

Collaborative Legacy of Merce Cunningham

The Collaborative Legacy of Merce Cunningham Exhibition

Sundt Gallery, College of Architecture + Landscape Architecture, University of Arizona
Feb. 14th - March 22nd, 2011

UA Events:

Monday, February 14th

Exhibition Opening w/ talk by curator Beth Weinstein

Monday, March 7th

Film Screening: *Melange*, *Beach Birds for Camera*, and *Merce by Merce by Paik*

Wednesday, March 9th

Performance of John Cage's "Where Are We Going and What are We Doing"

Performed by Charles Alexander, Renee Angle, Laynie Browne, and Tenney Nathanson

Thursday, March 10th

Dance Performance: *Space, Time + Dance (Room for 4)*, by Douglas Nielsen and UA School of Dance

Time-Space, by Amanda Engelhardt and David Maurice (choreography) and Nick Johnson (set)

Friday, March 11th

Film Screening: Experiments in Art and Technology's *9 Evenings: Theater and Engineering*

Q+A with special guest and film producer Julie Martin [E.A.T.] and Laura Kuhn [John Cage Trust]

Saturday, March 12th

Roundtable, *The Collaborative Legacy*

Moderated by MOCA Exec. Director Anne-Marie Russell

Panelists: MCDC's Trevor Carlson and David Vaughan, Paul Kaiser [OpenEnded Group], Laura Kuhn [John Cage Trust], Julie Martin [E.A.T.] and Beth Weinstein.

Saturday, March 12, 2011

Merce Cunningham Dance Company Legacy Tour Performance

Crises [1960], *XOVER* [2007] and *BIPED* [1999]

Additional Exhibition Venues:

School of Architecture, University of Maryland, College Park, MD, USA

Architecture Faculty, Technische Universität Dresden, Dresden, Germany

École Spéciale d'Architecture, Paris, France

Jan. 25 - May 7, 2012

May 31 - July 31, 2012

Nov. 8 - 18, 2012

Merce Cunningham / John Cage / Robert Rauschenberg
David Tudor / Andy Warhol / Jasper Johns / Marcel Duchamp
David Behrman / Andrew Culver / OpenEnded Group
Charles Atlas / Benedetta Tagliabue / E.A.T. / Billy Klüver
Elliot Caplan / Nam Jun Paik / Lucinda Childs / Frank Gehry
John Adams / Elisa Monte / Tod Williams + Billie Tsien
Glenn Branca / Nacho Duato / Jaafar Chalabi
Nikolaus Hirsch / William Forsythe / Frédéric Flamand
Ai Weiwei / Dominique Perrault / Doug Nielsen / Beth Weinstein

Collaborative Legacy of Merce Cunningham

The Collaborative Legacy of Merce Cunningham exhibition celebrates seven multi-disciplinary works from the late choreographer Merce Cunningham's company as well as selected works resulting from collaborations between other choreographers and architects, including Frank Gehry, Tod Williams and Billie Tsien, Dominique Perrault, and Ai Weiwei. The exhibition features reproductions of music and dance notations, drawings, sketches, and photographs documenting the collaborative process as well as the performed works.

The Merce Cunningham Dance Company (MCDC), created in 1953, was one of the most influential contemporary dance companies in the world, due to the invention Cunningham brought to the medium of dance and due to a seventy year career of cross-disciplinary collaborations with artists such as composer and poet John Cage, visual artists Robert Rauschenberg, Jasper Johns, and Andy Warhol, film makers Charles Atlas and Elliot Caplan and architect Benedetta Tagliabue. These works were informed by such diverse interests as zen philosophy, environmental aesthetics, chance and indeterminacy, and digital technology.

The exhibition was originally created to synchronize with the Merce Cunningham Dance Company's last performance at the University of Arizona. This event was within the company's final two-year "legacy" tour, at the end of which the MCDC permanently disbanded, as was Cunningham's wish.

Since opening at the University of Arizona's College of Architecture and Landscape Architecture (Feb. 14th - March 22nd, 2011), the exhibition has toured to the University of Maryland School of Architecture (Jan-May 2012), the Technische Universität Dresden (May-July 2012), and to the École Spéciale d'Architecture (November 2012).

Media Contact:

Beth Weinstein, associate professor of architecture, university of arizona
bmw99@u.arizona.edu / collaborativelegacy@gmail.com
www.collaborativelegacy.arizona.edu

Introduction	3
Merce Cunningham Collaborations	
<i>Minutiae</i> , 1954	8
Robert Rauschenberg [set] and John Cage [music]	
<i>Antic Meet</i> , 1958	10
Robert Rauschenberg [set] and John Cage [music]	
<i>RainForest</i> , 1968	12
Andy Warhol [set] and David Tudor [music]	
<i>Walkaround Time</i> , 1968	14
Jasper Johns [set] and David Behrman [music]	
<i>Ocean</i> , 1994	16
Aaron Copp [lighting], Andrew Culver and David Tudor [music]	
<i>BIPED</i> , 1999	18
The OpenEnded Group [projections] and Gavin Bryars [music]	
<i>Nearly Ninety</i> , 2009	20
Benedetta Tagliabue [set]	
John Paul Jones, Takehisa Kosugi and Sonic Youth [music]	
The Collaborative Legacy Installation at the University of Arizona	22
Other Collaborations	
<i>Available Light</i> , 1983	28
Lucinda Childs [choreography], Frank Gehry [set], John Adams [music]	
<i>The World Upside Down</i> , 1989	30
Elisa Monte [choreography], Glenn Branca [music], Tod Williams, Billie Tsien Architects	
<i>Multiplicity</i> , 1999	32
Nacho Duato with Jaafar Chalabi [set]	
<i>La Cité Radieuse</i> , 2005	34
Frédéric Flamand with Dominique Perrault [set]	
<i>Bockenheimer Depot</i> , 2005	36
William Forsythe [choreography], Nikolaus Hirsch and Michel Müller [space]	
<i>A Fragile Stability</i> , 2007, and <i>COUNTdown</i> , 2008	38
UA Faculty Doug Nielsen with Beth Weinstein [set]	
<i>La Verité 25x par Seconde</i> , 2010	40
Frédéric Flamand with Ai Weiwei [set]	
Exhibition Documentation, Credits and Acknowledgements	42

2 Merce Cunningham

Merce Cunningham was born on April 16, 1919 in Centralia, Washington. At the age of twenty he began his professional modern dance career with a six-year tenure in the Martha Graham Dance Company as a soloist. He first performed his own choreography in 1944. Exploring his new and groundbreaking ideas in the realm of dance and choreography, he formed the Merce Cunningham Dance Company in 1953 while at Black Mountain College.

Throughout his seventy year career Cunningham worked in collaboration with visual artists, composers, designers and film makers; the most influential of these collaborations was with his life partner, poet and composer John Cage. This relationship fostered Cunningham's lifelong passion for exploration and innovation, most notable being the conclusion that the music and dance should be created independently of each other, related only by time and space. Cage and Cunningham also worked with chance procedures, embracing indeterminacy, fostering the independence of all elements of the performance, and allowing dance itself to be the pure subject of Cunningham's dances.

Choreographing more than 150 dances and over 800 *Events* over the course of his career, Cunningham emerged a leader in applying new technologies to the arts, exploring film, motion capture technology, and webcasting through "Mondays with Merce."

Merce Cunningham passed away on July 26, 2009, at the age of 90.

Sources + Further Reading:

- <http://www.merce.org/about/MCDCbio.php>
- Vaughan, David, and Melissa Harris. *Merce Cunningham: Fifty Years*. New York: Aperture, 1997.
- Brown, Carolyn. *Chance and Circumstance: Twenty Years with Cage and Cunningham*. New York: Knopf, 2007.
- Kostelanetz, Richard, and Jack Anderson. *Merce Cunningham: Dancing in Space and Time*. Chicago: Chicago Review Press, 1992.
- Cunningham, Merce, Meredith Monk, and Bill T. Jones. *Art performs life: Merce Cunningham, Meredith Monk, Bill T. Jones*. Minneapolis: Walker Art Center, 1998.
- Cunningham, Merce, and Jacqueline Lesschaeve. *The Dancer and the Dance*. New York: M. Boyars, 1985.
- Copeland, Roger. *Merce Cunningham: the Modernizing of Modern Dance*. New York: Routledge, 2004.
- Tomkins, Calvin. *The Bride and the Bachelors: Five Masters of the Avant Garde*. Harmondsworth, Eng: Penguin Books, 1976.

The Collaborative Legacy of Merce Cunningham exhibition and related events reflect on the nature of the work between Merce Cunningham and the equally important artists, composers and designers with whom he created works, and upon his unique method of collaboration on these works "in space and time."

3 Introduction to the Collaborative Legacy

From his studies at the Cornish School in Centralia, Washington, where students studied all of the visual and performing arts without specialization, to his arrival in New York City to dance in Martha Graham's company, and summers spent at Black Mountain College, Cunningham was exposed to dance, theater, and visual art as intertwined disciplines. Compared to many choreographers today who explore territories beyond dance and pursue multi-faceted artistic careers that include performance art, installation, theater, visual arts and design, Cunningham's body of work engaged these disciplines through his collaborators while he remained focused on dance—dance as pure movement, without "expression" or narrative. In tandem with the abstract, non-narrative and non-representational work being created by his artist peers at the outset of his career,

[Cunningham's] choreography [was] concerned with the fact of movement, as the music of John Cage [was] concerned with the fact of sound, or a painting by Jasper Johns with the fact of a certain object.¹

These facts—of the legitimacy and interest of the work being the medium's matter, rather than its message—were not recognized by Cunningham as one of his "key discoveries" yet they were essential for the innovations that would follow.

His unique method of collaborating with musicians, artists and designers emerged after several years of "sharing programs" and making pieces with John Cage. Although satisfied with the results of their coordinated works,

John Cage didn't like the idea of one art supporting another or one art depending on another. He liked the idea of independence and wondered if there were another way we could work separately to produce a work of music and dance.²

This critique of the subordination of one art to the other led to what Cunningham referred to as the first of the four key discoveries—"the separation of music and dance..."³ The non-subordination of parts would allow them to be developed independently and largely in isolation, resulting in the performance parts [music, lighting, costumes, set, and dance] coming together at the last minute before the curtain rises.

The second "key discovery" was the use of chance operations in choreography. Here, too, Cunningham adopted practices that his partner John Cage was employing in musical composition.

[In the 1950s] a scientific institute called the Institute of Random Numbers had declared that using random numbers was just as useful as logic. The *I Ching*, the Chinese *Book of Changes*, had been published—that showed that chance was a way of working which opened up possibilities in dance that I might otherwise have thought impossible.⁴

Documented in several sketches, charts, and notes included in the exhibition are the rule-sets that Cunningham used to determine things such as the number and placement of dancers to perform a segment, male or female, lights on or off.⁵ The binary logic of coin-tossing and other chance operations can be understood as forms of proto-computing, and thus it was a natural segue for Cage and Cunningham to later use computer technologies to develop sound and movement material. Cunningham identified his experimentation with computer technology, along with possibilities afforded by working with film and camera, as the third and fourth key discoveries. Each of these discoveries worked to override personal "will," preconceived ideas or habit, and create unanticipated intersections.

Dance and theater scholar Roger Copeland frames Cunningham's work within the "Collage Aesthetic," in contrast to, if not the antithesis of, the notion of a *Gesamtkunstwerk* based upon the "Wagnerian dream of synthesizing the separate arts into a seamless and unified whole."⁶ Between these poles lies the spectrum of possibilities – the methods, structures and content of the collaborations represented in the exhibition.

Seven of the works documented in *The Collaborative Legacy* are those by Cunningham and his collaborators, spanning from the early years of his company [*Minutiae*, 1954] to his last work [*Nearly Ninety*, 2009] that was realized in collaboration with architect Benedetta Tagliabue. These dances coexisted in time and space with "open-ended sound scores" by John Cage, David Tudor, and Andrew Culver [*Ocean*] and music by Gavin Bryars, and more environmental art works by Robert Rauschenberg [*Antic Meet* and *Minutiae*], Jasper Johns [*Walkaround Time*], Andy Warhol [*Rainforest*], and the team of Paul Kaiser and Shelley Eshkar of OpenEnded Group [*BIPED*]. The seven works give a sense of the varying degrees to which Cunningham's dancers mingled in a shared space with volumetric elements, or, as in *Nearly Ninety*, co-existed as discreet events occurring on stage.

As a complement and counterpoint to these seven Cunningham collaborations, the exhibition documents seven collaborations between subsequent generations of choreographers with architects, revealing just the tip of the iceberg of this architectural "type". More to the point, these other works reveal the diverse approaches to "content" and methods of collaborating in space and time.

If Cunningham represents the non-narrative, chance-derived, and not—"about"—anything-but-itself end of the dial, at the opposite end is the example of architect Jaafar Chalabi's collaboration with Nacho Duato on *Multiplicity: Silence and Forms of Emptiness* [1999], in which architectural and musical themes of the Baroque are

explored through the set's voluptuous geometries and the story of J.S. Bach's life.⁷ The site of the commissioned dance [Weimar] gave rise to the idea of an homage to Bach; this in turn informed the musical score, the choreographic variations and fugue, and Chalabi's exploration of convex and concave folds, creating convoluted interior and exterior space in the scaffold supported curtain wall.

Between the two extremes of Cunningham+ and the Chalabi-Duato collaborations are works by Lucinda Childs with Frank Gehry; Elisa Monte with Tod Williams and Billie Tsien; Frédéric Flamand with Dominique Perrault and also with Ai Weiwei; William Forsythe with Nikolaus Hirsch; and UA faculty Douglas Nielsen with Beth Weinstein.

The collaboration between Childs, Gehry and composer John Adams was the brainchild of curator Julie Lazar [LA MoCA], producing the first work of the museum's Stages of Performance program- *Available Light*. In reflecting on the legacy of Oskar Schlemmer at the Bauhaus, Cunningham and his collaborators, and at the Judson Church, Lazar pointed out that,

...in none of these examples,... did the architect actually work with the choreographer to influence the shape of the dance. [LA MoCA's] Stages of Performance proposed the development of a more direct interaction between the individual artists from each discipline... to create a performance that enabled the audience to see the underlying forms of each individual's work, in the context of a completely integral artwork.⁸

In the context of *The Collaborative Legacy* exhibition *Available Light* clearly exemplifies both a continuity and divergence from the Cunningham model. While maintaining the philosophical stance that the work was not about anything, Childs' choreographed patterns were synchronized precisely to the music, and the dance's two geometric orders responded to Gehry's split and skewed stages and audience grandstands. According to Adams,

to be successful, a collaborative relationship, such as the one that produced *Available Light*, requires a delicate balance of artistic sensitivities. In our time, the term "collaboration" has somewhat lost its original connotations of rapport and... I would construe [collaboration] to mean work that's built through a continuous consultation and exchange of ideas and feedback. Because of the geographical problem... there was only a kind of general concord about the larger form, the most important of which was the duration and... [its not being]... broken down into little separate movements.⁹

Tod Williams and Billie Tsien's set for Elisa Monte's *The World Upside Down* was a conscious response to Gehry's static scaffolds for *Available Light*. Williams and Tsien wanted to explore the possibility of an architecture that participated in the dance as a performer. Their elegant folding wall transformed from flat screen to prow, turning inside out to reveal its hidden structure. Monte's choreography fully explored all that one could do in relationship to this wall, and in this way completely diverged from the "independence" Cunningham strived for. Her dance was subordinated to, if not dominated by, the strong presence of the architecture.

Frédéric Flamand's choreographies similarly are explorations of the potential of their architectural context, emerging very much in dialogue with his architect partners so that the theme permeates the dance, stage setting, lighting, projections, and costumes. Always spring boarding from a theme [the "normal" body, the body at work or leisure, the body-city, invisible cities, the radiant city] or a text [Calvino's *Invisible Cities* and *Baron in the Trees*, Ovid's *Metamorphosis*, Nijinsky's diary...] the work undoubtedly wraps "about" an idea, though in non-narrative ways. The more successful in the litany of collaborators [including Diller+Scofidio, Mayne, Hadid, Nouvel, and the Campana Brothers] have created elements with some form of spatial flexibility or mobility, engaging them in the dance. The exhibition features two of Flamand's most recent collaborations. Dominique Perrault's employs mobile and "modulor" metal-mesh screens for a piece on the theme of *The Radiant City* and Le Corbusier; the design process also involved architecture students from the IUAV [*La Cité Radieuse*, 2005]. Flamand's most recent collaboration on *The Truth 25x/Second* [2010] features Ai Weiwei's tangle of Readymade ladders that transforms from a ramshackle hovel on the ground to a suspended matrix that evokes images of construction cranes for a 21st century castle in the air.

The collaboration between architect Nikolaus Hirsch with choreographer William Forsythe, like many of the collaborations represented, involved extensive dialogue for the two parties to trace out a set of shared principles. Although the purpose of this collaboration was the fitting out of the public and performance spaces in The Forsythe Company's new home, the goal was also to create a flexible spatial kit of parts that invite dancer/public to adapt and manipulate space in sync with the hall's constantly changing events.

The collaborations featured in the exhibition offer a diversity of models for different disciplines coming together on a single project. There are projects whose parts were developed independently, virtually without dialogue, and in which non-subordinated parts co-exist in a layered collage, such as Cunningham and most partners. There are projects in which long-established collaborators independently create their contribution to the work, but which synchronize by the grace of their collaborators' "mind-reading." Think of professional tango partners or elderly couples who communicate virtually without words. Think of Cunningham and Cage. And though neither old nor a couple, Duato and Chalabi seem headed this way after more than a half-dozen projects together.

There are projects whose partners establish through dialogue, debate, drawing and modeling some idea, structure, or methodology to organize and synthesize their distinct contributions; this can be seen as a "getting on the same page" without necessarily subordinating one to the other. This would include the Childs-Gehry interaction, OpenEnded Group's approach to Cunningham—and one can argue that Cage and Cunningham began this way. There are projects whose partners establish a theme, yet one contribution is deeply contingent upon another for its structure; for instance Childs' dance in relation to its music, or Flamand's and Monte's dances in relation to their architectural sets. And there are projects in which the disciplinary roles of the partners are blurred such that all contribute to the conceptualization and creation of all of the

parts. My understanding is that Forsythe, and often Flamand, attempt to work in this way, reaching into other disciplines of space, lighting and costume; whether Forsythe invites his collaborators to trespassing into his territory is to be questioned.

Visual artist and Cunningham-collaborator Paul Kaiser interprets Conway's law as stating that a "group's communications structure replicates itself in the structure of the works they create together.¹⁰ *The Collaborative Legacy* aims to call attention to the ideas, structures and methods that bring together diverse contributions to the represented multi-disciplinary projects. Although focused on collaborations uniting the human body in space and time, these models for bringing diverse voices together on one project are transferable to other interdisciplinary partnerships. The exhibition also celebrates Merce Cunningham's openness to the unpredictable, and the means he and John Cage created to support and honor the contributions of all of their collaborative partners. Although many would argue that using the *I Ching* to design complex contemporary architectural works is an improbable proposal, the underpinnings of the collaborative work methods that Cage and Cunningham developed in the 1950s is still contemporary in its parametric logic and its embracing of complexity and simultaneity.

-Beth Weinstein
Curator of *The Collaborative Legacy*

Notes

1. David Vaughan, "Merce Cunningham," *Merce Cunningham*, ed. Germano Celant. [Charta : Milan, 2000] p 96.
2. Brown, Carolyn; Cunningham, Merce; Kuhn, Laura Diane; Melillo, Joseph V.; Schiphorst, Thecla; Vaughan, David; "Four Key Discoveries: Merce Cunningham Dance Company at Fifty," *Theater - Vol. 34, No. 2, Summer 2004*, p 105.
3. Ibid. p 105.
4. Ibid. p 106.
5. Cunningham first used chance in *Sixteen Dances* [1951] to determine the order of various dance segments into an established structure of dark, interlude, light, interlude, etc., and also using charts + chance for the choreography / spacing of several dancers during one of the interludes. In *Suite for Five* [1956] imperfections on pieces of paper were used to organized places in space to move through. "Interview by Laura Kuhn," *Art Performs Life* [DAP : New York, 1998], p 24-26.
6. Roger Copeland, "Merce and the Aesthetics of Collage," *TDR*, Vol. 46, No. 1 [Spring, 2002], p 12.
7. Chalabi's project statement explicitly references Leibniz, and resurgent interest in architectural circles about the fold, interiority and exteriority, and continuous surfaces that pass through these gendered concavities and convexities.
8. Available *Light catalog* [MoCA: Los Angeles, 1983], p 6.
9. Marshall, Ingram. "Light Over Water: The Genesis of a Music," [<http://www.earbox.com/inter-lightoverwater.html>, accessed 12 Aug, 2010].
10. Paul Kaiser, "On Creative Collaboration," Chapter in *Managing as Designing*, edited by Boland and Collopy, Stanford University Press, 2004. Digitally available on OpenEnded Group's website: openendedgroup.com/index.php/publications/older-essays/on-creative-collaboration [accessed 12/12/10].

Cunningham and Rauschenberg had first met in the late 1940's at Black Mountain College. The set for *Minutiae* was Rauschenberg's first specific collaboration with the Merce Cunningham Dance Company [MCDC]. The object created for this piece - one of the artist's earliest 'combines' was executed in response to Cunningham's request for something the dancers could move through. "When I had almost finished the choreography for *Minutiae*," Cunningham later recalled, "I called him. I didn't tell him what to make - I just asked for something that the dancers would be able to go through and under and around, like an object in nature..."

MINUTIAE: Merce Cunningham / Robert Rauschenberg/ John Cage

Robert Rauschenberg was a leading contemporary American artist, whose work has been exhibited around the world. He was born in 1925 at Port Arthur, Texas. After serving in the Armed Forces, he studied at the Kansas City Art Institute, at Academie Julian in Paris, and later at Black Mountain College, North Carolina and the Art Student's League in New York. His first one-person exhibition was at Betty Parsons Gallery in 1951. Since 1958 he showed regularly in New York at Leo Castelli Gallery.

He was an innovative artist working in many mediums, painting, sculpture, printmaking, dance and performance, and has won international recognition in all these fields. In 1964 he was the first American artist to win first prize for painting at the Venice Biennale.

Rauschenberg was one of the first artists to incorporate technology into his work and in 1966 he, together with Billy Klüver, Fred Waldhauer, and Robert Whitman founded Experiments in Art and Technology to facilitate the collaboration between artists and engineers.

Major retrospectives of his work have been held at The Jewish Museum, New York in 1963; the National Collection of Fine Arts, Washington, 1976; and most recently "Robert Rauschenberg: A Retrospective" organized by the Guggenheim, New York, in 1997, which traveled internationally. His work is included in virtually every important museum and international collection of contemporary art.

"Two weeks later, Bob called. He had made a very beautiful hanging object, with streamers, but we couldn't use it because in those days we played in so many places where it wasn't possible to hang anything. So two weeks later he called me again and he'd made these panels. On the back was a comic strip that one of the dancers used to read on stage."

Rauschenberg created a brilliantly colored, free-standing construction consisting of two panels of different sizes, joined at the top by three thin strips forming an archway. The panels were made up of collage elements, such as cloth, lace, newspaper [predominantly comic strips], and objects, including a shaving mirror that was set spinning before the curtain rose on the performance and that was also set in motion by the movements of the dancers as they passed by it. Strips of scarf-like cloth provided a curtained entrance or exit on one side of the larger panel. Cunningham has said of Rauschenberg's object that it was "added to the scene with no visible derangement other than that of any object being where it is."

With its use of a red color palette and collaged items, the set Rauschenberg constructed for *Minutiae* could be considered a precursor for many of his later art pieces, including the 'Red Paintings' such as *Yoicks* [1953]. Though Rauschenberg would not coin the term 'combine' until around 1955 to describe those works that use a combination of materials [usually found], sculptural elements and paintings, the set for Cunningham's dance is certainly a part of that early newfound genre.

Minutiae was a test for Rauschenberg in making art for dance. His future works for the MCDC were usually less predictable. They were manifestations of complexity through his endeavors to create art whose unexpected conjunction with other elements in a collaboration emphasized alteration and activeness. This interest in making works that are subject to time and external variables is also evident in the initiative he took to create in partnership with Billy Klüver of the Bell Telephone Laboratories, the collaborations between artists and engineers that resulted in the *9 Evenings: Theater and Engineering*. Many of the artists who participated in these collaborations are today primarily considered visual artists. Yet these collaborations extended their work into the temporal realm reflecting the emergence at that time of the "Happening" as a new art form.

Cunningham's choreography for *Minutiae* consisted of a number of movements described in program notes as "small, short, abrupt" and as having been inspired by "an observation over a period of time of people walking in the street." Cunningham has also referred to them as "movements anyone does when getting set to do a larger movement." They included hopping, crawling, walking, running, kneeling. It was originally made for seven dancers—five women and two men.

These minutiae of movement are reflected in the materials Rauschenberg chose to use in his object: old newspapers, found objects, scraps of cloth, items that Cunningham says were also "picked up off the street."

Minutiae was one of the earliest works made by Cunningham for his young company in which decor became one of the coexisting collaborative elements. In performance, what visible derangement there was to the *Minutiae* set-combine occurred in a fairly predictable way. The dancers movement around and through it, as Cunningham had intended, activated the shaving mirror and the scarves that were an integral part of the construction.

World Premiere: December 8, 1954. Brooklyn Academy of Music, Brooklyn, NY

Music: John Cage, *Music for Piano*.

Design: Set by Robert Rauschenberg, costumes by Remy Charlip, original lighting by Scott Hale, with later performances lit by Nic Cernovitch.

Dancers: Merce Cunningham, Carolyn Brown, Anita Dencks, Viola Farber, Jo Anne Melsher, Marianne Preger, Remy Charlip

Sources + Further Reading:

<http://www.voiceofdance.com/v1/features.cfm/1645/Merce-Cunningham-and-A-History-of-Unconventional-Collaboration645.html>
"A License to Do Anything": Robert Rauschenberg and the MCDC, Michelle Potter, *Dance Chronicle*, Vol. 16, No. 1 [1993], pp. 1-43

John Cage and Merce Cunningham met in 1938 at the Cornish College of the Arts where Cage worked with choreographer Bonnie Bird as an accompanist and composer. Cage and Cunningham met again in New York in 1942, and immediately began performing programs together.

Antic Meet dates from over a decade after the beginning of their creative partnership, and was already several years into Rauschenberg's participation as "Artistic Advisor" on scenographic parts of the work. In his 2003/4 interview with Laura Kuhn, Cunningham identified *Antic Meet* as one of the fourteen 'key collaborations' and a work exemplifying one of the four 'key discoveries' - the separation of music and dance.

ANTIC MEET: Merce Cunningham / John Cage / Robert Rauschenberg

¹⁰ **John Cage** was a composer, writer, philosopher, and visual artist. After a stint overseas and around the time of his studies with Schönberg in Los Angeles Cage published his first compositions, in a rigorous atonal system of his own. In 1937 he moved to Seattle to work as a dance accompanist, and there in 1938 he founded a percussion orchestra; his music now concerned with filling units of time with ostinatos. He also began to use electronic devices and invented the 'prepared piano', placing diverse objects between the strings of a grand piano in order to create an effective percussion orchestra under the control of two hands., for which he wrote numerous works including the major concert work, *Sonatas and Interludes* [1948].

He was associated with Merce Cunningham from the early 1940s, writing and performing music for him; he was Founding Music Director of Merce Cunningham Dance Company and remained as Musical Director 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, music and sets.

From the early 1950s Cage became interested in Eastern philosophies, especially in Zen and began his systematic establishment of the principle of indeterminacy: by adapting Zen Buddhist practices to composition and performance, Cage succeeded in bringing both authentic spiritual ideas and a liberating attitude of play to the enterprise of Western art. His aesthetic of chance produced a unique body of what might be called "once-only" works, any two performances of which can never be quite the same. In an effort to reduce the subjective element in composition, he developed methods of selecting the components of his pieces by chance, early on through the tossing of coins or dice and later through the use of random number generators on the computer, and especially IC [1984], designed and written in the C language by Cage's then programmer-assistant, Andrew Culver, to simulate the coin oracle of the *I Ching*.

For first time Cage and Cunningham created a work with only the overall duration of the piece structuring the relationship of music to dance, with no points at which music and dance directly reflect, influence, or correspond with each other. Without shorter sections within the twenty-six minutes, "the dancers' unsupported time span was expanding" and they would have to rely on the movement itself and personal sense of time. *Concert for Piano and Orchestra* could be any length; the piece would be bracketed only by the curtain rising and then falling.

In addition to this elasticity, *Concert* has no overall score, but all parts are written out in detail. A performance of the *Concert* may include all of the instruments, but may also be performed as a solo, duet, trio or any combination of the given instruments, resulting in a change of title. The notation of all orchestral parts uses a system where space is relative to time. The amount of time is determined by the musician and later, during the performance, altered by the conductor who has his or her own part and acts as a living chronometer. Notes are of 3 sizes, referring to duration or amplitude or both, the interpretation being determined by the performer. All of these solos involve as many playing techniques as possible.

The piano score is an aggregate of 84 different kinds of notations and composed using 84 different compositional techniques. The pianist may play the material in whole or in part, choosing any notations, elements or parts and playing them in any order. As a technique to override ones predisposed likes and dislikes, Cage used chance operations, such as the flipping of coins, as well as the imperfections in the paper upon which the music was written as compositional techniques.

Cunningham stated that "*Antic Meet* is a series of absurd situations, one after the other, each one independent of the next." The choreography assembled a range of movement types including soft-shoe, acrobatics, wrestling, vaudeville, as well as satirical takes on Martha Graham's expressionism.

The design for the props and costumes embraced absurdity and juxtaposition, without using chance operations as done with the dance and music. It was the result of a dialogue via posted letters in which Cunningham gave Rauschenberg "a scenario with many ideas for costumes and props already specified, and Bob took off from there."

The scenes included "Opener," "Room for Two" with Rauschenberg's rolling door, "Mockgame," "Sports & Diversions #1 + #2," "Social" with "Merce's ironic and rather nasty depiction of male-female relations in so-called polite society," "Bacchus & Cohorts" [Merce and 4 women], "Sports & Diversions #3" [Viola solo], "A Single" [Merce solo], and ended with "Exodus."

World Premiere: 14 August 1958, 11th American Dance Festival, New London, CT

Music: John Cage, "Concert for Piano and Orchestra"

Design: Robert Rauschenberg

Dancers: Merce Cunningham, Carolyn Brown, Viola Farber, Cynthia Stone, Marilyn Wood, Remy Charlip.

Sources + Further Reading:

Merce Cunningham, *The Dancer and the Dance: Merce Cunningham in conversation with Jacqueline Lesschaeve*, Marion Boyers
Publisher: New York, 1991
Carolyn Brown, *Chance and Circumstance: Twenty Years with Cage and Cunningham*, Knopf: New York, 2007
John Cage, *Silence: Lectures and Writing*, Middletown, CT : Wesleyan Univ. Press, 1961
<http://www.johncale.info/index2.html>

At the time Cunningham was creating *RainForest*, he was inspired by Colin Turnbull's book *The Forest People*, about the author's experience "following pygmies through tangled under-brush" as a towering Westerner. The title of the dance also was derived from Cunningham's memories of the environment in which he grew up - the rainforest in the Olympic Peninsula.

Dancer Carolyn Brown referred to *RainForest* as "'a creature dance' set in an otherworldly jungle, inhabited by untamed solitary beings who meet in strange, sensual, inexplicable, mysterious, sometimes hostile encounters and part, much as animals might do in the wild.' In the opening duet, two creatures seem to be awakening in the primordial ooze-reaching, stretching, slithering around and across each other in a sinuous, sensuous, slow-motion reverie." The slow and quiet opening increases in speed and intensity "and ends in a whirlwind fury with Merce's final solo."

¹² RAINFOREST: Merce Cunningham/Andy Warhol/David Tudor

Andy Warhol was born on August 6, 1928 in Oakland, Pittsburgh. Diagnosed with a rare neurological disease, Warhol sought comfort in DC comic books and celebrity magazines at a young age. He moved to New York and graduated from Carnegie Institute of Technology with a degree in Pictorial Design in 1949. Work came easily to Warhol in his new city where he established his home and studio for the remainder of his life. Throughout his career, Warhol was able to enter into many different realms of art and design and consequently the related worlds of fashion, music, media, and celebrity as a commercial artist/illustrator, painter, printmaker, graphic artist, sculptor, filmmaker, videographer, and photographer, eventually expanding his interests into the circle of performance and music. It was his work in the 1960's, extending into the early 1970s where Warhol's most iconic works were produced, expanding upon the emerging Pop Art movement. Some of his prominent works include the Marilyn Monroes, Dollar Signs, Disasters, Coca Cola Bottles, and Campbell's Soup Cans. Constantly documenting his life through audio recordings and photography, Warhol's documentation increased when he suffered a nearly fatal gun-shot wound from a radical feminist author. This traumatic event forever changed Warhol but he continued to produce works and infiltrate many aspects of popular culture.

RainForest was Cunningham's first piece with a score by David Tudor, who was an accomplished pianist and frequently the designated performer for whom John Cage composed works. In addition to his performing Cage's infamous 4'33" and *Concert for Piano and Orchestra [Antic Meet]*, he also premiered works by avant-garde composers Earle Brown, Morton Feldman, Karlheinz Stockhausen, Christian Wolff, and La Monte Young. By the early sixties, Tudor's activities as a pianist gave way to composing live electronic music. He "chose specific electronic components and their interconnections to define both composition and performance drawing upon resources that were both flexible and complex."

In response to Cunningham's title, Tudor said, "I'll put a lot of raindrops in it." Not literally, though. Sound from sources such as car windshield wipers, lawn sprinklers and assorted 'urban junk sculptures' passed through transducers, creating a vibrating soundscape "evoke[ing] the chattering and crying of birds and animals."

Trained in "pictorial design" at the Carnegie Institute of Technology, Warhol's career began as a commercial artist, working for magazines such as *Vogue*, *Harper's Bazaar* and *Glamour*. In less than a decade, Warhol was exhibiting his drawings and paintings in galleries and at the Museum of Modern Art. By the time he collaborated with Cunningham, Warhol was well known for his appropriation of pop-culture imagery—from Campbell's Soup Cans to Marilyn Monroe—and for the works produced in his silver-painted Factory.

Warhol's *Silver Clouds*, an installation of helium-filled mylar pillows, was exhibited at the Leo Castelli Gallery in 1966—the same gallery at which both Robert Rauschenberg and Jasper Johns had exhibited their work since 1958. The mylar pillows were the result of a collaboration with Billy Klüver, an engineer with the Bell Telephone Laboratories. In January of that same year Klüver, with other engineers and ten New York artists, worked together on a series of performance works integrating the newest technologies. This resulted in *9 Evenings: Theater and Engineering*, and included works by David Tudor, John Cage and Robert Rauschenberg. A frequenter of art galleries, Cunningham saw the *Silver Clouds* in Castelli's gallery and asked Jasper Johns, who had taken over Rauschenberg's role as Artistic Advisor to the MCDC, if he thought Warhol would let him use *Silver Clouds*. Warhol agreed.

Dancer Carolyn Brown recalled that in the performance "there were 'two dozen or so' of the pillows that had 'a life of their own, and became active partners in the choreography.'" Just as the pillows moved around according to some form of chance, Richard Nelson's lighting plan was determined by chance procedure: he "asked each dancer to put one dot randomly on each page", with categories for color, direction, and time, and one chart per minute of the piece. Hence, the lights were always in motion but moved slowly, with predetermined cues.

In spite of the title's reference to a natural environment, the "rain" in the musical score and the naturally propelled 'gently wafting' pillows, *Rainforest* was undeniably contemporary and urban. The silver mylar finish created a potent connection to the city, its skyscrapers and to Warhol's factory; Tudor's "music" sampled mechanically manipulated water. Don McDonagh wrote that the "dance is like a representation of life in a primitive society where relationships are simple and somewhat brutal. The suggestions of rooting and cavorting that are in the piece contrast wonderfully with the almost antiseptic decor, suggesting cavemen in a computer era."

World Premiere: 9 March 1968, 2nd Buffalo Festival of the Arts Today, Buffalo, NY

Music: David Tudor

Design: Andy Warhol, with costumes by Jasper Johns

Dancers: Merce Cunningham, Carolyn Brown, Barbara Lloyd, Sandra Neels, Albert Reid, Gus Solomons, Jr.

Sources + Further Reading:

Don McDonagh, "Merce Cunningham," *Don McDonagh's Complete Guide to Modern Dance*. NY: Doubleday, 1997.
www.daviddtudor.org/
www.warholfoundation.org/legacy/biography.html

The meeting of Marcel Duchamp with Merce Cunningham and John Cage occurred in 1942 in the New York apartment of artist Max Ernst and collector Peggy Guggenheim. By 1968, when *Walkaround Time* was made, Cage and Cunningham had become close friends with Duchamp and his wife, Teeny, and at this point Duchamp had retired from active involvement with art.

Jasper Johns, who had taken over the responsibility from Rauschenberg to create or curate the scenographic aspects of MCDC works, asked Cunningham, at a dinner hosted by the Duchamps, if he would like a set based on the *Large Glass*, one of Duchamp's best known works [full title: *The Bride Stripped Bare by Her Bachelors, Even*]. Duchamp approved as long as he was not the one creating the set.

WALKAROUND TIME: Merce Cunningham/David Behrman Jasper Johns [+Marcel Duchamp]

¹⁴ Early in his painting career **Marcel Duchamp** explored cubism with an emphasis on successive images of a single body in motion, leading to works such as *Nude Descending a Staircase* [1912]. In 1913, Duchamp abandoned traditional painting and drawing techniques, creating *The Bride Stripped Bare by Her Bachelors*, which incorporated mechanical drawings and notations. He also began to experiment with *Readymades* in 1914. After associating with the Dada group in Paris, he made his first motor-driven construction. In 1923, Duchamp seemingly abandoned his interest in art for chess, though he still continued to experiment and collaborate with the Surrealists. Duchamp settled permanently in New York in 1942, associating with Surrealist émigrés. In 1946 he secretly began work on a major assemblage that would last the next 20 years [*Etant Donnée*]. He died on October 2, 1968.

An active composer and artist since the 1960s, **David Behrman** works on pieces that range from multimedia installations for gallery spaces to musical compositions for performance in concerts. Relying on the interactive real-time relationships with imaginative performers, most of his pieces make use of technology in personal ways and flexible structures. In the early 1970s, Behrman joined the MCDC, touring as a composer/performer as well as assisting Cage with several projects in the sixties and seventies. He has taught at Bard College since 1998, receiving the John Cage Award in 2004.

Johns supervised the production of the set, which included seven lightweight metal box-frames that were sheathed in transparent vinyl, sealed, and inflated. The front and back panels had been silkscreened with line drawings of portions of the *Large Glass*; the drawings on the back panels were painted in color, creating a visual "delay." Two of the inflated frames were suspended from above, while the others were freely placed on the floor. At Duchamp's request, at one point during the performance, the inflated frames were organized to approximate the original artwork.

The translucent vinyl volumes created "windows" mediating the performer-audience relationship. These visual obstacles created by the inflatables in *Walkaround Time* "and the many ways in which Cunningham acknowledges the impact of the electronic and digital revolution on our lives all conspire to create an active tension between 'presence' and mediation." [Roger Copeland]

Walkaround Time diverges from Cunningham's main innovation or "discoveries" – the independence of components of the performed work – in that music, décor and dance related to and paid homage to Marcel Duchamp's work. David Behrman's title for his score, "...for nearly an hour...", was a reference to another of Duchamp's glass paintings—*To be Looked at [From the Other Side of the Glass] with One Eye, Close to, for Nearly an Hour* which incorporated Readymade sounds, such as "engines alternately roaring into action and sputtering to a halt."

Readymade movements were taken from warm-up exercises in a Cunningham technique class. Conceptual Readymades included the intermission referring to René Clair's 1924 film *Entr'acte* screened during the Dadaist ballet *Relâche*. The choreographic Readymades could also be compared to what were contemporary re-appropriations of found objects in visual art, like those present in Rauschenberg's 'combines'. Borrowing imagery and references from within the *Large Glass* [coffee grinders, mastic molds, gasoline,...] the choreography suggested "mechanization" in which body parts emulated smoothly meshing gears, pistons, and rods." Duchamp's *Nude Descending a Staircase* was also referenced in the alternating still and swift movements in one of Carolyn Brown's solos, suggesting "stopping and moving at the same time." Addressing time explicitly in this work, Cunningham stated that the "main thing... is the tempo. Marcel always gave one the sense of a human being who is ever calm, a person with an extraordinary sense of calmness, as though days could go by, and minutes could go by. And I wanted to see if I could get that—the sense of time."

¹⁵ "It is often suggested that Cunningham's decentralization of the stage space, largely Zen-inspired [through Cage], has much in common with the way painters like Jackson Pollock handled the area of the canvas. But there was an essential difference between what Cunningham and Cage were doing and the work of the Abstract Expressionists, whose subject as Calvin Tomkins has said, was still 'the heroically suffering artist.' This kind of content was of course precisely what Cunningham wished to eliminate from his choreography and Cage from his music [hence their involvement with chance processes]. In this way they were closer to Duchamp. Like him, they wished to erase the distinction between art and life. Just as Duchamp's Readymades converted everyday objects into works of art by virtue of his having chosen them, so Cunningham used non-dance movement as an element in his choreography and Cage 'admitted into the purview of music the sounds, and even noises, that are part of ordinary life.'"

— David Vaughan, "Merce Cunningham's *Walkaround Time*," 1982.

World Premiere: 10 March 1968, 2nd Buffalo Festival of the Arts Today, Buffalo, NY

Music: David Behrman

Design: Jasper Johns after Marcel Duchamp, with costumes by Jasper Johns

Dancers: Merce Cunningham, Carolyn Brown, Barbara Lloyd, Sandra Neels, Valda Setterfield, Meg Harper, Albert Reid, Gus Solomons, Jr., Jeff Slayton.

Sources + Further Reading:

Mark Franko, "The Readymade as Movement: Cunningham, Duchamp, and Nam June Paik's *Two Merces*," *RES: Anthropology and Aesthetics*, No. 38 [Autumn, 2000], pp. 211-219

Roger Copeland, *Merce Cunningham: The Modernizing of Modern Dance*, NY: Routledge ,2003

According to Joseph Campbell, "Between the river and the ocean, Beach Birds" is a reference to what would have been James Joyce's next book had he lived. Campbell had told Cage the book would be called *Ocean*. For the 1991 James Joyce / John Cage festival, Cage and Cunningham decided to make a work with this title. *Ocean*, envisioned as having musicians encircling an audience encircling a dance in the round, went unrealized for lack of an appropriate space. *Beach Birds* was created in its place for that event, and then ultimately made as a dance for camera.

In spite of John Cage's death in August 1992, Cunningham went on to realize the work two years later through a commission from festivals in Belgium and Amsterdam. John

OCEAN: Merce Cunningham/John Cage, Andrew Culver + David Tudor/Marsha Skinner

¹⁶ **David Tudor**, established himself as a pioneer in the performance of new music when he performed the American Premier of Pierre Boulez' *Deuxième Sonate pour Piano* in New York in 1950. After this point, Tudor became John Cage's closest associate, for whom Cage wrote many works. Tudor became known for being able to solve difficult problems of notation and performance through his own imaginative and virtuoso solutions, becoming an essential component to the composition of the music. Gradually ending his career as a pianist, Tudor began to work with electronic modification of sound sources in the late 1960s, pioneering "live electronic music" by creating electronic sounds directly during performance.

Andrew Culver creates chamber, orchestral, electronic, and computer music; sound and music sculpture, film lighting, text pieces, and installations as well as writing about music, art and anarchy. As a way to realize his own works, Culver develops his own sound sources, databases, and software, making chance operations available to others. Working closely with Cage as his assistant from 1981 until his death in 1992, Culver programmed the chance operations and compositional processes central to John Cage's work, working on the composition and directing all five Cage operas. Culver works in various media, with over 60 compositions. Some media include microtonality, percussion, music sculpture, computer music, film, and computer projected text.

Cage's ideas, for lack of a completed score, served as a springboard for David Tudor's electronic score of marine and other underwater noises, and for the orchestration by Andrew Culver. Culver was involved with all aspects of Cage's work during his final eleven years and programmed the chance operations and compositional processes central to Cage's work.

Of his contribution David Tudor noted that "each performer uses different sound materials, derived from peripheral 'ocean' sources: sea mammals, Arctic ice, fish, telemetry, sonar, and ship noises. The sounds are preconditioned by a group of input modifiers, and then acoustically presented via a group of output modifiers, which substantially alter their characteristics. The choice of electronic components effecting these alterations can differ with each performance. The sound system employs a sophisticated electronic panning process, distributing the sounds among three systems... defining three different architectural spaces."

Culver's music was scored for 112 instrumental soloists seated around the audience and consists of 32,067 events spread over 95 compositions in five continuously overlapping layers. Cunningham explained the use and function of music in *Ocean*. "We don't hear the music until the night before—the dancers do not dance to the music. The music is made quite separate, much like sight and sound—they merely coexist. It's more like Fuller's term 'synergy,' where two energies, quite separate, get together and they produce something that no one realized was going to happen until they came together, and then something happens."¹⁷

The ninety minute dance was divided into nineteen different sections for fourteen dancers comprising solos, duets, trios, quartets and ensembles. To order the choreographed elements, Cunningham doubled the number of hexagrams borrowed from *I Ching* - due to the length of the piece - making 128 possible phrases played out over ninety minutes. Following the *I Ching* strategy, nothing repeats and nothing is predictable. As a result, the work gets more complex as it goes along, with more intricate combinations and more varieties of speed. None of this is regular. Everything is continually in flux.

Choreography in the round has opened up a number of possibilities, particularly in terms of directions and facings. It is not flat space, but curved. The result is that, given the frequency of changes possible, it takes longer to choreograph... It brings up Einstein's work about curving space—we tend to think flat. I told the dancers: 'You have to put yourself on a merry-go-round that keeps turning all the time.'

Large digital clocks were mounted to face the audience, giving them an ever-present awareness of the passage of time. Moreover, these countdown devices could be interpreted as a deep-sea diver's instrument – a necessary tool for exploring below the water. The suggestion is that the experience of time under water is very different – it becomes about survival; every second is critical.

The costumes were designed by Marsha Skinner who had previously designed the monochromatic outfits for Cunningham's *Beach Birds* and *Change of Address*. She has written that for the lighting she took her inspiration from *Moby Dick* and for the costumes from Homer's "wine-dark sea."

In September 2008, the MCDC revived *Ocean* on a stage built at the bottom of a granite quarry in central Minnesota, 100 feet below ground. Filmmaker Charles Atlas—a long-time Cunningham collaborator—recorded the performance with five cameras. "This is his largest work, and it has such sentimental value because of [Cunningham's] relationship with Cage. We were resistant to remounting this because it seemed so difficult to capture on camera with an audience present. But if we didn't remount it, it would just have been a memory."

World Premiere: 18 May, 1994; kunstenFestivaldesArts, Cirque Royal, Brussels, Belgium

Conception: John Cage and Merce Cunningham

Music: Andrew Culver [*Ocean 1-95*], David Tudor [*Soundings: Ocean Diary*]

Lighting and Costumes: Marsha Skinner

Sources + Further Reading:

www.salon.com/weekly/interview960722.html

www.daviddtudor.org and www.anarchicharmony.org/People/AndrewCulver.html

channel.walkerart.org/play/merce-cunningham-talking-dance/

"Art in the Round: The Merce Cunningham Dance Company" by Isabel Cowles, March 18, 2009

The collaboration between Kaiser, Eshkar and Cunningham was unusual in two ways—it began with the visual artists approaching Cunningham to work with them on an exploration of theirs, entitled *Hand Drawn Spaces*, and it demanded significant interaction between choreographer and artists. Kaiser and Eshkar were investigating the potential to inhabit a gesture-drawn [as opposed to photo-realistic] animated space and to introduce drawn moving figures into that space. This was achieved through the use of a then-new program called "Biped" and through the use of motion capture. As a counter point to Cunningham's *Ocean*, Kaiser and Eshkar had envisioned *Hand Drawn Spaces* as an installation in which the digital dance would surround the observer.

BIPED: Merce Cunningham Dance Company/ 18 Paul Kaiser + Shelley Eshkar / Gavin Bryars

Paul Kaiser, an experimental filmmaking and writer, spent ten years teaching students with severe learning disabilities, with whom he collaborated on making multimedia depictions of their own minds. From this work, he derived two key ideas – mental space and drawing as performance – which became the points of departure for the solo and collaborative digital artworks he has been making since the mid-90s. **Shelley Eshkar** is a digital artist whose research explores drawing, computer graphics, and human motion. He had artist-in-residencies at MASS MoCA in 1999, at UC-Irvine in 2001, at Arizona State University [2003-5], and at Le Fresnoy – Studio National.

Gavin Bryars worked briefly with John Cage and collaborated closely with Cornelius Cardew and John White. He has taught extensively in England. His first major work as a composer was *The Sinking of the Titanic* [1969] and *Jesus' Blood Never Failed Me Yet* [1971]. His first opera, *Medea*, was first staged by the director Robert Wilson [1984]. Gavin Bryars has a particular association with dance and the visual arts: choreographers who have used his work and commissioned new pieces from him include William Forsythe, Lucinda Childs, Carolyn Carlson, Maguy Marin, Jiri Kylian, Siobhan Davies, Edouard Lock and David Dawson.

The year following the *Hand Drawn Spaces* collaboration, Cunningham returned the invitation to collaborate on a piece to be called *BIPED*—appropriate given his fascination with exploring the limits of what two legged bodies can do.

BIPED can be understood as a work exemplifying two of the "four key discoveries" that serve as frames through which one can consider Cunningham's work—the possibilities of video and film, and experimentation with computer technology.

For *Hand Drawn Spaces*, Cunningham had developed a motion alphabet, with separate systems which could be isolated [torso, head, arms and feet] and whose elements could be combined into a sequence after the fact. For *BIPED*, Cunningham provided a few dance sequences from the choreography, plus stepping, that Jeannie Steele and Robert Swinston performed in a motion-capture studio, exchanging roles so that the captured material was neither person nor gender specific.

Working within the Biped software, Eshkar and Kaiser created dancer-related splines containing both procedural information and scanned texture maps. The combination of all of these elements resulted in unforeseeable animations. Although this was not a "chance operation" in the Cage-Cunningham sense, Cunningham was very sympathetic to the method and the outcome. Working with captured movements from *BIPED*, Kaiser and Eshkar animated and combined

various figures and grounds. "We had dot bodies from the... motion-capture, stick bodies inspired by the yarrow sticks cast by *I Ching* practitioners like Cunningham and Cage, and cubist/chronophotograph bodies –our nod towards Marey and Duchamp... We took care never to lose the underlying perception of real and plausible human movement."

Speaking of the relation between the drawn figures and the fore- or background, Kaiser remarks that in "...scan lines you get a tremendous sense of figures being compressed, elongated and raised [from the movement of the lines]. It's as if your whole sense of the stage space is being uncoupled from gravity. Because they are lines in 3D, there's parallax... You can't predict it. And yet it's very different from chance operations of the kind that Cage and Cunningham were involved in. This is a natural system following its law—mainly a visual system playing on how your eye reads the world. These rhythms are unforeseen, but they are not chance. That's an important distinction between the way that I look at things and the way [Cage and Cunningham] did."

19 The instructions to both the visual artists and to the composer Gavin Bryars were that the piece was "about technology" and would be "like switching channels on a television." Bryars had worked with John Cage in the late 60s and had seen his first Cage-Cunningham collaboration, *Nocturnes*, at that time. He was familiar with their methodology, of "working independently towards a common goal!" Following in Cage's footsteps he chose [with Cunningham's permission] to disregard the choreographer's instructions and composed a very lush and continuous score. One of Bryars's ambitions was to create a juxtaposition of live music and its digital shadow in much the same way that the visual component of *BIPED* would contain live dance and its projected double.

Kaiser and Eshkar, in collaboration with the lighting designer Aaron Copp, decided to use a large scrim. "We wanted to provide a series of lenses on the dance that would transform the space of it." Using the scrim they activated the entire visual field, in addition to the lower 1/6 inhabited by the dancers.

To trick the eye away from registering this projection's ghost on the rear curtain, they hung thin strips catching the light, and mimicking the vertical lines of the drawing. Susanne Gallo's iridescent metallic costumes also caught the light, keeping the dancer's full three-dimensionality legible amidst the projections. According to Kaiser, "Merce decided to have his own special effect. He put slits in the back of the physical [curtain from where] the dancers could slip in and materialize in much the same way as our [animated] figures do."

Each of the animation files had a different name—Upper Lower, Solo Large, Under Water, Scan Line, Waterfall—and the names and the durations were given to Cunningham to arbitrarily assign them an order through chance operations, which he did. "When we saw the piece at the dress rehearsal, it was clear to us that this was a master work of a dance. A masterwork that is very distinctly Cunningham and couldn't have been made by anyone else, but it also had a feeling of classicism. It was a miraculously well made work by someone who may have been using chance operations but was at the same time in absolute control of his time and space."

World Premiere: 23 April, 1999; Zellerbach Hall, UC Berkeley, Berkeley, California

Music: Gavin Bryars

Design: Paul Kaiser + Shelley Eshkar (projections), Aaron Copp (lighting), costumes by Susanne Gallo

Sources + Further Reading:

OpenEndedGroup.com and author's interview w/ P. Kaiser (Oct 16, 2010)

Johannes Birringer, "Thinking Images: Paul Kaiser and Marc Downie in conversation with Johannes Birringer," *PAJ* 89 (2008), pp. 17-37.

Ann Dils, "The Ghost in the Machine: Merce Cunningham and Bill T. Jones," *PAJ*, Vol. 24, No. 1 (Jan., 2002), pp. 94-104.

Nearly Ninety emerged from the Brooklyn Academy of Music's [BAM] invitation to create a new work in celebration of Cunningham's 90th birthday. For this occasion he chose to neither perform works from the company's repertory, nor to collaborate with long-time friends and colleagues. His choice was to take risks—to work with a combination of people he'd never met before and to make something completely new.

NEARLY NINETY: Merce Cunningham/Takehisa Kosugi John Paul Jones/Sonic Youth/ Benedetta Tagliabue/ Franc Aleu/Romeo Gigli/

²⁰ Milan-born architect **Benedetta Tagliabue** joined Enric Miralles' studio in 1991 where she eventually became a partner. Her work includes a number of high profile buildings and projects in Barcelona: Diagonal Mar Park [2002], Head Office Gas Natural [2006] and the Market and quarter of Santa Caterina, Barcelona [2005], Public Library at Palafolls, Barcelona [2007], as well as projects across Europe, including the School of Music in Hamburg [2000] and the City Hall in Utrecht (2000). In 1998 the partnership, EMBT, won the competition to design the new Scottish Parliament building and despite Miralles' premature death in 2000, Tagliabue took leadership and the Parliament was successfully completed in 2004, winning several awards. Presently she is directing summer workshops at TEC de Monterrey [Mexico] and the School of Architecture in Venice [IUAV] in addition to lecturing worldwide. The Miralles Tagliabue -EMBT studio espouses collaboration rather than specialization.

Using daily materials and electronic technology, **Takehisa Kosugi** creates mixed-media sound performances and installations. Born in 1938 in Tokyo, Kosugi cofounded two separate groups, "Group Ongaku," performing in an anti-musical DADA-istic style, receiving recognition in Europe through the group Fluxus. The second group, "Taj Mahal Travellers," played in various locations, combining intermedia presentations with collective improvisation. Since 1977, Kosugi has been a resident composer/performer with the MDCD and has served as music director since 1995. His commissioned works include "S.E. Wave/E.W. Song," "Interspersion," "Cycles," "Spacings," "Assemblage," and "Rhapsody." Kosugi has received notable grants and awards, such as the John Cage Award for Music as well as performed in many international festivals from the late 1970s to the early 1990s. Internationally, Kosugi's sound installations have been presented in various exhibitions from the 1980s to the early 1990s.

In addition to the constraint of a set for 90-minutes, Benedetta Tagliabue's task included creating a place for the musicians on stage; yet her first response to the purity and precision of his dance was that the stage should, in fact, be empty. The practical concerns—of creating a small footprint to maximize the dancers' space, to house the musicians and all their gear—lead to the development of a multi-faceted, vertically layered structure that could be dynamically involved in the dance. Its realization involved extensive coordination, atypical of Cunningham collaborations, with models

presented to him in New York, and MDCD's Trevor Carson observing the set's fabrication in Barcelona.

The resulting "starship," a delicate 8-ton steel structure, with semi-transparent and iridescent skins, performed four "movements," each with distinct characteristics.

In the first act, the curtain was raised but with elements hidden; the structure and the musicians were understood through the intermingling of their shadows with projected animations of the rotating set, resulting in a complex and abstract dance of lines filling the screen, suggesting crystals, webs, and threads.

Over the duration of the performance the scrims were peeled away, one by one, revealing the triangulated structure, foregrounded by smaller projection screens with blown-up details of natural phenomena, creatures, smoke, and water. Parallel to the transformation from mediated view to actual view of the set, the stage lighting ²¹ bleached over time, from multicolored to a more continuous luminous glow. In the fourth quarter, with all other elements stripped away, the set remained the singular, isolated object. It could be appreciated for its compact complexity or critiqued as being too obviously an object in a field condition of flows. The set's final action was to hinge open creating an elevated platform upon which a solo dancer balanced precariously amid the intense action around her. Given the multiplicity of events on stage, Cunningham suggested that the dancers think about "the things going on behind... [as] completely separate. [There] could be a construction site, a group of people playing basketball.... That's something else, just going on at the same time...."

True to Cunningham's approach, even in this work necessitating significant communication between collaborators, the component parts of the performance (lighting, video, individual dancers, spatial objects, and sounds) remained and were conceived independently. Were the different minds that conceived these elements independently participating in a similar conceptual and methodological culture? Certainly not. Yet by embracing Cunningham's view, the jarring collage of sounds and images occurring simultaneously in time and space were just other independent events.

World Premiere: 16 April, 2009, Brooklyn Academy of Music, Brooklyn, New York

Music: Takehisa Kosugi, John Paul Jones, and Sonic Youth
Design: Benedetta Tagliabue [Miralles Tagliabue – EMBT]; project director: Beatriz Minguez de Molina; team: Cesare Batelli, Jack O'Kelly, Giuseppe Maria Fanara, Eniko Tatay, Gabriele Rotelli, Lee Kelly, Annie Kwon; fabricator: Esteve Miret
Costumes: Romeo Gigli
Lighting: Brian MacDevitt
Video Projections: Franc Aleu

Sources + Further Reading

author's interview with Tagliabue, April 17, 2009.
Alastair Macaulay, "Merce Cunningham, Turning 90: Meanings Still Pour From Movement," New York Times, April 17, 2009.
<http://www.mirallestagliabue.com/>
<http://www.lovely.com/bios/kosugi.html>

The Collaborative Legacy of Merce Cunningham exhibition gives scholars, students and the general public opportunities to discuss, debate and celebrate Cunningham's practice of collaboration with artists at the forefront of every creative discipline.

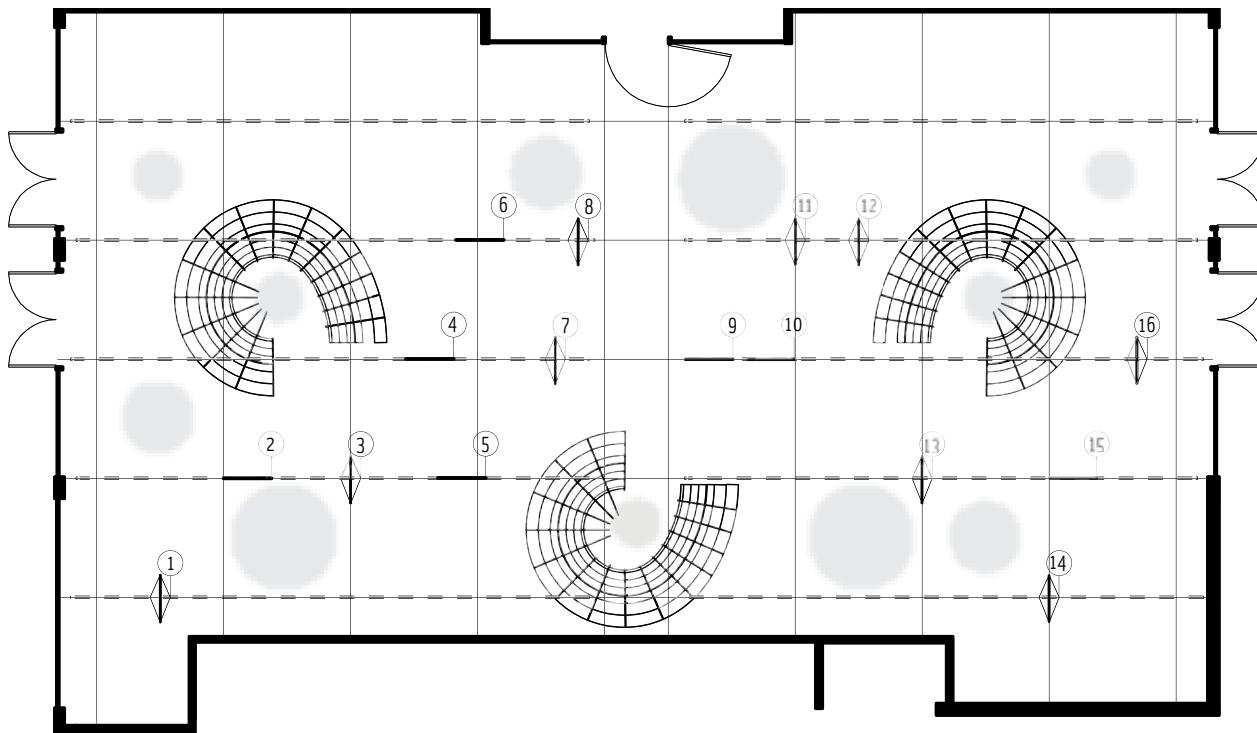
Informed by the research of their studio critic (Weinstein) twelve UA School of Architecture students in the Speculations and Scenographies Design Studio, made proposals for the UA exhibition design. Through a debate and jury process they selected one of the three proposals to develop and construct. The chosen design placed the printed and audio-visual content of the exhibition within a controlled landscape influenced by chance operations. Thus the exhibition became a physical experience of the methodologies Merce Cunningham used to create his dances "in space and time."

The Collaborative Legacy of Merce Cunningham Exhibition Design by UA Architecture Students

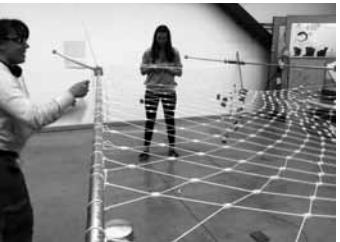
22

23

The design took cues from the geometry inscribed in the gallery's concrete floor. Projected onto a virtual ceiling datum, this grid organized a new surface—a suspended landscape of nylon string that hung between the roof and the ground plane. The effect of gravity on this net created a series of inverted vaults—"circulation nodes"—that interrupted the gallery's open plan. Thus the nylon net structured the circulation system, guiding the visitor through the gallery, around these suspended obstacles, to the sixteen panels. The placement of the panels and the circulation nodes was determined through chance operations, informed by Merce Cunningham's own creative process. A second form of node housed the exhibition's audio-visual content, and were also geometrically informed by the gridded floor plane. These corrugated cardboard egg-crate structures transformed the language of the net above into a habitable volume. They situated the human body in relation to media devices, offering resting places and visual focus as a counterpoint to the layered landscape of nets, circulation trajectories and distributed information panels.

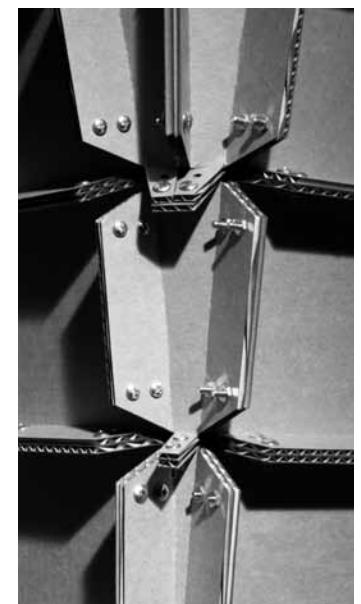
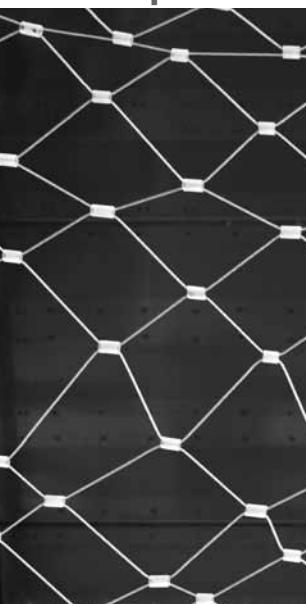
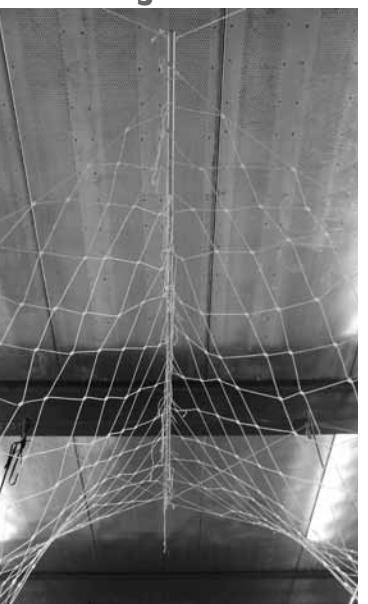


- ① Minutiae
- ② Antic Meet
- ③ Walkaround Time
- ④ RainForest
- ⑤ Available Light
- ⑥ The World Upside Down
- ⑦ Ocean
- ⑧ The Collaborative Legacy of Merce Cunningham
- ⑨ BIPED
- ⑩ BIPED
- ⑪ Multiplicity: Forms of Silence and Emptiness
- ⑫ Bockenheimer Depot Theatre Conversion
- ⑬ La Cité Radieuse
- ⑭ Fragile Stability, Countdown
- ⑮ Nearly Ninety
- ⑯ The Truth 25x/Second



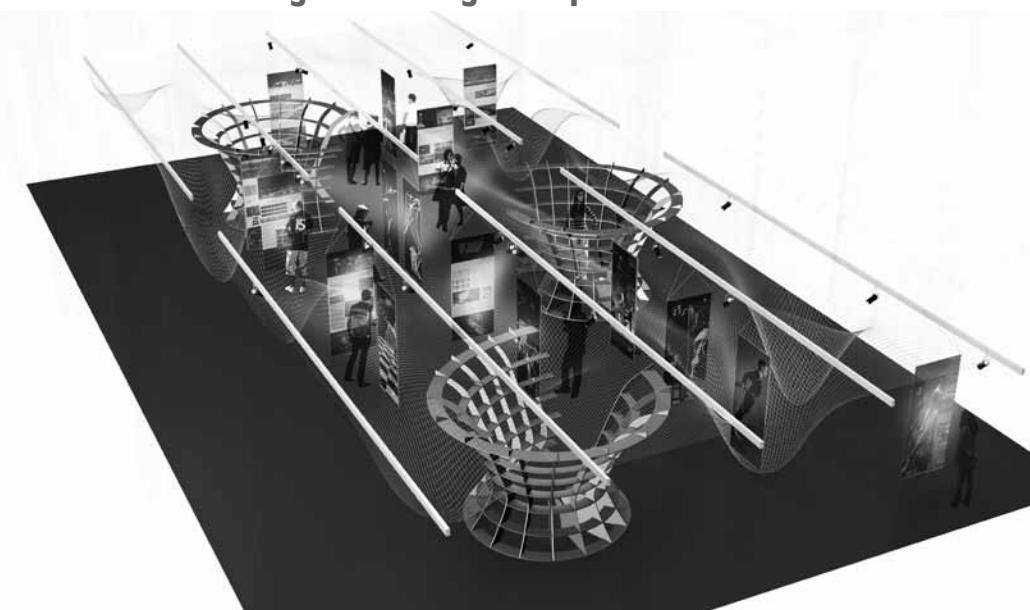
Design Process: Modeling, Testing, Prototyping and Fabricating the Exhibition Components

24



25

²⁶ Visualizing the Design Proposal



27

Available Light was the first project of the Stages of Performance program in which Los Angeles MoCA's Julie Lazar commissioned performing artists, architects/designers, and musicians to collaborate on a new work. Concurrent to the matching of Lucinda Childs, Frank Gehry and John Adams, Gehry was commissioned to renovate two warehouses to become MoCA's "Temporary Contemporary" exhibition space; this eventually became the site the artists selected for their performance.

²⁸ AVAILABLE LIGHT:Lucinda Childs/Frank Gehry/John Adams

Lucinda Childs began her career as choreographer and performer in 1963 as an original member of the Judson Dance Theater in New York. After forming her own dance company in 1973, Ms. Childs collaborated with Robert Wilson and Philip Glass on the opera *Einste in the Beach*, participating as leading performer and choreographer. Since 1979, Ms. Childs has collaborated with a number of composers and designers. The first of these was *DANCE* choreographed in 1979 with music by Philip Glass, and a film/dec or by Sol LeWitt, for which Ms. Childs was awarded a Guggenheim Fellowship. *DANCE* was revived in July, 2009 at Bard College Summer Festival, and at the Yard on Martha's Vineyard.

Frank Gehry established his practice in LA in 1962 after architecture studies at USC , a masters in urban planning at Harvard's Graduate School of Design and several years of practice, both under Victor Gruen and a year in Paris. He was drawn to the LA art scene, and artists such as Ed Ruscha, would give him his first commissions. His own experimental house in Santa Monica drew critical acclaim and helped catapult his career. Important works include the West Coast headquarters of Chiat Day, the Vitra Design Museum in Weil-am-Rhein, the Guggenheim Museum - Bilbao, and the Walt Disney Concert Hall. He received the 1989 Pritzker Prize, the world's most prestigious architecture award.

John Adams began composing at age ten. A New-Englander, he earned two degrees from Harvard, before moving to the San Francisco Bay area. He taught at the San Francisco Conservatory of Music for ten years before becoming composer-in-residence of the San Francisco Symphony. He collaborated on two operas with poet Alice Goodman and director Peter Sellars – *Nixon in China* and *Death to Klinghoffer*—and several others works with Sellars including the 2005 opera, *Doctor Atomic*. *On the Transmigration of Souls*, commemorating the first anniversary of 9/11, earned him the Pulitzer Prize for Music.

In reflecting on the legacy of Oskar Schlemmer at the Bauhaus, Cunningham and his collaborators, and at the Judson Church, Lazar pointed out that,

"in none of these examples... did the architect actually work with the choreographer to influence the shape of the dance. The Stages of Performance proposed the development of a more direct interaction between the individual artists from each discipline... to create a performance that enabled the audience to see the underlying forms of each individual's work, in the context of a completely integral artwork."

Neither Childs nor Gehry were familiar with each other's work when MoCA matched them in 1981, but both had a reputation for embracing explorations into new and unchartered territory.

In "For *Available Light*: Some Notes on Choreography" Susan Sontag wrote that Childs' work is an "avoidance of cliché and anything disjunctive, fragmented... a refusal of humor, self mockery, flirtation with the audience or cult of personality." It is an "art of refusal," a series of "unremarkable movements," repeated and explored in all their variations and patterns, demanding attention, while simultaneously entrancing. According to dance critic Sally Banes, "each dance, for the spectator, is a process of noticing, remembering, making contrasts and comparisons, constructing patterns and making sense of their juxtapositions to other, nearly identical patterns." In keeping with this approach the choreography for *Available Light* "wrapped" the music, working precisely with the rhythms of John Adams' score. The split group of dancers, between upper and lower stage levels, allowed one to echo the other, providing a counterpoint. The play of white to black to red costumes added another dimension to the complex and continuously shifting patterns being created.

Gehry's intervention connected the close and the distant. Interior and exterior were linked through "available" light, natural or red-gelled, shining in through clerestory windows, calling attention to the material simplicity of the existing trusses, scaffolding stages, dancers and audience. Unused portions of the warehouse were sectioned off with chain-link scrims, leaving visible dark and vast space in counterpoint to the illuminated and active stage. The split and skewed stages platforms put the audience in a position to always be viewing both frontally as well as from an oblique, more sculptural, vantage point. Split bleachers positioned audience to see each other in a layered space—a configuration abandoned in *Available Light*'s only other performance, at the Brooklyn Academy of Music, later that same year.

Gilbert Rolfe points out in realtion to "minimalism," common to all of the collaborators on *Available Light*, that "the business of art is to do justice to the complexity of experience,..." and the minimalism is not a reduction to a point but rather a clarification that "draws attention to the inherent ambiguity of the specific and the instrumental." [Jeremy Gilbert-Rolfe, 22].

World Premiere: 29 September 1983; Temporary Contemporary, Los Angeles, CA

Music: John Adams
Design: split set and split audience seating by Frank Gehry; costumes by Ronaldo Shamask
Light: Beverly Emmons

Sources + Further Reading:

author's interview with Lucinda Childs (Oct 15, 2010)
Available Light (MoCA: LA, 1983) including Jeremy Gilbert-Rolfe's "Frank Gehry's Setting for Available Light," and Susan Sontag's "For Available Light: Some Notes on Choreography"
Patrick Bensard, *Lucinda Childs a film*, 2006.
Anna Kisselgoff, "Dance: In Brooklyn, Premiere of 'Available Light,'" *New York Times*, October 29, 1983.
Gerald Rabkin, "BAM's Next Wave. I: Making Waves Together," *Performing Arts Journal*, Vol. 8, No. 1 (1984), pp. 35-47
F. O. Gehry, P. Arnett, T. Bickford, G. Celant, and M. Andrews. *Frank Gehry, buildings and projects*. New York: Rizzoli, 1985.
Ingram Marshall, "Light Over Water: The Genesis of a Music," (www.earbox.com/inter-lightoverwater.html, accessed 8/12/10)

Elisa Monte approached the architects Tod Williams and Billie Tsien to design a set for a new work with Glenn Branca's score—*The World Upside Down*—already in hand. The architects' first concept was to physically manifest Branca's "wall of sound"—a reference to his forceful serial music—by constructing a steeply inclined plane on stage for the musicians, akin to a surgical theater. With both music and dance structured by counts and synchronized by visual cuing, it was clear that the musicians needed to be in the pit, and the set needed to be independent of them.

THE WORLD UPSIDE DOWN: Elisa Monte/ Tod Williams Billie Tsien Architects/ Glenn Branca

Elisa Monte founded her company in 1981 after having danced professionally since the age of 11, as a principal with the Martha Graham Dance Company, and with Lar Lubovitch and Pilobolus. She has been commissioned to choreographed several pieces for Alvin Ailey [*Treading and Pigs and Fishes*] and has had her choreographic works performed by companies world wide. "The choice to dance is completely instinctual, completely compelling. We all struggle through life trying to understand why we're here and what we're doing. For me, dance has always been my way of communicating of finding answers. There was just no other path."³⁰

Tod Williams and **Billie Tsien** have worked together for over 30 years and in 1986 they founded Tod Williams Billie Tsien Architects. They "see architecture as an act of profound optimism. Its foundation lies in believing that it is possible to make places on the earth that can give a sense of grace to life—and in believing that that matters." Their body of work includes The American Folk Art Museum in New York, the Neurosciences Institute in La Jolla, California, the Cranbrook Natatorium in Michigan, and an addition to the Phoenix Art Museum. Work in construction includes a new museum for the Barnes Foundation in Philadelphia, a performing and visual arts center at the University of Chicago, and a multi-disciplinary dialogue center at Bennington College.

Glenn Branca is a self-taught musician and composer who has developed a "tonal system and compositional approach to music based on the intervals of the harmonic series." His music is predominantly instrumental and performed by his ensemble. His early rock-and-roll/punk /"no-wave" music put him in experimental context of artists Brian Eno and Dan Graham, Art on the Beach and Franklin Furnace Gallery. His first commission for dance was from Twyla Tharp in 1982.

In designing for a dance, Williams and Tsien saw two general strategies: "to make a set upon which dancers danced or one that would become a partner in the dance...Then the idea began to emerge, first... to do with the costumes—that they would be reversible—and that the set would be movable, changeable as the world turned upside down." Their proposal for a wall of musicians evolved into a 40' vertically hinged wall to be moved by the dancers, turned inside out, hiding and revealing its structure, alternately illuminated from the front—rendering it opaque—and from the rear, revealing

its structure and dancers hidden behind the scrim. The structure, mobility and balance of this enormous wall, developed and executed with great simplicity by the theater's scene crew, would, amongst other things, cantilever over the edge of the stage and the musicians in the pit.

Monte worked with Williams and Tsien's model of the stage and hinged wall to further explore the range of possible relationships of body to space to set. The HetTheater stage offered other potential transformations, to lift dancers and the wall on several parallel platforms.

At the time of *The World Upside Down*'s creation, collaborations between architects and performing and visual artists was common. The slow economy of the late 80s prompted many young design practices to engage in speculative conceptual projects and explore critical issues in atypical venues and in collaborative means. Williams and Tsien had already collaborated with artists such as Dan Graham, Mary Miss and David van Tieghem through organizations such as the Public Art Fund and Art on the Beach.³¹

Elisa Monte's choreographic work was highly issue-based like much visual art work of the time in its addressing identity politics and social struggle. At the time of this piece, the AIDS crisis wrecking havoc on the art and dance community; in November of 1989 the Berlin Wall came down. Thus the notion of a world in which identities shift and things transform was an unavoidable reality.

The World Upside Down was performed a second time at New York's City Center, for which a smaller set was constructed in proportion to that stage.

World Premiere: 16-17 November, 1990; Musiektheater, Amsterdam, Netherlands

Music: Glenn Branca

Design: set and costume concept by Tod Williams Billie Tsien Architects

Costume realization by Kathy Inukai

Lighting: Craig Miller

Sources + Further Reading:

author's interview with Tod Williams + Billie Tsien [Oct 17, 2010]

Tod Williams, Billie Tsien and Hadley Arnold. *Work Life: Tod Williams Billie Tsien*, New York: Monacelli Press, 2000.

Victoria Gerbel, "Framing the Dance," *Dance Ink*, Vol. 2, No 3. [Winter 1991-2]

www.elisamontedance.org

www.glennbranca.com

opinionator.blogs.nytimes.com/2007/03/06/the-in-search-of-the-lost-chords-contest/

Originating from an invitation to co-produce a new work with the city of Weimar, the European Cultural Capital in 1999, choreographer Nacho Duato's *Multiplicity* is a reflection on the life and work of Johann Sebastian Bach. Bach lived in Weimar between the ages of 18 and 32 and wrote numerous masses and cantatas during his sojourn there.

MULTIPLICITY: FORMS OF SILENCE + EMPTINESS: Nacho Duato / Jaafar Chalabi

³² Born in Valencia Spain, **Nacho Duato** served as the Artistic Director of the Compañía Nacional de Danza from 1990 - 2010, at which time accepted the invitation to lead the Mikhailovsky Theater ballet company St. Petersburg. He began his professional dance career in 1980 with the Cullberg Ballet [Stockholm]. The following year he joined Holland's Nederlands Dans Theater, under the direction of Jirí Kylián, where he became a resident choreographer in 1988.

Jaafar Chalabi is an Iraqi-Austrian architect based in Vienna where, with his brother Talik, he co-directs Chalabi Architects + Partners. He is a Lecturer for Housing and Spatial Design at the University of Technology and, since 1997, is also a guest Professor at the EAV in Versailles, France. Jaffar holds a PhD in Architecture and Movement.

The performance is divided in two parts: *Multiplicity* [Vielfältigkeit] is a choreographic reflection on themes and variations in response to the composer's music. The collaged variations that make up the dance mirror variations in the score, lighting, setting and costume. Duato states that the second portion of the dance [*Forms of Silence and Emptiness*] "maintains a more introspective tone, more mystic and spiritual, reflecting upon the subject of death, so present in the work of Bach. Musically... it is based mainly on the Art of Fugue." Working intently with music, rhythm, and continual, dynamic movements, Duato's reputation is that of a highly musical choreographer. And for him Bach is the "composer of composers."

In Jaafar Chalabi's statement about this work he writes,

multiple-folds, diversity, multiplicity, and labyrinth refer to the process and concept of folding. The Baroque refers not to an essence but rather to an operative function of a trait. It endlessly produces folds. The Baroque trait twists, turns its folds, pushing them to infinity, fold over fold, one upon the other...

In architecture, the fold provides a model for theories of metamorphosis and covering [*Bekleidung*, Gottfried von Semper]. Folds are maneuverable borders which separate an interior from the exterior, yet also create an

interior within the exterior and an exterior within the interior. Considered abstractly, it is only the type of bend -concave or convex- that determines inside and outside, meaning the gender of the space. In this unfixed state, the fold provides a model of transformation.

A scaffold set at the back of a stage acts as building retaining a curtain wall, that transforms itself from an opened to a closed entity. This architectural gender of the Baroque represents the separation of the façade [exterior] and the closed room [interior], the outer facade of reception and the inner rooms of action. The geometrically ordered scaffold contains several floors all connected through ramps, creating a fluid movement. These ramps represent vertical folding, spatial continuum, all set in diagonal [dynamic] relations within a rigid [static] structure.

³³

Multiplicity was the first, and in many ways the most ambitious, collaboration between Chalabi and Duato. In their subsequent collaborations the architectural intervention is separate, uninhabited by the dancers. In works such as *White Darkness* [2001] and *Castrati* [2002] Chalabi created curtains of mechanically manipulated draping and hinged, triangulated surfaces. Sets for more recent works—such as the freestanding folding wall in *Herrumbre* [2004] and the folded set of planes that float over head in *Jardin Infinito* [2010]—break free from the background and occupy space.

Architectural and material themes established in *Multiplicity*—the dynamic three-dimensional potential of a folded surface—continue as a thread in Chalabi's stage interventions despite his having left behind the literal connections to the Baroque long ago. The more recent ballets draw inspiration from a broad range of sources, from artistic references such as the painter Velazquez' *Las Meninas* [*Ofrenda de Sombra*, 2000] to the persistence of terrorism, violence, and torture in our society in disregard to agreements established in the Universal Declaration of Human Rights.

World Premiere: 23 April, 1999, Weimar, Germany [1999, Cultural European Capital]

Music: Johann Sebastian Bach

Design: Jaffar Al Chalabi

Costumes: Nacho Duato with Ismael Aznar

Light Design: Brad Fields

Sources + Further Reading:

http://cndanza.mcu.es/english/erepertorio/repertoire_e.htm

<http://www.cap.co.at/>

Deleuze, Gilles. *The Fold: Leibniz and the Baroque*. Minneapolis: University of Minnesota Press, 1993.

Semper, Gottfried, Harry Francis Mallgrave, and Michael Robinson. *Style in the Technical and Tectonic Arts, or, Practical Aesthetics*. Los Angeles: Getty Research Institute, 2004.

Literary works are consistently a springboard from which Frédéric Flamand's works take flight; they provide a common reference to which he, his dancers and scenographic collaborators can refer throughout the process of a project's exploration, development and realization. For *La Cité Radieuse*, numerous references were interwoven, the most prominent being reference to both the architect Le Corbusier's seminal text *The City of To-morrow* and his visionary project for the *Radiant City*. According to Flamand, early 20th century modernism exemplified by Le Corbusier's *Radiant City* has been superseded by "supermodernism" of the global networked world.

³⁴ LA CITÉ RADIEUSE: Frédéric Flamand/Dominique Perrault

Since his early work under the umbrella Plan K, **Frédéric Flamand's** work has questioned representations of the human body through visual art, audio-visual technology and performance art works. He has continued to investigate the contemporary being and space through his interdisciplinary collaborations as director of Charleroi/Dances [1991-2004] and since 2004 as Director of the Ballet National de Marseille. His collaborators have included Robert Wilson, William Burroughs, Diller + Scofidio, Jean Nouvel, Thom Mayne, Zaha Hadid and the Campana Brothers. In addition to traditional theaters, Flamand's work has been presented at the Kassel Dokumenta 8, Hannover Expo 2000, the First Venice Biennial Dance Festival and Cannes Film Festival.

Paris-based Architect and urban designer **Dominique Perrault** gained a global reputation with his winning and built competition entries for the French National Library [Paris, 1989] and the Olympic Velodrome [Berlin, 1992]. His work at these scales and for stage share an attention to detail and use of modern, industrial materials; abstract, minimal forms carefully integrated into their context.

"Symbolic places, represented by public spaces and churches, have been succeeded by what the anthropologist Marc Augé calls 'non-places': airports, shopping centers, transit stations and motorways – anonymous space visited by more and more people every day." And non-place is utopia. "Our production questions the new forms of utopia linked to the advent of this global *Cité Radieuse* where the human body is subjected to endless energy flows and plunged into the infinite branches of networks modeled by ideologies relating to health and security."

La Cité Radieuse is the third in a body-city trilogy with Zaha Hadid's *Metropolis* [2000] and Thom Mayne's *Silent Collisions* [2003].

The gridded matrix on the floor and the modularity of the rolling woven metal mesh scrims can be understood as a reference to Le Corbusier's *Modulor* both as measure, a unit of construction and the modularity of the apartment units in his Marseille Block. At the same time, Perrault's privileging of "place-making" over "building-making" can be seen as akin to site-specific and land art methodologies. Perrault claims the

grid is genetically closer to the gridded abstract works of artists such as Donald Judd and Sol Lewitt.

Transparent, light capturing and reflecting mesh resonates as the "electronic skin" or urban architecture. Developed with students at the IUAV [Venice Institute of Architecture and Urbanism] and Perrault's office, projections onto these mobile scrims flicker through references to Le Corbusier's modulor, super-urban non-places, and virtual re-presentations of the dance from altered and augmented views of those dancers live, on stage.

Working within the context of theater, Perrault was specifically interested in the dilemma of the fourth wall – the barrier between audience and the performance; he addressed this by fragmenting that wall into a pixelated set of human-scaled, modular and mobile scrims, capable of multiplying the layers and images: real dancer, pixelated scrim and a lingering larger scrim at the proscenium opening. A multiplicity of views confound reality and illusion through the set as "optical instrument... cutting up light and movement." For Perrault, "the project finally realizes the *Radiant City*, though not controlled by a neurotic geometry but rather by irradiating sound, light and images, rendering radiant that which they irradiate."

The IUAV's Christina Barbiani describes the project between Flamand and the architecture students as exploring "themes and fields of application" that extend beyond disciplinary boundaries. Architecture and dance intersect as the manipulation of the space with its bodily occupation as primary concern, as an encounter of permanent and ephemeral spatial orders. In the tradition of the Bauhaus and Hellerau, utopian visions "suppress barriers between disciplines but also between those disciplines and life itself."

World Premiere: 15-16 July 2005, Théâtre National de Marseille - La Criée, Marseille, France

Music: Jacques-Yves Le Docte
Sound editing: Xavier Yerlès
Design: set by Dominique Perrault; projections by Pino Pipitone
Artist adviser: Bernard DeGroot
Light design: Nicolas Olivier, Frédéric Flamand
Costumes: Annelies Van Damme
16 dancers

Sources + Further Reading:

<http://www.ballet-de-marseille.com/>
Le Corbusier, *The Radiant City: Elements of a Doctrine of Urbanism to be Used as the Basis of our Machine-Age Civilization*. New York, Orion Press, 1967.
Le Corbusier, *The City of Tomorrow and its Planning*, trans. Frederick Etchells, London: Architectural Press, 1971.
Vittoria Capitanucci and Dominique Perrault. *DPA : Dominique Perrault Architecture: Recent Work*. Milano: Skira, 2006.

As Artistic Director of the Ballett Frankfurt, William Forsythe created both the choreography and the scenographic ambiance for his performances, drawing from his company's faithful partners and in-house pool of trans-disciplinary talents. Forsythe is generally credited with creating the choreography plus the lighting and spatial design, while company dancer Stephen Galloway contributed costume designs and Thom Willems composed electronic music for over twenty-five dances. Since leaving the state company, Forsythe's work has increasingly bridged installation and other art forms, challenging disciplinary boundaries. In 2005 he took over a 80 x 35m industrial tramway station and called upon architect Nikolaus Hirsch to fit out its interior, creating a home for his new Forsythe Company. Hirsch's practice has similarly involved many trans-disciplinary works with artists and ephemeral spaces. In a conversation between the two, Forsythe defined his [choreographic] work as "construction/deconstruction."

³⁶ BOCKENHEIMER DEPOT: William Forsythe/Nikolaus Hirsch

William Forsythe is recognized as one of the world's foremost choreographers. His work is acknowledged for reorienting the practice of ballet from its identification with classical repertoire to a dynamic 21st-century art form. Forsythe's deep interest in the fundamental principles of organisation has led him to produce a wide range of projects including installations, films, and web based knowledge creation.

Nikolaus Hirsch is an architect and director of the Städelschule Academy of Fine Arts and Portikus in Frankfurt. His projects focus on experimental art institutions and include the European Kunsthalle [2006–2008], unitednationsnationsplaza in Berlin [with Anton Vidokle, 2006–2008], and the Cybermohalla Hub in Delhi. Further work includes the award-winning Dresden Synagogue and the Hinzept Document Center. Nikolaus Hirsch has curated "ErsatzStadt: Representations of the Urban" at Volksbühne Berlin, "Cultural Agencies" [Istanbul, 2009/10] and "Helke Bayre - Portikus Under Construction" [2010]. He is the author of *On Boundaries* and *Institution Building*.

The temporary reconfiguration of the depot negotiates "between the formal and informal," between a highly controlled acoustic and luminous environment and an urban [porous, public, noisy, and transitory] space. The varying actions [rehearsing, meeting, gathering, performing and eating] were supported and divided by repetitive elements: industrial felt sheeting on floors and walls [with its acoustic properties and references to Joseph Beuys] and modular furnishings that could be reorganized in support of the temporal as well as physical demands on the space. The following excerpt is from "Planning the Unpredictable."

NH: ... What one may call "architecture" is permanently in process. The spatial concept was intended as a research between stability and instability. How do you see the relationship between architecture and dance? In a rather reductive way one could say that architecture is rather about stasis, whereas dance is more about movement. These disciplines seem to be quite opposed.

WF: For me it is rather hard to think of architecture as not made for bodies. And dance is just a way of being body. We are always body, day and night...You can have a comforted body, punished body, body in fitness studios, hospital body, kung-fu body,... What we are suggesting in the space at the Bockenheimer Depot is that there is more than one way of being body. And what, then, is a body in public space? And how could a body be in a less defining space?

Architecture is always making us body in a certain way. The choice of using stairs, elevators or ramps alone is an authoritarian way to say, "be body this way, be body that way."

WF: ...We don't usually think about living in public. The project is an attempt to turn this around. Away from the private body and towards the public body. Usually physical behaviors of bodies are very regulated. In that sense, we wanted to have space that allows one simply to be body, rather than a space that requires specific behaviors of the body. The aim was to create a space of unregulated time. The body is not only physical, it is also temporal. What we choose to do with our body—what we do with it in time—is a very important subject. And that is perhaps very choreographic.

NH: The use of time reflects the architectural approach of our concept: On one side of the hall, there is a rather formal theatre space [including auditorium and stage] and its scheduled time, on the other, we have a rather informal space and an unregulated use of time. The two spheres are negotiated through a huge vertical element made out of felt—something between a wall and a curtain; between creating autonomy and providing exchange. The element is flexible in longitudinal axis, so that informal and formal spaces can be changed in size, i.e. reciprocally shrinking and expanding. In terms of temporal use, there are important repercussions between these areas. Like the ballet performances of some members of the Ballet Frankfurt that extend from one space into the other, or [other] programs... that uses both spaces, or... that use and abuse the felt elements of the undetermined space. These are phenomena which occur even on a smaller scale when visitors manipulate architectural elements according to their own individual rhythm of time.

NK: The paradox between planning and evolution is something important for our project. Traditionally, at the very center of architecture as a discipline is "planning." In that respect, the work at the Depot was extremely interesting: we had to deal with quite different rhythms of production, of making. The work in the context of a theatre—and especially your approach—is very much about process, which is actually quite different from what architectural discussion understands by process or processual planning. Yours is a kind of directness, a true search with all its consequences: going forward and back, starting again in 1:1 scale in the workshop. I remember moments when we as architects had a real problem of control, when we had to create coherence in order to keep to schedules and costs. In these rare moments, we were thrown back into the classical role of architecture: no improvisation, but a determining strategy towards the future... In contrast to this was the collaboration with you. It seems to me as if your approach is very much about maintaining openness, a process of the making. Does the notion of openness play a role in your work as a choreographer?

WF: The staging of public space is not different from what I do on a theatrical stage in terms of its strategies and organization. You certainly have different resources. The players are your public, the stage is the public space. When I am doing a piece for a stage, I usually want to know how big the stage is, how high it is, how deep it is. You have to know the rules of the space, what it can do. That comes through practice.

Sources + Further Reading:

- "Planning the Unpredictable: A dialogue between Nikolaus Hirsch and William Forsythe" *Janus, In Search of Utopia*, No. 14/2003, 64–68.
- Techniques et Architecture: Scenographie*, No.485, Aug–Sept 2006, 50–53.
- Arnd Wesemann, *Bill's Universe, Ballettanz/Das Jahrbuch*, 2004.

The title for this first collaboration between Beth Weinstein [School of Architecture] and Doug Nielsen [School of Dance] cropped up in the midst of a conversation between the two about qualities or concepts in their work that are intentionally sought or that recur unintentionally. *A Fragile Stability Achieved By The Precise Distribution In Space of Extremely Unequal Measures* opened possibilities for a dynamic set made of elements at diverse scales, and for dance steps and spatial configurations that explored the spectrum of balance, speed and stillness, crowding, emptiness, heaviness and suspension.

A FRAGILE STABILITY ACHIEVED BY THE PRECISE DISTRIBUTION IN SPACE OF EXTREMELY UNEQUAL MEASURES: Douglas Nielsen / Beth Weinstein

³⁸ UA Associate Professor and Architect **Beth Weinstein** is a frequent collaborator on performance projects in and out of proscenium space. Gus Solomons, Jr., a former Cunningham dancer, commissioned her first set for dance in 1989. Recent works include set, lighting and projections for a one-woman play, *Coming in Hot* [2009], and the spatial design for *Invisible Cities* [2008], performed on the Pennington Street Garage rooftop. In addition to teaching design and technology courses, she leads collaborative projects and seminars linking architecture, dance, and performance, such as *SHIFT* [2010], a performed reinterpretation of visionary 20th C theaters. Her scholarship focuses on sites of intersection between architectural and choreographic practices, ranging from the scale of the drawing board to urban space and landscapes.

Douglas Nielsen is an internationally known teacher, choreographer, performer, and director. Nielsen is a former member of the Batsheva Dance Company in Israel, and the Gus Solomons, Pearl Lang, and Paul Sanasardo dance companies in New York. He has been a guest teacher and choreographer at more than 40 universities, and in 1988, he helped blueprint the first modern dance company of Mainland China. Nielsen is a recipient of four fellowships from the National Endowment for the Arts, and a performing arts fellowship from the Arizona Commission on the Arts. He has been honored with the 2003 Lester Horton Dance Educator Award for excellence in teaching, and the 2007 American Dance Festival Balasaraswati/Joy Ann Dewey Beinecke Endowed Chair for Distinguished Teaching.

Variations in suspension of three main elements, a heap of concrete blocks, plus lighting and the existing theater curtains, created a dozen distinct environments over the course of the performance.

For the architecture students the project created an opportunity for feedback and testing, at 1:1, from a client and users, and the process of develop from concept, fabrication, rigging, lighting, to practice and performance.

World Premiere: 19 April, 2008, Stevie Eller Theater, Tucson, Arizona.

Music: David Byrne, John Lurie, Charlemagne Palestine

Design: Beth Weinstein [Project Direction] with UA architecture students Torsten Anderson, Omar Lopez, and Andy Malanowski

Costumes: Lydia Harmon

Light Design: John Dahlstadt

Sound: Mark Miceli

Dancers: Joshua Carter, Nathan Cottam, Teal Darkenwald, Erika Farkvam, Emily Ford, Cory J. Gram, Zachary Heller, Damon Lemmons, Christina McCuaig, Brendan Rooney, Alison Witcomb

COUNTdown ³⁹

Prompted by the UA's involvement in the Mars Landing Project, *COUNTdown* gave rise to the second collaboration between Beth Weinstein and Douglas Nielsen.

The performance and set loosely probed themes related to the Mars voyage—the countdown and launching of a mission into the unknown, the anticipation and journey involved, the arrival, and discovery, and gathering of data and its interpretation.

Students in the School of Architecture during the Fall Semester Seminar researched the history of space explorations after analyzing dancers' and choreographers' use of space. Among the works they studied were Cunningham's *Beach Birds for Camera*, Forsythe's *In the Middle* and *Solo*, and Flamand's *Cité Radieuse*. Based upon this understanding of dance space, the materials and geometries of space suits and vehicles, and the topographic information gathered from the Mars mission, they developed a design for the set. After a round of prototypes, the students constructed a 24' x 56' backdrop derived form maps of the Mars topography that included inflatable envelopes. The students also "performed" their set each evening during a twenty minute count-up to the performance.

World Premiere: 24 April, 2008, Stevie Eller Theater, Tucson, Arizona.

Music: Brian Eno [For the Clock of the Long Now], Eric Zoran [Cartoon]

Digital Editor: Daniel Howarth

Design: Beth Weinstein [Project Direction] with UA Architecture students Melanie Beldrin, Salomé Moreno, Juan Ortiz Lopez, Nicole Sweeney, Federico Peralta, Cassandra Soto. Design Research: Melanie Beldrin, Derek Butvin, Colleen Cummings, Christy Fisher (MLA student), Salomé Moreno, Gabrielle Sackhoff, Nicole Sweeney.

Costumes: Lydia Harmon

Light Design: John Dahlstadt

Dancers: Joshua Carter, Annie Christianson, Cameo Cross, Jonathan Curtis, Kelsey Davis, Stacy Harris, Zachary Keller, Marquez Johnson, Hayley Meier, Brendan Rooney, Emily Schon, Bryan Wong.

Sources + Further Reading:

http://www.nasa.gov/mission_pages/phoenix/main/index.html

<http://hirise.lpl.arizona.edu/>

Working at the polar opposite of Merce Cunningham and his collaborators, Flamand consistently seeks intense dialogue and debate with his project partners and draws intensely from literary and mythological sources to construct a non-linear but semi-narrative framework for his dance performances. In this work Flamand returns to one of his favorite author's texts—Italo Calvino's *The Baron in the Trees*. His collaboration with architect Thom Mayne drew from Calvino's *Invisible Cities* [*Silent Collisions*, 2003].

⁴⁰ THE TRUTH 25x/SECOND: Frédéric Flamand/Ai Weiwei

Since his early work under the umbrella Plan K, **Frédéric Flamand's** work has questioned representations of the human body through visual art, audio-visual technology and performance art works. He has continued to investigate the contemporary being and space through his interdisciplinary collaborations as director of Charleroi/Dances [1991-2004] and since 2004 as Director of the Ballet National de Marseille. His collaborators have included Robert Wilson, William Burroughs, Diller + Scofidio, Jean Nouvel, Thom Mayne, Zaha Hadid and the Campana Brothers. In addition to traditional theaters, Flamand's work has been presented at the Kassel Dokumenta 8, Hannover Expo 2000, the First Venice Biennial Dance Festival and Cannes Film Festival.

Ai Weiwei "is often referred to as the Andy Warhol of China." His work both as artist, blogger, curator and designer takes a critical stance towards the rapid changes taking place in China today. He served as architect consultant to Herzog and DeMeuron for the 2008 Olympic "Bird's Nest" Stadium, and has exhibited at the Museum of Modern Art in San Francisco, the Dokumenta in Kassel, the Venice Biennial and the Tate Modern. His work continues to be highly political, working in defense of the victims of the Szechuan earthquake and commenting on issues of freedom, cultural memory, and media deception.

Quitting the earth's surface to gaze down from the treetops with a new perspective, the Baron's distanced analytical view evokes engraved aerial vistas of cities and constructed linear perspectives of the story's Enlightenment era setting. With no literal reference to the Baron narrative, *The Truth 25 Times per Second* offers a multitude of perspectives on the body entangled in a transforming forest of ladders through our divided contemporary viewpoints—"reality" overlaid with multiple digital doubles and others.

Flamand states that "our new global environment organizes the confusion [if not fusion] between near and far, as well as the control of bodies; an expansion of view is coupled with a contraction of living space. We are experiencing an obsession with transparency and a suppression of the invisible. It is the paradox of the fluid horizon of flows and networks in an increasingly compartmentalized universe, saturated with new borders where control becomes a real environment. The word CRISIS is translated in Chinese by combining two characters that mean DANGER and OPPORTUNITY respectively."

For another reflection on the evolution of vision, on assumptions about Western contemporary art and culture, Flamand sought out Chinese artist, architect, and activist Ai Weiwei. Flamand could also anticipate from Ai Weiwei a critique of the rapidly morphing Chinese culture and built environment, and of the disparity between eyewitness accounts of current events and mediated "truths." Reflecting upon these multiple truths, the dance is named after film director Jean Luc Godard's definition of cinema as the "truth 24 frames per second."

Truth also concerns Ai Weiwei. Often referred to as the 'Chinese Warhol' for his savvy use of media, he has investigated and blogged about the student deaths resulting from building collapses during the 2008 Sichuan earthquake. More recently he was put under house arrest in connection with a planned celebration that would have hindered the government-ordered demolition of his Shanghai art studio. "The truth is," according to Ai, "our acceptance of the so-called reality."⁴¹

Ai Weiwei states that "how to reinterpret the contemporary dance vocabulary into a common every-day human struggle and daily experience is one way to explore the limits of movements rationality, of structured composition, and of our visual experience. The ladders give a clear definition, transforming our intention through a form of abstract expression while the aluminum offers a definite harsh and clear structure that every participant has to deal with."

These tangled ladders evoke the bamboo scaffolds that have proliferated all over Beijing, Shanghai, the Three Gorges Dam and other mega-sites of construction. As readily available hardware store objects these are also Duchampian Readymades.

World Premiere: 12-13 February 2010, Grand Théâtre de Luxembourg, Luxembourg

Musical advisers : George Van Dam
Artistic adviser : Bernard DeGroot
Design: Ai Weiwei
Costumes : Aurélia Lyon, Nicole Murru
Lighting design : Frédéric Flamand and Philippe Gosperrin
17 dancers

Sources + Further Reading:

Ai Weiwei's Blog: *Writings, Interview, and Digital Rants, 2006-2009*, Cambridge: MIT Press, 2011
Charles Merewether, *Ai Weiwei: Beijing, Venice, London, Herzog & de Meuron*, Walter König: 2009.
Italo Calvino, *Invisible Cities*, trans. William Weaver. New York: Harcourt Brace, 1974.
Italo Calvino, *The Baron in the Trees*, trans. Archibald Colquhoun. New York: Random House, 1959.
<http://www.ballet-de-marseille.com/>

Project Credits

Curator, Exhibition Graphic Designer: Beth Weinstein

Project Assistant: Annie Kurtin

Research Assistant: Lara Lafontain

Spatial Design + Installation: Beth Weinstein (project direction); UA Architecture

Student Design Team: Sulaiman Alothman, Kori Camacho, Alan Escarcega,

Michael Farley, Jesus Alan Figueroa, Jongwoo Kim, Corey Kingston,

Crista Mapes, Lara Lafontain, Alicia Perez, Shaun Poon, Mat Propst

Poetry-Content Consultants: Laynie Browne and Charles Alexander

Graphic Design Consultant: Ellen McMahon

42

Acknowledgements 43

This project would not have been possible without the moral and intellectual support, guidance, stories and images offered by Tamara Dillon, Kevin Taylor, Kevin Carr, Trevor Carlson and David Vaughan at the Cunningham Dance Foundation and the Merce Cunningham Dance Company; by Laura Kuhn of The John Cage Trust; Paul Kaiser of OpenEnded Group, and Julie Martin of E.A.T. Equal thanks go to the choreographers, artists, and architects who granted access to their archives, shared their stories, and hospitality—Lucinda Childs, Frédéric Flamand and Pierre Thys of the Ballet National de Marseille, and Tod Williams and Billie Tsien Architects; as well as to Jaafar Chalabi, Léa Richard-Nagle at Dominique Perrault Architecture, Joyce Shin at Gehry Partners, Julian Richter at The Forsythe Company and architect Nikolaus Hirsch. I would also like to thank the multitude of photographers who documented these dances for their generosity in granting permission to use their images. My gratitude to Annie Nequette, Paul Kaiser and Roslyn Sulcas for editorial advice.

I would also like to acknowledge the support and encouragement of friends and family on the west side of the island next to the Hudson, and on the 'right' sides of the Seine, the Santa Cruz and the Potomac: thank you. - Beth Weinstein

Project Support

The University of Arizona:

College of Architecture + Landscape Architecture and the School of Architecture,

College of Fine Arts, UApresents, and the Poetry Center

Tucson Community:

Thomas Reprographics, Museum of Contemporary Art: Tucson, Tucson Museum of Art, Posner's Art Store, Casa Vicente, Maynards Market + Kitchen, Tucson Symphony Orchestra



opposite: University of Arizona installation and events
right: University of Maryland installation