and he had to use all of the pedals and hand-held notes at a furious rate. The use of pedals was constant and violent.”^36 *Indices* typifies the sound of the New York School during the 1950s: it is disjunct, non-pulsed, unpredictable, and concerned with the sounds themselves rather than their relationships. When Brown first experienced the music together with the dance, he found the lack of synchronicity astonishingly effective, and he was impressed with the dancers’ clocklike precision.

In the fall of 1958, Cunningham, Cage, Tudor, and Carolyn Brown gave a number of performances in Europe. In Stockholm they were invited to perform at the opera house, and Bengt Häger suggested to Cunningham that he might include music by a Swedish composer. In just a few days, Cunningham choreographed a duet for himself and Brown called *Night Wandering*, to which Tudor played Swedish composer Bo Nilsson’s *Quantitäten*—the original, full Swedish title was *Rörelser, Slagfigurer, Ekvantiteter*, but Tudor usually performed it as the shortened, German title *Quantitäten*—a solo piano piece composed one year earlier. Though somewhat denser and more active than the previous piano pieces by Cage, Brown, and Wolff, *Quantitäten’s* inclusion here serves to remind us of Tudor’s deep connection to the European avant-garde during the nineteen-fifties, and to how similar the sound worlds of “New York” and “Darmstadt” were during this time, regardless of compositional method or aesthetic intent.

**Disc Two**

Morton Feldman’s *Ixion* (1958), a work for chamber ensemble that also was performed in a two-piano version (as heard on this recording, played by Cage and Tudor), was commissioned by Cunningham for the dance *Summerspace*. Unlike the works heard on Disc One, *Ixion* is harmonious in a more traditional way, and hovers primarily in the upper registers of the piano. The following work on Disc Two takes us forward in time, into the mid-1960s, after the Company’s first world tour of 1964. (In the meantime, the Company had moved away from the sound world of the

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^35 Earle Brown, in *Merce Cunningham*, 75.

^36 Ibid., 76.
1950s, which was characterized by either live acoustic music or prerecorded tape music: in 1961, the dance *Aeon* became the first for which the musicians made use of live electronics, a practice that would remain central to the Company’s musical choices for the rest of its existence.) In 1965, Cage’s *Variations V* “accompanied” Cunningham’s choreography of the same name, but the two were, in this particular case, uncharacteristically intertwined. Often cited as one of the earliest and most elaborate examples of multimedia performance, the logistically complex production involved the close collaboration of engineer Billy Klüver and required the technical assistance of a number of Bell Labs engineers. (What is heard here is an excerpt from a forty-minute recording.) Commissioned by Lukas Foss and first performed at Lincoln Center in New York City, *Variations V* used photo-electric devices, film and TV circuits, and required that the stage be rigged with antennae placed in a grid. The music, created continuously by Cage, Mumma, and Tudor with the help of an enormous amount of electronic gadgetry and yards and yards of cables, was, in the words of Cunningham, “only heard when the dancers opened the circuits because of their proximity to the antennae or their interrupting the beams of photo-electric light.” The diverse industrial sounds heard on this recording are far removed from the placid piano textures of the previous five tracks, and heralded the increasing focus on non-acoustic sounds and sounds free from electrical interference. Mumma, who believes that the implications of *Variations V* changed his life in many ways, has written extensively on the unprecedented nature of what he calls the establishment of “a coexistence of technological interdependence and artistic nondependence”:

For the audience, *Variations V* was like a multi-ringed circus. For the performers it was participation in a man-machine environment, chock full of images and gadgets: movies, TV images, slides, a bicycle and gym mat, plastic plants, furniture (all of them rigged with electronics), and a garden of vertical antennas projecting upwards from the floor. These vertical antennas were capacitive sensors which responded to the locations of the dancers on the stage by sending electronic signals to the musicians. It was one of two systems of sensors. The other system was a network of photoelectric cells which responded to changes in light intensity as the dancers moved past them. Electronic signals from these photo-electric cells were also sent to the musicians.

The musicians operated an orchestra of electronic sound-producers: tape recorders, radios, phonographs, and the like. The signals from the two sensor systems directly articulated these sound-makers. That is, by their movements the dancers articulated both the performance space and the sounds of the music. The interaction of the systems with the performers was complex, and contained a measure of technological unpredictability.

The following year, Mumma settled into his new roles as composer, electronic tinkerer, and technological trouble-shooter in the pit (when there was one). Mumma’s *Mesa*, rich and ominous, was used for the dance *Place* (1966). The piece’s title referred to the “butte-like

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landscape unique to the southwestern United States and characteristic of its sound continuity.”

Scored for Tudor playing bandoneon and Mumma using live electronic cybersonic processing, the composer considered the piece “a closely interdependent collaboration.” The long sounds are loud, complex, and grainy, sometimes evocative of electric guitar feedback. Mumma and Tudor worked together extensively during Mumma’s years with the Company, and they complemented one another’s skills in ways that were productive for them both. Mumma recalls that what he did musically as a composer was quite different and independent from Tudor’s approach:

In fact, we worked oppositely, in certain ways, which was good. In my electronic work I was often exploring electronic manipulation of acoustical sounds. Tudor was doing the opposite, largely: acoustical modification of electronic sources. Which is what Rainforest did. So we didn’t bump into each other. Except in very

40 Mumma, in unpublished, revised typescript of “From Where the Circus Went [2009],” 11.
41 Mumma, “From Where the Circus Went,” 69.
small orchestra pits we sometimes bumped into each other!\textsuperscript{42}

The final work on Disc Two is Japanese composer Toshi Ichiyanagi’s \textit{Activities for Orchestra}. Composed in 1962, \textit{Activities for Orchestra} was used for the dance \textit{Scramble} in 1967. Though notated, the work was indeterminate in several ways, including in its instrumentation, and it “required difficult new ways of performing acoustical and electronic instruments simultaneously.”\textsuperscript{43} Ichiyanagi, like Takehisa Kosugi who joined the Company’s musicians a few years later, was involved with the original Fluxus group, and brought a measure of irreverent whimsy to the group. In 1968, Clive Barnes reviewed \textit{Scramble} with strong words for the “ear-splitting noise,” in which, he claimed, “an orchestra apparently imitates a stampeding electronic tape.” Through all of this, he added, Cunningham “picks his way smiling gingerly and yet really as confident as a master acrobat on a high wire.”\textsuperscript{44} This recording includes acoustic instruments (Mumma on horn, for example) as well as some minor electronic processing and feedback (Tudor), and Cage using scraped objects and voice.

\textbf{Disc Three}

Another key contributor to Merce’s music was David Behrman, whose \textit{... for nearly an hour…} was composed for the dance \textit{Walkaround Time} (1968). \textit{Walkaround Time} is perhaps most remembered for its elaborate set design by Jasper Johns, who had taken over as Artistic Advisor for the Company in 1967. Based on Marcel Duchamp’s “Large Glass” (\textit{The Bride Stripped Bare By Her Bachelors, Even}; 1915–23), Johns’s sets reproduced, isolated, and enlarged the various amorphous shapes found in the Duchamp work (the images from the “Large Glass” were transferred to a number of plastic inflatables for use in the set design); distributed around the stage, the pieces were moved by the dancers until they eventually represented the same arrangement as in the original. The title of Behrman’s extraordinarily complex, three-part work made reference to another work on glass by Duchamp (also cracked, like the “Large Glass”), called \textit{To Be Looked At (From the Other Side of the Glass) With One Eye, Close To, For Almost an Hour} (1918). Cunningham recalled that in part of this piece (Part Two, an “entr’acte”), the music was different every time; in particular he recalled the musicians played a recording of someone singing the song “Parlez-moi d’amour” in Japanese.\textsuperscript{45} At the beginning of this short excerpt of \textit{... for nearly an hour…} (taken from the end of the entire piece: Part Three, Event 3), several overlapping women’s voices are heard reading from Duchamp’s notebooks; the readers include several of the female dancers, and Behrman made the recordings in the hotel rooms in Buffalo where the Company members were staying prior to the 1968 premiere. Other sections of the piece (not heard here) include recordings made at Niagara Falls on a winter’s day, the sound of a Volkswagen Beetle’s muffler as it drove around the hills of Stony Point, N.Y., and text fragments (also Duchamp) spoken by the performing musicians. Photocell distributors moved these sounds around the hall, surrounding the audience in both gentle and forceful ways.

\textsuperscript{42} Mumma, interview with the author, February 18, 2010.
\textsuperscript{43} Mumma, “From Where the Circus Went,” 69.
\textsuperscript{45} Cunningham, in \textit{Dancer and the Dance}, 114f. David Vaughan explains that various records (including “Parlez-moi d’amour,” tangos, etc.) were played during a section between the two main halves of the piece, during which Behrman’s music stopped and the dancers behaved as they would backstage. Behrman explains that the records mostly came from David Tudor’s own collection.
Heard here as a ten-minute excerpt from the middle of a thirty-minute recording, Pauline Oliveros’s *In Memoriam: Nikola Tesla, Cosmic Engineer* consisted of three pages of typewritten instructions for the musicians of the dance *Canfield* (1969). Mumma, who performed in the piece, recalled walking around the theater testing sounds and communicating with the other musicians on walkie-talkies, as well as the use of what he referred to as “acoustical space sound activators.” The composer herself has commented on the ideas behind *In Memoriam*:

The compositional problem was to include, extend, expand, explore, compare, store, and manipulate the auditory space within Cunningham’s philosophy, which allows a natural rather than an imposed relationship to arise between the music and the dance.

The first performance of *Canfield* which I was able to witness was done in silence [due to a musicians’ union strike]. Cunningham’s philosophy was exquisitely demonstrated that evening. The dance indeed went its way and existed powerfully as a total organism without any necessity for accompaniment. It was an extraordinary experience for everyone, and the subsequent drama was apparent in such ways as a critic’s proclamation: “Merce Cunningham goes on in silence. Thank God!”

Since that performance there has been a subtle tuning of the dance and the music to the point of philosophical resonance. The musicians have mastered the materials of a very difficult situation and very much go their own ways. Their performance could exist independently of the dancers’; but the dance and music together resonate powerfully.46

A critic, reviewing a Brooklyn Academy of Music performance in 1970, described the musical events in this way:

*[In Memoriam, Nikola Tesla]* started as the house lights were dimming. In an amplified conversation conducted from the orchestra pit and various other positions in the theater, the three musicians of the Cunningham Dance Company—John Cage, David Tudor, and Gordon Mumma—could be heard discussing their most recent sound experiences and giving a subjective acoustic evaluation of the Brooklyn Academy of Music. This subjectivity was only a prelude, however. It soon developed that this piece involved an objective analysis of the sound environment. Like scientists, the musicians worked independently in teams on a series of experiments—Cage and Mumma working together and Tudor working with an assistant, Jean Rigg.

Their activities consisted of making sounds, listening to them, and recording them—experimenting within the entire space of the Brooklyn Academy of Music, maintaining contact with one another by radio communications. In one experiment, for example, Mumma was sent up on stage (off in the wings) to play a

46 Mumma, written correspondence with the author, August 11, 2010.
47 Pauline Oliveros, in *Merce Cunningham*, 79f.
bugle while turning in a circle. As he turned, the sound bounced off walls, sank into curtains, and was even affected by the dancers. One was reminded that such a procedure provides the necessary data by which bats navigate.\footnote{Stephen Smoliar, “Merce Cunningham in Brooklyn [1970],” in Kostelanetz, ed., \textit{Merce Cunningham: Dancing in Space and Time}, 77f.}

Christian Wolff’s graphically-notated \textit{For 1, 2, or 3 People}, composed in 1964, was used for the dance \textit{Tread} in 1970. Partly a listening game for the musicians, a high degree of communication and interaction is necessary during performance. The recording heard on the present collection is Tudor’s solo version (using the sounds of a Baroque organ and electronics), one of the most sonically diverse selections on this set so far. Not coincidentally, Wolff’s creation of the type of graphic notation used in \textit{For 1, 2, or 3 People} might have developed in direct relation to Tudor’s realizations of earlier indeterminate pieces. Ron Kuivila explains:

\begin{quote}
At about the same time that Cage began to work with transparencies, Wolff voiced some dissatisfaction with the fixed nature of the realizations of indeterminate notations that Tudor was in the habit of preparing. Wolff developed an alternative approach, based on contingency, which attempted to make such preparations impossible. Simply put, Wolff developed notations that stipulate specific actions to be taken based on the sounding music.\footnote{Ron Kuivila, “Open Sources: Words, Circuits, and the Notation-Realization Relation in the Music of David Tudor,” \textit{Leonardo Music Journal} 14 (2004), 22.}
\end{quote}

The next work on Disc Three, Wolff’s \textbf{Burdocks}, was performed by an ensemble of six
musicians on stage (at Cunningham’s request), with the dance called *Borst Park* (1972). Though eventually dedicated to Cunningham in the published version of the score, *Burdocks* was not written for the choreographer. Rather, Cunningham heard a performance of Wolff’s composition at New York University a few months before the premiere of *Borst Park*, and decided that this was the music he wanted for his new dance. An elaborate and beautifully notated piece of “democratic indeterminacy,” *Burdocks* consists of ten optional sections for one to ten “orchestras.” The excerpted recording included here, featuring mostly acoustic instruments playing the short repetitive melodies and rhythms on a variety of diverse noisemakers, reveals the good-natured virtuosity and whimsical play involved in a realization of the piece. Wolff was encouraged and inspired by Cunningham’s work, and in a short, poetic essay that makes reference to many of the musical techniques employed in the piece (as well as elements of the dance), Wolff described how he was particularly moved by

the mix of things and the spirit which kept them both apart and together; the changes one after another; the complicatedness of things together. Many various processes, activities, states felt as if they were coming—spinning, breaking off, drifting, walking, just moving—from a source which was magnetically there, and kept eluding you; and each element of that variety (we can all play the melody together). Then again different bodies making the same movements (read bass or treble clef). The groups coordinated within one another but separately active. The cheerfulness. The gravity. The endurance (511 times). The abstraction, and the chance, each one’s own, of something’s becoming evocative. Other qualities generated by the dancing I could at best hope for, though they are the very means of that encouragement: pleasure, generosity, and a sense of danger made sometimes light, sometimes piercing and harsh by concentration and discipline. *Burdocks*’ sounds can be unruly and messy; they cannot do each other bodily damage, unlike the dancing, and I think they feel the lack of that possibility.50

More a performance strategy than a composition, Cage, Mumma, and Tudor created *52/3*, the music for *Landrover* (1972), collaboratively.51 The dance was sectional, with four segments of unequal lengths occurring in any order. The musicians decided to divide the total length of the choreography into three equal sections, and that each of them would be responsible for one section. The order was determined right before the performance by drawing straws.52 Cage chose to read short sections of his new vocalized piece *Mureau*. Tudor used “seismological signals,” and Mumma presented an “ultrasonic blanket” kept at the barest level of perceptibility. Though essentially creating discrete works, their attitude was fundamentally collaborative in nature. Today, Mumma recalls that the “interactive aspect with Cage and Tudor and myself—it was very flexible, and very trusting.”53 The beginning of this version is dominated by piano sounds, Cage playing inside a somewhat prepared piano. This is followed by an intense, sustained section of high, layered, loud harmonic sounds. The third section is also dominated by sustained electronic sounds, though more pulsing and less forceful than the previous. Mumma used near-inaudible

51 According to Stephan Moore, for the purposes of naming the music in programs, the piece always took the title of the week it was performed (for example: “First Week of August”).
52 Mumma, “From Where the Circus Went,” 70.
53 Mumma, interview with the author, February 18, 2010.
sustained sonorities between each of the three sections of the piece. This realization of 52/3 ends with a mysterious sequence of ricocheting sounds and whirring electronic breaths.

The last work on Disc Three is Mumma’s Telepos, created for the dance titled TV Rerun in 1972. In this work the composer revived, in what he called “an elementary way,” the collaboration between musicians and dancers that had occurred so elaborately in Variations V For this performance Mumma designed lightweight elastic belts for the dancers, and he described the work’s process (“multi-accelerometer electronic telemetry”) in this way:

The belts contained acceleration sensors and radio transmitters. The dancers’ movements were translated into audible pitches, transmitted to special electronic equipment in the orchestra pit, and heard from loudspeakers around the audience. This process of telemetry was like that used in space travel. Thus the dancers were collaboratively responsible for the nature and continuity of the sound, though the implications of this technological extension of human activity suggested more collaborative potential than we (the dancers and I) actually felt in the making of the piece.54

The resulting music, dominated by high pitches (and occasional silences, especially near the end, that allow us to hear the thudding music of the dancers’ feet), is mostly busy and bubbling with activity. Telepos’s indeterminate variability echoes Cunningham’s claim that the collaborators were “involved in a process of work and activity, not in a series of finished objects.”

**Disc Four**

The next disc opens with the first instance on this set of an electronic composition by David Tudor, who devoted his energies almost exclusively to that medium since the mid-1960s. Commissioned by Cunningham to be performed with the choreography called Sounddance (1975), Tudor’s Toneburst used sound sources that came entirely from pure electronic feedback. The version heard here was recorded in Perth, Australia, in 1976. According to John D.S. Adams, who was the sound engineer for the Company during the early 1990s and who has written elegantly on Tudor’s electronic music, Toneburst was a difficult piece for Tudor to realize, and is particularly significant in his compositional and technical development. (Ron Kuivila has written that Toneburst was always performed completely live, “without a net”—he did not use prerecorded material so as to avoid the risk and hassle of assembling his complex networks necessary for the spontaneous realization of the piece.55) Related to his prior work Untitled (1972), which was meant to be performed simultaneously with Cage’s Mesostics Re Merce Cunningham, Tudor used some of Untitled's source material in Toneburst but modified it in different ways. Adams also comments on the way Tudor exploited his performance tools:

> The loudspeaker is just as important in Tudor’s performances as are the electronic instruments he physically manipulates. The loudspeaker's interaction with the surrounding acoustic space remains critical to the presentation of Tudor's music. He treats the speaker more as a musical instrument than simply as a transducer.

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54 Mumma, “From Where the Circus Went,” 69.
Toneburst was no exception to this approach.56

Furthermore, Adams elaborates, Tudor himself described this piece as “a direct translation of [Tudor’s] mind into music.” Toneburst is, then, “the definitive Tudor composition” because it “wraps up in one complex package the mysterious ideas and elusive philosophies behind the conception, realization and performance of his music.”57 The freight-train-like power of Tudor’s improvisation gives an unadulterated impression of some of the most uncompromising music ever created for dance.

Toneburst is followed by a 1976 Tokyo recording of Takehisa Kosugi’s S.E. Wave/E.W. Song for the dance Squaregame (1976). A violinist, vocalist, performance artist, performer of miniature live electronic music devices, and an installation designer, the naturally multi-faceted Kosugi became a regular Company musician in 1977; he became the Music Director in 1995. S.E. Wave/E.W. Song was the first commission he would realize for Cunningham, and he created half a dozen others in the years to follow. Kosugi admitted to occasionally watching the dance during performance, while enjoying the independence of the separate performance elements: a celebration of time, he called it. In this excerpted recording of S.E. Wave/E.W. Song, the eerie, echoing quality of the manipulated human voice and the distorted amplified violin melody contrast starkly with the relentless electronic autonomy of Tudor’s Toneburst.

Cage suggested to Cunningham that he invite the composer Maryanne Amacher to make the music for the dance called Tors. The full title of her piece is:

(also used as a classifier of seeds)*
*| Hollis Frampton, A STIPULATION OF TERMS FROM MATERNAL HOPI |

Given no indications by the choreographer, Amacher created a quiet and still piece on the threshold of audibility. Cunningham remarked that he couldn’t really describe this music, but that “it’s quite like subliminal sounds.”58 As a mixed-media sound designer interested in psychoacoustics and environmental sounds, Amacher collaborated frequently with Cage (for example, contributing soundscapes for his Lecture on the Weather), and became active as a producer of sound art for many Cunningham Events.

The sound of the lone acoustic flute at the beginning of the next piece comes as something of a shock after the plethora of electronic music heard before it. Jon Gibson’s Equal Distribution accompanied the dance Fractions 1, and was recorded in New York City in October 1978. The work, excerpted here from a thirty-four minute recording, is scored for a solo pitched instrument, and was originally performed by Gibson himself on alto saxophone (the solo instrument heard at the beginning is gradually joined by multi-tracked shadows of itself; on this recording Gibson plays flute and electronics). The inclusion of Gibson’s work during a time when he was closely

57 Ibid.
58 Cunningham, in The Dancer and the Dance, 23
associated with both Philip Glass and Steve Reich—composers who favored a steadily pulsed “minimalist” approach quite different from the music Cunningham usually favored—reveals the choreographer’s curiosity and openness with regard to new and differing aesthetics. Cage’s Inlets (1977) for the dance sextet of the same name closes Disc Four. Also titled Improvisation II, this indeterminate work calls for the musicians to “play” conches filled with water. The resulting gurgling, caused by tipping the shells slowly from one side to the other, is amplified, and accompanied by a long continuous tone produced by blowing into a conch like a trumpet, as well as the sound of burning pinecones (live or recorded). (A foghorn is also used, though it is not heard on the excerpt included here.) According to John D.S. Adams, who performed Inlets with Tudor and others on several occasions, sometimes champagne was used to fill the conches instead of water.

**Disc Five**

The centrality of David Tudor’s electronic music to the Company during the 1970s and 1980s is evident on Disc Five, which is devoted almost entirely to his work from this period. Tudor took over as Music Director for the Company upon Cage’s death in 1992; he continued in this capacity until he became too ill to work, and subsequently handed the role over to Kosugi in 1995. Ron Kuivila has written broadly on what made Tudor distinctive as an electronic music explorer:

> The conception of live electronic music as a liminal situation caught between composition and performance that is central to Tudor’s work is a logical extension, perhaps even a logical conclusion, of his role as a performer of indeterminate scores. However, electronic configurations, unlike transparencies, produce their own temporal behavior. This creates a musical situation in which advance planning is only partially useful, perfect compliance is impossible, and the concepts of contingency and action are essential. In such situations, Tudor could create a particularly private music in which he continued to act as a collaborator, diplomat and wayward influence on the actions and interactions arising from the confines of his electronic and electroacoustic systems.  

The three Tudor pieces presented here are joined by the Tokyo-born composer Yasunao Tone’s Geography and Music, written for the dance called Roadrunners in 1979. A resident of New York City since 1972, he had been an original member of Group Ongaku and Fluxus. Tone’s piece was for viola and piano (or two pianos), plus electronics (in this recording Martin Kalve plays qin, a Chinese zither). In addition, Cunningham recalled that the piece also includes “ancient Chinese tales which are recited live in English using two separate microphones that gate the musical instruments.” He added: “Sometimes a recording of the stories in Chinese is heard.”

On this recording we hear the Company musicians (Kosugi, Cage, Tudor, and Kalve) reading what is initially a self-referential text (“Introduction: The following texts are mostly taken from the geography section from Tàipíng Yúlán, one thousand volumes of Chinese encyclopedias, published in 983 A.D. and the rest of them are excerpts from Tàipíng Quanxi, published in 981 A.D., and both volumes were edited by the same editor, Li Phuan . . .”), accompanied by the qin, and followed by the recording in Chinese.

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60 Cunningham, in The Dancer and the Dance, 154.
*Geography and Music* is the second work on Disc Five; it is preceded by Tudor’s *Weatherings* (1978), written for the dance called *Exchange*. Following *Geography and Music* is Tudor’s *Phonemes*, which Cunningham commissioned for the staged and filmed dance called *Channels/Inserts* in 1981. On this recording, made in 1992 in Tel Aviv, Tudor performed alone. For a Lovely Music release of a remastered realization of the piece, John D.S. Adams wrote:

*Phonemes* employs two discrete processes which provide input source material for an array of sound modifying electronics, thus creating a multitude of outputs. It is difficult to recognize that these outputs are derived from the same source, as each undergoes a unique set of modifications. The first process utilizes a customized percussion generator with the ability of extending attacks up to several seconds in length. The second uses a vocoder capable of chopping a sound into small pieces. In performance, Tudor takes short sounds and lengthens them and in turn, long sounds and shortens them, thus creating two processes which can overlap and interplay with each other in time and space.

During the piece’s composition Tudor found the combinations reminded him of speech . . . hence its name.\(^{61}\)

The next work Tudor created after *Phonemes* (the fourth work on this disc) was his live electronic *Sextet for Seven* for the dance *Quartet* (1982). Tudor’s title—the incongruous seven-layered sextet—echoes Cunningham’s odd indication of “quartet” even though the dance is for five performers. A description of Tudor’s *Sextet* on the Merce Cunningham Dance Company website refers to “chilling” music created by “six homogeneous voices and one wandering voice.”\(^{62}\) The relative quietude and airy, layered electronic voices that characterize much of this performance provide a useful contrast with the relentless power of *Toneburst* (this quietude is occasionally interrupted, somewhat startlingly, by an amalgam of loud and active sounds).

**Disc Six**

Kosugi’s *Spacings* (for the dance *Doubles*, 1984) and John King’s *gliss in sighs* (for *Native Green*, 1985) start off Disc Six. The hypnotic, slow evolution of constant sound in Kosugi’s piece (a live electronic solo, played by the composer), like most of the electronic music recordings included here, deserves to be listened to under a sensitive pair of headphones.

John King, a 1976 graduate of CalArts, had known Cage since 1980. Cage was encouraging and supportive of King’s experiments in multi-track tape composition and instrumental design (in particular, a prepared violin), and eventually commissioned King to write a piece for a new dance of Cunningham’s. King recalls meeting the choreographer in the Westbeth studio, where he was told the title, length, and quality of the dance: “some very fast movement.” King recalls further:

> I began to compose the piece, which was for multiple tracks of prepared violin


tape loops, and also with one “live” prepared violin score. This was the first time I wrote a piece using “time-windows” which indicated specific times within which what string/what preparation/what bowing was to be played. At the premiere at City Center in March 1985, I remember Cage was in the pit, sitting right behind me. When the piece was over, he was so kind and said how perfect it was for the company and how the sounds reminded him of an electronic jungle.63

To my ears, gliss in sighs is as much cityscape as it is jungle, as it hammers and rumbles as much as it roars and screeches. Like much of the work of Tudor and Kosugi, King’s piece is constant, emphatic, and densely layered with sounds created by King’s electric prepared violin, though the origins of the sounds are difficult or impossible to determine from the recording alone. (The continuous, breathless quality of much of the music of this period marks a drastic difference from the tranquil balance of sound and silence heard in the music used by Cunningham during the 1950s.) King was later commissioned twice more for new works, by Cage’s successors Tudor and Kosugi, in 1993 and 2002. Each time, Cunningham provided the same information—the title of the dance, overall timing, and a promise of fast movement. As a musical contributor to the pit ensemble from 1985 to the present, King acknowledges the “great gift” Cunningham gave to musicians, a gift he calls powerful, fantastic, and inspiring: “The gift of freedom,” he explains, “as composers-musicians to create freely within his ever-challenging and always-forward-looking vision; as an audience member to be given the freedom of individually experiencing the work with no imposed agenda.”64

The third work on Disc Six, Cage’s Voiceless Essay, was used with the videodance Points in Space (1986), a coproduction with the British Broadcasting Corporation, made by Cunningham in collaboration with Elliot Caplan. Caplan succeeded Charles Atlas as filmmaker-in-residence for MCDC in 1985. Both Atlas and Caplan were important collaborators for Cunningham in his choreography for the camera, an element in his creative process as important as Cage, chance, and later, computers. In Caplan’s film, Points in Space, one gets a sense of the music of the dance itself: we hear the bodies working and straining, the heavy breathing after exertion, and the solid thump of multiple dancers landing at the same time. We also hear the electronic manipulation of Cage’s voice reading mesostics based on Thoreau’s essay “On the Duty of Civil Disobedience.” (The voice analysis and resynthesis was created at the Center for Computer Music at Brooklyn College with the support and assistance of Charles Dodge, Francis White, Curtis Bahn, and others.) The film, like the music, is not expressing something or telling a story: “I call it dancing,” Cunningham says in the film with a smile.

Tudor’s Webwork for the dance Shards (1987) follows Voiceless Essay. D’Arcy Gray categorizes this piece as an excellent example of what was typical of Tudor’s series of “Webpieces”: “Nothing typifies Tudor’s work during this period more than the process of taking unique pre-recorded material, changing and layering it in real time and playing it through a multichannel sound system.”65

63 John King, written correspondence with the author, July 19, 2010.
64 Ibid.
Michael Pugliese’s **Peace Talks** for the dance *August Pace* (1989) follows *Webwork*. Like Jon Gibson’s solo flute, the sudden sound of a sitar, percussion, and a variety of AACM-like “little instruments” (bells, whistles, gongs, rain sticks, shakers, rattles, horns), comes as something of a surprise after an hour of electronic or electronically manipulated sound. Pugliese, a conservatory-trained percussionist, composer, and conductor, passed away in 1997 at the age of forty-one. He worked occasionally with the Company over a period of many years. Like John King and dozens of other composers who came to write for Cunningham’s dances, Pugliese’s connection to the Company grew out of his engagement with Cage’s music (most notably, Pugliese co-organized a twelve-hour marathon concert of Cage’s music at Cooper Union in 1982; he also performed and recorded many of Cage’s compositions himself). Beginning in 1985 Pugliese toured frequently with the Company. *Peace Talks* is one of two works he composed for Cunningham, and was based on a poem by Steven Keene; it is performed here as a duet between Kosugi and Pugliese.

**Disc Seven**

Takehisa Kosugi’s **Spectra** accompanied the twenty-minute-long dance called *Cargo X* (1989), and opens Disc Seven with the haunting manipulation of a singing voice, along with a number of what Kosugi refers to as “small objects” (this complete recording of the piece features Kosugi, Tudor, and Michael Pugliese on live electronics, percussion with contact mics, and voice). This is followed by Cage’s **Sculptures Musicales** for the dance *Inventions* (1989). A thirty-minute work, Cage’s score consists entirely of somewhat cryptic prose (which makes explicit reference to one of Cage’s heroes), written on a single piece of paper. It instructs the performers to create chords that Cage called “sculptures.” Cage’s instructions consist of the following paragraph:

Sculptures Musicales “Sounds lasting and leaving from different points and forming a sounding sculpture which lasts” (Marcel Duchamp). An exhibition of several, one at a time, beginning and ending “hard-edge” with respect to the surrounding “silence,” each sculpture within the same space the audience is. From one sculpture to the next, no repetition, no variation. For each a minimum of three constant sounds each in a single envelope. No limit to their number. Any lengths of lasting. Any lengths of non-formation. Acoustic and/or electronic.

D’Arcy Gray, who performed the piece many times with the musicians of the Merce Cunningham Dance Company during the early 1990s, learned from Tudor that some of the sounds should be barely audible, while others should be “near the threshold of pain.” Much of this recording is in the “barely audible” category. In response to a question about how the piece works, Gray has written:

The 3 sounds are necessary to define a 3 dimensional space, so surrounding the audience is important, but so is getting up over their heads . . . or underneath them if possible. At MCDC we used a 16 channel sound system and 3 performers, so there were 3 speakers getting used for each “event” or “sculpture.”

A constant sound in a single envelope means a sound which starts, lasts for the duration of the “event,” then stops. No timbral or other fluctuation in the sound is desired. For example, a long tone on a single pitch at a single dynamic that lasts for the length of the event would work. This is the hard part for the performer:
how do we find interesting sounds that comply with this very important stipulation?\textsuperscript{66}

The version heard here makes use of various objects, nature sounds, and electronics.

Tudor’s \textit{Virtual Focus} (for the dance called Polarity, 1990), Cage’s \textbf{Four\textsuperscript{3}} (for Beach Birds, 1991), and Tudor’s \textit{Neural Network Plus} (for the dance \textit{Enter}, 1992, which “Blue” Gene Tyranny describes as being “composed incorporating a synthesizer designed around an analog neural network chip by Intel Corporation,” played here by Kosugi and Tudor) fill out the rest of Disc Seven.\textsuperscript{67} \textit{Neural Network Plus} is excerpted from a recording of a massive sixty-one minute performance. D’Arcy Gray, who calls Tudor’s work from this period “mysterious and magical,” points out that although Tudor’s style, including a piece like the quietly restless \textit{Virtual Focus}, could be viewed as precursors to the “noise” music of today, it was being created by Tudor without much recognition on his part of the technological changes taking place, most notably the move from composition with magnetic tape to composition using personal computers.\textsuperscript{68} \textit{Four\textsuperscript{3}} is a thirty-minute work for four performers: one or two pianos, twelve rainsticks, violin or oscillator and silence. Following a series of time brackets, the four players perform several different actions, which they choose from among the available materials (rainstick, silence, oscillators, etc.).

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\textsuperscript{67} “Blue” Gene Tyranny, “David Tudor: Neural Network Plus” review, \textit{All Music Guide} online.

\textsuperscript{68} Gray, “David Tudor in the Late 1980s,” 41.
In addition, excerpts from a series of Cage’s chance-derived variations called *Extended Lullaby*, based on Erik Satie’s *Vexations*, are played on the piano, and are heard particularly clearly near the end of this performance.

**Disc Eight**

Disc Eight opens with John King’s *blues ’99* for the dance CRWDSPCR (1993). The title of the dance, like many of Cunningham’s titles, is cryptically ambiguous, and can mean either “crowd spacer” or “crowds pacer.” King describes his piece: “Tudor had some incredible sound processing devices, so I decided to use a few of these and to compose a ‘duet’ with David and I both using the same source material (recordings I made of a steel dobro guitar).”69 The software interface King created, and Stephan Moore programmed, for the 2007 revival of this continuous tidal wave of sound is illustrated below.

Stuart Dempster’s *Underground Overlays*, a piece dedicated to the memory of John Cage, was commissioned by Cunningham in 1993 for performances of the dance *Ground Level Overlay* in 1995. *Underground Overlays* presents a calm collage of layered melodies (accompanied, in this live recording made in Seattle on May 2, 1996, by the sound of the dancers’ active feet) produced in a unique way. The composer explained the process of creating the many “overlayed” combinations of sounds used in this piece, which combined prerecorded material with a live component that included conches, and optional garden hose:

> The source material for *Underground Overlays* was recorded 18 June 1994 in a two-million-gallon former water tank at Fort Worden in Port Townsend about 70 miles northwest of Seattle, which has now achieved some notoriety ever since the CD *Deep Listening* was recorded there in 1988. John Cage was deeply moved by that recording. The old water tank is known locally as “the cistern” or, more fondly,

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69 John King, written correspondence with the author, July 19, 2010.
“The Cistern Chapel.” It has an incredible reverberation time of 45 seconds; any sound made is reverberated warmly with near perfect evenness in tone quality and dynamic range over a 45-second decay time.

In the making of this work, ten trombone players descended 14 feet into the 186-foot-diameter underground cistern and spread out around the circumference. Dempster, as composer, soloist, and director, performed in the center, spinning slowly, delivering various visual cues to each of the performers in turn. That was step one. Step two was taking the resulting tapes and then ordering them in two parallel selection columns to be played with a performance attitude simultaneously while at the same time live musicians are blending with the tape(s), creating more layers.\(^6\)

*Underground Overlays* is followed by Cage’s *Four*\(^6\) (for the dance *Rondo*, 1996)—perhaps the most-often performed of his late “number pieces.” The sixth quartet written in this style, *Four*\(^6\) lent itself well to the preferred live improvisation practice featured in so many of Cunningham’s dance accompaniments, and offered a wide variety of contrasting and seemingly unrelated—sometimes startling—sounds. Kosugi’s *Wave Code A–Z* of 1997, for the dance *Scenario*, follows *Four*\(^6\). Kosugi improvised on electric violin over a dreamily stretched background. (The dance, *Scenario*, is particularly memorable because of its bulging, body-distorting striped and checkered costumes by avant-garde fashion designer Rei Kawakubo.)

Christian Wolff’s *Or 4 People* (1994) was used for a revival of an older dance called *Rune* (originally performed in 1959, also using music by Wolff called *Music for Merce Cunningham/For 6 or 7 Players*). The title of Wolff’s new piece made explicit reference to his older piece *For 1, 2, or 3 People* (1964; see Disc Three), which had been used for the dance *Tread* in 1970. This new work used some of the same graphic notation of the original piece, and was meant to be played by one to four performers using a variety of sound sources, possibly including, according to the composer, violin (or other stringed instrument), trombone, electronics, and keyboards. Wolff scored the piece specifically for a concert (without dance) in Holland that included the musicians Tudor, Kosugi, Nic Collins, and himself. Wolff recalls knowing that “we would have very little time to rehearse,” and that “the performers were not (or no longer) primarily readers of standard notation, but were familiar enough with my old notation and generally how to play such music.”\(^7\) Wolff explains the history of *Rune* and the genesis of the new piece:

> At later performances of *Rune* it was not practical or economical to put the band together, so Cage and Tudor decided to use *Duo II* for pianists (1958) and, I think, *For Piano I* (1952) and (or) *For Pianist* (1959). Then at later revivals of the dance (the first 6–7 player version was revived I think just once—I couldn’t be there—I’ve never heard the piece), when Tudor was no longer playing piano and Cage was already gone, the piano material wasn’t practical, so I suggested the use of *Or 4 People*.\(^7\)

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\(^6\) Stuart Dempster, program note on *Underground Overlays*, and written correspondence with the author, August 20, 2010.

\(^7\) Wolff, written correspondence with the author, July 10, 2010.

\(^7\) Ibid.
Rune is thus unusual as a Cunningham dance in that it had, over the years, several different accompaniments, though all by the same composer. Carolyn Brown called it (as of 1964) “the most difficult dance in the repertoire.”

Disc Nine
The penultimate disc of this set opens with Cage’s 108 and One, two compositions Cage suggested be performed together, both written in April 1991. Cunningham used these works—108 for a large orchestra with that amount of players; One for solo cello, the eighth solo Cage composed in his “numbers” series—for the dance Interscape, premiered at the Kennedy Center in Washington, D.C. in 2000 (Cage’s works had been premiered together in Stuttgart in November 1991). When performed together, the effect is that of a cello concerto, with Loren Kiyoshi Dempster featured here as soloist with the Orchestra del Teatro La Fenice conducted by Arturo Tamayo (Cage also created alternative solo versions for sho, or sho and conches). All the parts are in Cage’s time-bracket notation, used extensively in his later works, which indicated an exact timeframe within which freely placed single notes were to begin and end. The work is therefore both indeterminate and fixed; the overall form (order of events, and density) is predetermined but the actual instances of overlap are not. The orchestra’s instrumentation is specified, but the percussion parts are left open, though Cage suggested using a variety of East Asian instruments.

John King’s longtermparking accompanied the dance called Fluid Canvas in 2002. This was the third work he created for the Company, and was commissioned by Kosugi. King manipulated the laptop electronics himself. The piece is sectional; the rapidly pulsing electronic sounds are replaced by acoustic textures, digitally manipulated and looped piano sounds, for example, which pulse repetitively at varying tempi, before being usurped by a new array of agitated electronic sounds (the piano sounds return near the end of the piece).

The last two compositions on Disc Nine were both created for the approximately twenty-minute-long dance eyspace of 2006–07, for which Cunningham commissioned three different musical accompaniments. David Behrman’s Long Throw and Annea Lockwood’s Jitterbug were two of the three; the third was Mikel Rouse’s International Cloud Atlas, which made use of audience-controlled iPods set on shuffle mode (Rouse’s piece accompanied the dance’s premiere performance). Behrman’s gorgeous Long Throw combines a prepared piano and other instrumental sounds (note the ping pong ball bouncing on some of the low piano strings) with shifting electronic textures in the background, the latter functioning as a canvas on which the musicians delicately splatter bits of patterned color. Behrman has explained that the title Long Throw refers to the long history of the Merce Cunningham Dance Company, and contains an explicit reference to Cage’s prepared piano piece Music for Marcel Duchamp, composed in 1947:

The music reflects the six-decade time span from 1947 to 2007 by combining a piano part, with preparations similar to those used by Cage in his “Duchamp” piece, with 21st-century music software and sound-sensing technology.

Long Throw was made with performance roles for the core musicians of the Cunningham Company in mind: Christian Wolff, Takehisa Kosugi, John King,

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Brown, Chance and Circumstance, 378.
and Stephan Moore. In addition to the prepared piano part, the piece also calls for performances by several musicians playing violin, viola, and electric guitar. Its software was designed by the composer.\textsuperscript{74}

Annea Lockwood’s piece is realized here with zither, viola, electric guitar, laptop, and live electronics (played by King, Behrman, and Stephan Moore). Lockwood worked much in the way that had grown to be typical of the composers for the Company, who enjoyed combining prerecorded natural sounds, electronic manipulation, and live performance. She explains:

In \textit{Jitterbug}, two musicians are interpreting photographs of rocks as graphic scores, photographed for this work by Gwen Deely; the rocks are intricate in their patterns and color shifts and I found them in a creek bed, in the Montana Rockies. A 6-channel, pre-recorded electroacoustic score draws on insect sounds: aquatic insects which I recorded in the small lakes and backwaters of the Flathead Valley, Montana; and “air” insects generously made available to me by Lang Elliott, of the NatureSound Studio. A curious aspect of the underwater recordings was that these strong sound signals were being created by beetles and other microscopic insects which were always invisible to me, although the water was clear and often shallow.

Deep tones from bowed gongs and a piano infiltrate this insect world, providing a strong contrast.\textsuperscript{75}

As the last authored composition included on this box set of “Music for Merce,” Lockwood’s \textit{Jitterbug} fits particularly well with the oft nature-themed work of Cage and Cunningham’s later years.

\textbf{Disc Ten}

The final CD illustrates the variety of music available for use in a type of performance Cunningham called \textit{Events}. The idea of the \textit{Event} grew out of the original 1952 Black Mountain College “event” in which a shared time structure unified a variety of seemingly random and surprising simultaneities (reading, dancing, playing music). The Black Mountain College “event” also made use of the performance space in a new way, by having the audience placed, more-or-less, around the performers, rather than all facing forward toward a proscenium-type of stage. This “event” coincided roughly with Cunningham’s beginning to incorporate everyday gestures into his choreography, a practice that would come to be of primary interest to the following generation of New York dancers, in particular, those associated with the Judson Dance Theater.

The first \textit{Event} took place in Vienna in 1964, during the Company’s first world tour, and was born out of the necessity of having to perform in the non-traditional space of a museum (it was called \textit{Museum Event No. 1} and the dances were accompanied by a continuous version of Cage’s \textit{Atlas Eclipticalis}). During the same tour, two other \textit{Events} were performed in Stockholm. As a practical strategy for dealing with the unpredictable nature of touring, the \textit{Event} evolved into a variable,

\textsuperscript{74} David Behrman, written correspondence with the author, August 20, 2010.

\textsuperscript{75} Annea Lockwood, written correspondence with Paul Tai (New World Records), March 17, 2010.
uninterrupted, open form that could be performed essentially anywhere: in a church, gymnasium, museum, city square, park, warehouse, etc. The content of the dance(s) was taken from preexisting works in the Company’s repertory, creating simultaneous collages that were as related or unrelated as the dance was to the music. Event details were originally decided upon on the day of the performance, but became more prepared and rehearsed over time. Cunningham has written that

The Events were originally intended as a means of giving performances in unorthodox surroundings.... Since we, the dancers, had no awareness of what the continuity of sound would be, we were free to involve ourselves in what we were doing.... We continue to present Events in orthodox and unorthodox situations, usually with four musicians.... Each is a composer, and each makes a sound ambience separate from the others, using the Event time as he chooses.76

Echoing the inherent flexible freedom of the Events, Mumma remarked that they “held implications of greater collaborative endeavors than most of the repertory works.”77 Further, the Events were particularly important from the mid-1960s onward: Mumma estimates that from that point on, only about half of the Company performance spaces had anything resembling an orchestra pit: “The one thing that was critical, always, when you’re considering a touring company, is that the music situation had to be flexible,” Mumma concludes.78 Cunningham explained:

We could show that theater need not be thought of as theater, but could be something seen in the street. Life was like theater; theater like life, you could watch it as you watch people on the beach. As we played in these different situations, it became paramount that the pieces were not to be made to fit into a given space, but rather that you could simply look at each new situation and see how to deal with it.79

Starting in the mid-1970s, however, Events also took place at the Westbeth rehearsal/performance space. (Though not a proscenium stage, the studio was nonetheless an enclosed and restricted space.) Composers were invited to contribute music to weekend Events. Over the next few years these contributors included: Robert Ashley, Maryanne Amacher, Jacques Bekaert, Joel Chadabe, Nicolas Collins, Philip Corner, J.B. Floyd, Martin Kalve, Takehisa Kosugi, Ron Kuivila, Garrett List, Annea Lockwood, Alvin Lucier, Jackson Mac Low, Tony Martin, Meredith Monk, Phill Niblock, Nam June Paik, David Rosenboom, Frederic Rzewski, Yasunao Tone, and Christian Wolff, as well as the regular players.

77 Mumma, in Merce Cunningham, 68.
78 Mumma, interview with the author, February 18, 2010.
79 Cunningham, in Dancer and the Dance, 176.
Legacy
At the time of this writing, the Merce Cunningham Dance Company has embarked on its “Legacy Tour,” a monumental series of final performances worldwide, to be completed in New York City on December 31, 2011. When the Company has finally finished its run, it will have been actively promoting live contemporary music for nearly sixty years. Even though these CDs (and these notes) explore the music for the Company to the exclusion of other parts of Cunningham performances, the other aspects of Cunningham’s legacy—costumes, sets, lighting design, backdrop, and dance itself, all beyond the scope of this essay—and the continued commitment to multimedia collaboration, are undoubtedly as important in their contribution to this whole. Cunningham explored the nature of such a serendipitous Gesamtkunstwerk:

What we have done in our work is to bring together three separate elements in time and space, the music, the dance, and the décor, allowing each one to remain independent. The three arts don’t come from a single idea which the dance demonstrates, the music supports and the décor illustrates, but rather they are three separate elements each central to itself.”

In the end, the vast and diverse body of music alone created for Merce Cunningham overwhelms; as Christian Wolff has written in his reminiscences for this CD booklet, “he was always open to and wanted what was new.” Rather than struggle to understand it all, or even merely to comprehend the selected samplings offered here, we would do well to take the advice of John Cage, who gently instructs:

To obtain the value of a sound, a movement, measure from zero. (Pay attention to what it is, just as it is.)

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Christian Wolff
One of the last times I saw Merce—we were at Dia Beacon for an Event—I told him about how once, when David Tudor made exquisitely quiet sounds—or appeared to: at times one could hear nothing, only see the movement of his hands, I asked David whether he really did make all the sounds or sometimes just made the movements. David smiled his mysterious smile and nodded, yes he sometimes didn’t make any sound at all. Merce laughed loudly and, I think, in recognition. Merce was engaged with music in various ways. He was always open to and wanted what was

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80 Ibid., 137.
81 Cage, “2 Pages, 122 Words on Music and Dance,” 96.
new, and John Cage’s company and constant interest in new musical developments of course was part of that. Merce didn’t wait for a reputation to be established. Starting in 1950 he used music by as-yet-unknown composers just starting out, like Morton Feldman, Earle Brown and myself, along with Europeans like Pierre Boulez, Pierre Schaeffer and Pierre Henry (the first instances of “musique concrète”), and Bo Nilsson, and of course the somewhat older and more experienced, but certainly maverick, Cage.

He also liked music that was more familiarly appealing, Satie’s above all, but also music like Louis Moreau Gottschalk’s virtuoso piano piece Le Banjo and nineteenth century piano favorites from one of those “music the whole world loves” collections (both proposed, I think, by David Tudor). And there was John Cage’s earlier music, often for prepared piano, which at the time was regarded as far out, but actually sounded strong and engaging, with plenty of rhythmic energy.

I met Merce because of John Cage and Grete Sultan. Grete was my piano teacher. She lived in a loft on East 17th street in New York, just off Fifth Avenue, Merce lived in the loft above hers. She had sent me to John Cage to study composition, so knowing John also led to meeting Merce. At Grete’s (this is in 1950) I played a piece while John and Merce were there. Merce exclaimed, “that’s beautiful.” He was generous about music. We did a run-through just before the final dress rehearsal of the last piece I made for the company (the dance Loose Time, in 2002). Merce (I hadn’t noticed) was sitting in the front row of the theater and just after we finished I heard him murmur “beautiful.”

At one of the performances of an Event at the Tate Modern in London, the musicians, Takehisa Kosugi (with his table of live electronic set-ups), William Winant (with an array of percussion instruments) and myself (on grand piano, with assorted small sound-making objects), were up on a kind of extended mezzanine platform in the middle of the huge space. Merce, now in his wheelchair, was up there too looking down at the dancers below. The musicians were improvising and sometimes getting quite wild (maybe responding to the challenge of the very large space). At one point Merce was seen to turn his wheelchair around suddenly and look at us with particular interest (a very rare instance, to my knowledge, of, for a moment, not watching the dancers), as though wondering: how was that music happening?

There were two problematic occasions I remember. The first with the music for Suite by Chance, which was a tape piece I had made (and was assembled by John Cage, David Tudor and Earle Brown) in 1952. You can read about this in Carolyn Brown’s fine book Chance and Circumstance. The problem lay with the audience’s response to the sometimes abrasive or rude electronic sounds, especially when they appeared to coordinate with certain movements of the dance. Of course no coordination was intended. In any case, Merce was untroubled by any of it and said nothing.

The other occasion, in the ’70s, involved an Event for which I organized the music, including some pieces based on traditional labor and political songs. The musicians decided also to sing the songs themselves. There was some concern, but I knew that generally the dancing, while sometimes intense and serious, could also be humorous. While we were rehearsing I looked over at the dancers (also rehearsing, on their own) and what they were doing seemed more on the humorous side, so I thought things might work out. In fact, the dancers were running through
something for another performance. When, at the actual performance, we first sang one of our songs (“There Once Was a Union Maid”), raucously, Merce was dancing one of his beautiful, intense, and lyrical solos. The effect was shocking in a way that seemed entirely inappropriate. Afterwards I went to see Merce and apologized. He didn’t smile, but he didn’t say anything either. (Actually, Remy Charlip, one of the first Cunningham Company dancers, and Jasper Johns, when I said to them what a terrible thing I had instigated, said, Oh no, they thought it was fine.)

Merce was remarkably open about all the elements that, independently, joined with his choreography—the sets, costumes (both of these he himself sometimes contributed to), lighting, and music. With very few exceptions these elements were newly made along with the dance. This newness was one of things that made it possible for them to be independent. And whatever they turned out to be, Merce accepted it. In this way we were all given a great gift—“permission” and opportunity for freely doing new work, and for performing or being performed (and in all sorts of fine and as well as unusual venues, all over the world).

There might be interesting wrinkles. When Merce asked for music, nothing was said about the dance except for its total duration: Provide music for, say, a 22-minute dance. With the dance Loose Time, though, I happened to see Merce while we were each still working on the choreography and the music. He, quite unusually, described some of the work on the dance—there was a lot of movement in it, including really fast footwork and a solo for Holley Farmer, in which he found she could do even more disparate things at the same time than he had supposed. I was far enough along in the music that I didn’t worry about how it might or might not go with what Merce described (in any case, the specific coordinations of dance and music would be entirely open and unpredictable). I had been told the dance would be about 25 minutes long. About two weeks before the first performance, after I’d finished making my score, I got a call: the dance was now running about 30 minutes. As it happened, my score had open and flexible features to it and could be extended the extra time. Incidentally, the title of the dance, Loose Time, seemed equally applicable to the music, and the music’s (independently determined) title, Moving Spaces, could have been applied to the dance.

In the 1950s the work of Cage, Feldman, Brown, myself, and the performing of David Tudor, was much supported by our involvement with Merce’s dance performances. And in the years after the same can be said of many other composers and musicians. Possible effects of Merce’s choreography on our music are harder to gauge. For myself, as I look back, it was—as it still is—such a strong example of ever-changing inventiveness and surprise—in the structures, the various kinds of continuity, intersections, and overlays of activity, the drama of contingency. And there was what you could call “heterophonic unisons”—a number of people, whether dancers or musicians, doing the same thing (unison) but, inevitably, because of individuals’ irreducible differences (bodies, minds, and hearts), also not the same. And in all this the extraordinary dedication of work and discipline.

In his particular ways, Merce was, as I said, very generous.
CUNNINGHAM AND CAGE
By David Vaughan

The Merce Cunningham Dance Company came into being in the summer of 1953, when Cunningham was engaged to teach at the summer session of Black Mountain College, the progressive liberal arts school in North Carolina. He took with him a group of dancers who had been working with him in New York. They rehearsed a number of dances that they presented at the end of the summer at the school, and again during the following winter in an off-Broadway theater in New York City. This original group included Carolyn Brown, Viola Farber, Remy Charlip, and Paul Taylor, all of whom went on to become choreographers in their own right.

Cunningham and Cage decided to keep the company together some way. Cunningham gave the dancers a daily class, followed by rehearsal, a schedule he maintained throughout the Company’s existence. For the next ten years, the Company led a precarious existence, touring the United States in a Volkswagen microbus, purchased with Cage’s winnings from a television quiz show in Milan, on which he appeared as a mushroom expert. (While in Milan, he composed Aria and Fontana Mix.) The bus transported personnel—six dancers, two musicians (Cage and David Tudor), and a stage manager who was often Robert Rauschenberg—as well as costumes and props. Summer residences at the American Dance Festival, then at Connecticut College in New London, or at UCLA afforded the luxury of extended rehearsal periods when the dancers did not have to take other jobs. At New London, dancers from other companies, to whose directors the names of Cunningham and Cage were by then anathema, flocked to Cunningham’s classes, recognizing that the technique he had evolved was a viable instrument for dancers of any persuasion—a true technique rather than a vehicle for its creator’s personal expression.

In the early Fifties, Cunningham and Cage proposed radical formal innovations that were regarded by the dance establishment as perverse, frivolous, and irrelevant. In their earlier collaborations, mostly solos that they performed in joint concerts, dance and music shared a common rhythmic structure. From now on, they existed independently, with no relation except that of simultaneity. (When Cage was asked once why the dance and the music were not therefore performed in different spaces, he replied, “It’s for your convenience.”) When Cunningham began to choreograph for his Company, the dancers habitually learned and rehearsed a new work in silence. The various elements—choreography, music, décor—were often brought together literally only at the first performance.

The use of chance processes in the composition of both music and choreography meant that the usual principles governing dance structure, whether musical form or narrative, as well as those concerning the use of space, were abandoned. Instead, in terms of both time and space there was a “multiplicity of centers” (a concept derived from Zen Buddhism), in which no one element was necessarily more, or less, important than another. The dances always had a strong sense of structure, but this was organic—”imitating nature in her manner of operation”—rather than preconceived and imposed. Nevertheless, there was a difference in their respective approaches to chance: Cunningham used chance procedures in developing the choreography, but rarely in performance, whereas Cage allowed for aleatory procedures in performance as well as in composition.
In 1964, the Company, still led by Brown and Farber, and with Cage and Tudor as musicians and Rauschenberg as resident designer, undertook a six-month tour of the world. They performed in both Western and Eastern Europe, India, Thailand, and Japan. Engagements in Paris and London—where a week’s season was extended into a month—received the kind of considered critical comment, as well as enthusiastic audience response, rarely found at home. Word began to get back to the United States, and by the time the Company returned there was a new curiosity about the work. The Company began to tour more widely in the United States, partly under the auspices of the newly-formed National Endowment for the Arts; the New York State Council on the Arts sent MCDC to conduct residencies in colleges and universities all over the state; and there were regular seasons in New York City (rather than the single performances of earlier years). The Company continued to tour abroad almost every year. Both in Britain and France, the emergence of a native form of contemporary dance may be directly attributed to Cunningham’s influence, through both performances and classes—it became a common rite of passage for those who wished to form companies of their own to travel to New York to study in the Merce Cunningham Studio. Cunningham, though he professed to hate teaching, was a great teacher.

The Sixties saw a number of celebrated artistic collaborations with such artists as Jasper Johns, Frank Stella, Andy Warhol, Robert Morris, and Mark Lancaster. John Cage remained as musical advisor until his death in 1992, when David Tudor succeeded him. Takehisa Kosugi became music director shortly before David Tudor’s death in 1996. Musical accompaniment was nearly always live, most often live-electronic music, usually with instruments designed and made by the musicians themselves.

In the Seventies, Cunningham, dissatisfied with the way his dances were shown on film and television when handled by other directors, began to choreograph directly for the camera, in collaboration first with Charles Atlas and later with Elliot Caplan, creating a series of video- and film-dances that defined a grammar of dance on screen. In recent years, the collaboration with Atlas was resumed, resulting in definitive versions of repertory dances.

In the Nineties, Cunningham’s known interest in new technology led to his being offered the use of DanceForms, software that enabled him to devise choreography on the computer screen. This made possible an even greater complexity in the movement. He also experimented with Motion Capture technology, notably in the long dance BIPED, whose décor featured digital imagery derived from dance phrases he had devised for the purpose.

Cunningham received almost every possible honor and award, including the French Légion d’Honneur and the Praemium Imperiale in Tokyo, and at home the Kennedy Center Honors, the Dorothy and Lillian Gish Prize, and a MacArthur Fellowship. Although no longer without honor in his own country, he never sought success, never stopped making dances. Even in his last days, he told people he still visualized movement, steps. When the call came from the MacArthur Foundation informing him of his award, he sat looking out the window of his studio for a few minutes, then said to himself, “Well, I’ll get back to work.”

David Vaughan is the archivist of the Merce Cunningham Dance Company; he is the author of Merce Cunningham: Fifty Years (Aperture, 1997) and its CD-ROM supplement, Merce Cunningham: Fifty
Forward *(Cunningham Dance Foundation, 2005).*

**Merce Cunningham** (1919–2009) was a leader of the American avant-garde throughout his seventy-year career and is considered one of the most important choreographers of our time. Through much of his life, he was also one of the greatest American dancers. With an artistic career distinguished by constant innovation, Cunningham expanded the frontiers not only of dance, but also of contemporary visual and performing arts. His collaborations with artistic innovators from every creative discipline have yielded an unparalleled body of American dance, music, and visual art.

Born in Centralia, Washington, on April 16, 1919, Cunningham began his professional modern dance career as a soloist in the Martha Graham Dance Company and presented his first solo show in 1944. Over the course of his career, he choreographed more than 150 works and more than 800 site-specific *Events*, many of them in collaboration with his life partner, John Cage. His lifelong passion for exploration and innovation made him a leader in applying new technologies to the arts: he worked extensively with film and video, helped develop the choreography software DanceForms, and contributed to the creation of the pioneering webcast series *Mondays with Merce* (www.merce.org/mondayswithmerce.html). He earned some of the highest honors bestowed in the arts, including the National Medal of Arts (1990) and the MacArthur Fellowship (1985), and was named Officier of the Legion d’Honneur in France in 2004. Cunningham passed away in his New York City home on July 26, 2009.

**Music Directors**

**John Cage** (1912–1992) was born in Los Angeles in 1912. He studied with Richard Buhlig, Henry Cowell, Adolph Weiss, and Arnold Schoenberg. In 1952, at Black Mountain College, he presented a theatrical event considered by many to be the first “Happening.” He was associated with Merce Cunningham from the early 1940s, and was Music Director of the Merce Cunningham Dance Company until his death in 1992. Cage and Cunningham were responsible for a number of radical innovations in musical and choreographic composition, such as the use of chance operations and the independence of dance and music. His last work for MCDC was *Four*, the score for *Beach Birds*, presented at the James Joyce/John Cage Festival in Zürich in 1991, though Cunningham continued to use existing scores by Cage as accompaniment for his choreographies until his penultimate work, *XOVER*, in 2007. Cage’s radical compositions, from the *Sonatas and Interludes for Prepared Piano* through *Water Music*, *Fontana Mix*, *Cartridge Music*, *Atlas Eclipticalis*, to *4’33”*, are milestones in the history of contemporary music. He was the author of many books, among them *Silence* (1961), *A Year from Monday* (1968), *M* (1973), *Empty Words* (1979), and *X* (1983), all published by Wesleyan University Press. *I–VI* (the Charles Eliot Norton Lectures delivered at Harvard University in 1988–89) was published by Harvard University Press in 1990. Cage’s music is published by the Henmar Press of C.F. Peters Corporation and has been recorded on many labels. He died in New York City on August 12, 1992.

**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-Sixties to the composition and performance of “live electronic music.” In the early Fifties, 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 Fifties and early Sixties with programs of Cage’s radical works. In the late Fifties 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 MGDC. 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.

Takehisa Kosugi was born in Tokyo in 1938. He studied musicology at Tokyo National University of Fine Arts and Music. In 1960 he co-founded the Group Ongaku, the first collective improvisation group in Tokyo. In the early Sixties his event pieces were introduced by Fluxus in Europe and the United States. From 1965 to 1967 he lived in New York, creating mixed-media performance works and performing with Nam June Paik and other Fluxus members. In 1969 he co-founded the Taj Mahal Travellers in Tokyo, a collective improvisational group. As a composer he participated in Expo’70 in Osaka. He has been a composer/performer with MCDC since 1977 and was appointed Music Director of the Company in 1995. He received grants from the JDR 3rd Fund in 1966 and 1977, a DAAD fellowship grant to reside in Berlin in 1981, and the John Cage Award for Music from the Foundation for Contemporary Performance Arts in 1994. He has performed in many international festivals, including the Festival d’Automne à Paris, the Almeida International Festival of Contemporary Music in London, and the Sound and Nature in Krems, Austria. His sound installations have been presented in various exhibitions, including Für Augen und Ohren, Berlin; Ecouter par les yeux, Paris; and Kunst als Grenzbeschreibung: John Cage und die Moderne, Munich.

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**Merce Cunningham Dance Company Sound Engineers**

From 1952 until 1966, the task of setting up the Company’s sound systems in preparation for performances was done informally, mostly by David Tudor, often with John Cage’s assistance. From 1966 to 1976, Gordon Mumma and David Behrman took on the triple roles of performing, composing and audio engineering. Beginning in 1976, with sound systems in theaters becoming ever more complex and sophisticated, the position of “sound engineer” was established by the Company. That new role remained fluid and flexible, however, with the artists holding the position often extending their activities into performance and sound design.


Andy Russ: 2001–2004

Stephan Moore: 2004–2010

Live recordings taped during and in connection with performances by the Merce Cunningham Dance Company. The tapes are archived as the Merce Cunningham Dance Company Collection Sound Archive, New York Public Library for the Performing Arts, and are used with the kind permission of the New York Public Library.

*Quantitäten, Variations V, Mesa, Activities for Orchestra, Burdocks, Landrover,* and *Telepos* recorded and restored by Gordon Mumma. *For Magnetic Tape, For Piano I, Music for Piano* and *Ixion* restored by Gordon Mumma.
Producers: Paul M. Tai, Jean Rigg, David Behrman, John King, Takehisa Kosugi, Stephan Moore, Gordon Mumma, Christian Wolff
Digital mastering: Paul Zinman, SoundByte Productions, Inc. NYC
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