FRANCES BRONET ABBREVIATED PORTFOLIO

CASE NY PROFESSOR OF THE YEAR, 2001
WILLIAM H WILEY DISTINGUISHED PROFESSOR AWARD, RPI, 2001
PAST PRESIDENT, ACSA, 2001-02

Summary of Achievements in AAA UO

Goals
- To engage complex learning environment of 1700 talented students and 100+ faculty - in research, practice, new modes of teaching and administration through critical inquiry & design excellence
- To increase programs and resource development by alliances with internal and external constituents.
- To be an international leader in appropriate innovation, disciplinary/cross-disciplinary research & practice.
- To strengthen global programs in research, outreach and teaching

Successes

New Programs in Portland (PDX) and the Development of the UO White Stag Campus
- Warehouse renovation for new facility in heart of Portland for professional "campus" in Portland. University of Oregon's portal to global innovative architectural, design and art practice. Portland - leading international city modeling sustainability, creative production - a rich urban laboratory/"healthy" city.
- Development of curricula in Architecture, Digital Arts, Product Design for new Portland campus
- Building industry, city, academic institutions, professional and creative communities' relationships

New University of Oregon Eugene Facilities: Current and Future
- New building proposal $150,000,000 forwarded to Legislature for bond funding; fundraising begins.

Economic Health of AAA
- Reorganization of AAA fundraising enterprise; general budget in black through severe budget cutbacks

Curricular Reform
Launch of interdisciplinary curricula:
- Material Studies & Product Design; Ecological Design Certificate;
- Cinema Studies 2010 – 1st cross 3-college undergraduate major; Media Management Arts & Administration; MA/MS Arts Management + MBA; AAA interdisciplinary minor; Sustainable Land Development program
- New/updated curricula/programs: New Ph.D. Programs: Landscape Architecture '06; Architecture '11
- International programs growth: China, Korea, Japan, Croatia, Italy, Finland, Denmark, Canada

Diversity:
Huge effort towards recruitment, collaborations with HBCUs, Office of Institute Equity and Diversity

Public Outreach Leadership
Deep public engagement in most of our AAA units exemplified by faculty as change agents, affecting an audience of developers, city planners, engineers, students and educators by putting real designs and collaborative practices in the hands of those who implement the development of the built environment.

University Strategy: Big Ideas
Visionary set of directions based on our legacy programs while projecting transformative futures. 5 Big Ideas selected - strategies that would bundle the university's intellectual enterprise through the next few years. Out of 28 complex propositions two out of the final 5 came out of AAA.
- *Sustainable Cities Initiative*: How do you plan, build and retrofit cities in sustainable ways targeting the intersection of green buildings, communities, business and policies? Over $1,000,000 investment
- *Green Product Design Network*: Integrating materials, product design and business models for sustainable products. Material Studies and Product Design link with Green Chemistry and Sustainable Business practice, connecting AAA to CAS and LCB.

Strong Leadership Teams within the School
Eugene and Portland effective associate deans, heads, directors, finance, communications and external relations, development and office staff with new reporting structures

Broader Based Leadership AAA in University
Collaborating on university processes and best practices for transparency and communications specifically around
- Campus and Environmental Planning: Sustainability at campus level; relationship to cities;
- Portland
    - Larger/clearer plan for greater PDX presence
    - Integrating and distinguishing Portland

Student Recruitment and Retention: Numbers up

Hires – Great Talent Recruited: 20 new international search hires in 4 years

Increased Research and Creative Production

Highest Rankings - with Architecture #1 in Sustainable Design

Complete Success in Promotion & Tenure and Accreditations

FEMINIST TECHNOLOGY

EDITED BY LINDA L. LAYNE, SHARRA L. VOSTRAL, AND KATE BOYER

7 Teaching Feminist Technology Design

FRANCES BRONET AND LINDA L. LAYNE

WE BEGIN WITH THE understanding that the way technologies are designed and built can "enhance the power, authority, and privilege of some over others" (Winner 1986). We recognize that in our society, "power, authority, and privilege" still fall disproportionately to men. "Artifacts have politics" (Winner 1986) and our goal is to change gender politics—to empower women (individually and collectively), to eliminate gender bias and to create a world with gender equity.

We recognize that women are not a homogenous group and that they have different needs and desires.[1] We also recognize that there are multiple forms of feminism (see Aengst and Layne, this volume) and that feminist designers will not come up with designs we can all agree on. But we believe that generating more, sustained, multivoiced debate about the feminist or antifeminist attributes of existing or emergent technologies will be of great benefit to the goal of improving women's lives. We do not want to be based in post facto critiques of new technologies but want to move to influence design. One obvious way to do this is to equip the next generations of designers to work toward this goal.

Drawing on Bronet's sixteen years' experience of teaching interdisciplinary design, and Layne's experience over many of those years collaborating with her, we share our experience of trying to teach feminist technology design and lay out some suggestions for fostering feminism in design studios. We focus on two recent efforts on our part to teach the design of feminist technologies.

PRODUCT DESIGN AND INNOVATION STUDENTS, RENSSELAER, FALL 2006

In 1998 an undergraduate program in Product, Design, and Innovation (PDI) was initiated by John Schumacher, a philosopher in the Science and Technology Studies (STS) Department; Frances Bronet, a faculty member in the School of Architecture; and Gary Gabriele, a faculty member in the School of Engineering at Rensselaer. The curriculum combines the requirements of either mechanical

2010

Installations
— by —
Architects
Experiments in Building and Design
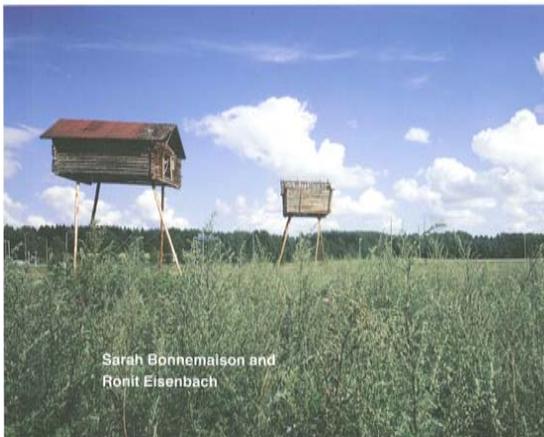
Sarah Bonnemaison and Ronit Eisenbach

Frances Bronet

Space in the Making

top
Like open pods, these translucent fabric structures invited dancers to enter. Frances Bronet (with Terry Creach Dance Company and Bennington College), *Dichotomy*, RPI Dance Infusion, *Design 1*, Rensselaer County Council for the Arts, Troy, New York, USA, 1997

bottom
Spill Out was created by hand weaving a thousand strips of spandex into a structural frame. Bronet (with Sid Fleisher and Ellen Sinopoli Dance Company), Historic Gasholder Building, Troy, New York, USA, 1997

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2010

GABRIELLA GIANNACHI &
NIGEL STEWART (EDS)

PERFORMING NATURE
EXPLORATIONS IN ECOLOGY AND THE ARTS

PETER LANG
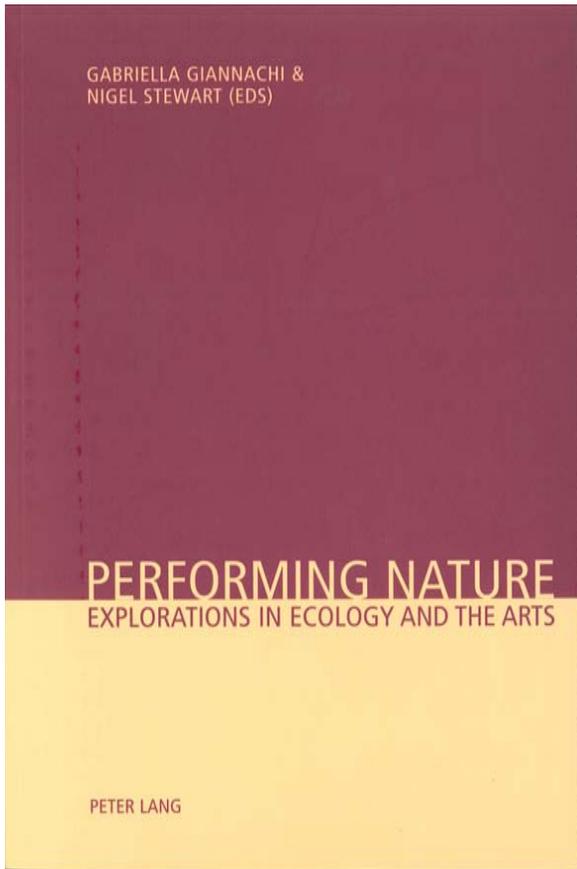
Beating a Path: Designing *in* the Posture of Body

Frances Bronet

The project *Beating a Path: Design in Movement* is one of a series of full-scale built investigations examining reciprocal relationships between movement and architecture. The work emerged from a concern that conventional architectural designers and architectural pedagogy work to develop spatial envelopes independent of the way that people moved in and around them. This project deliberately set out to explore how dancers moved and how to construct or evolve space generated by their movements – what John Schumacher and I have called 'space-in-the-making' (Schumacher and Bronet 1999).[1] We are investigating how design in movement can motivate new ways of liberative building and inhabiting that challenge the hegemony of design in (ready-made) space. This chapter first looks at the differences between ready-made space and 'space-in-the-making' and then explores these parameters through a set of projects deliberately constructed for performance.

Introduction

Design in space assumes that the space is already there, and that our movement is defined by it – by what it enables and what it prohibits. Design in movement is a complement to traditional architectural design in space, allowing us to experience space, through our bodies, in a way that challenges our deeply ingrained visual culture. It could also be called 'space-in-the-making', which refers to a condition where we would not have a ready-made design, procedure for construction, or model for occupancy. This means that any proposal would not be based on a preconceived or generic idea about the context, the project, the occupants, and so on. In many professional

2005
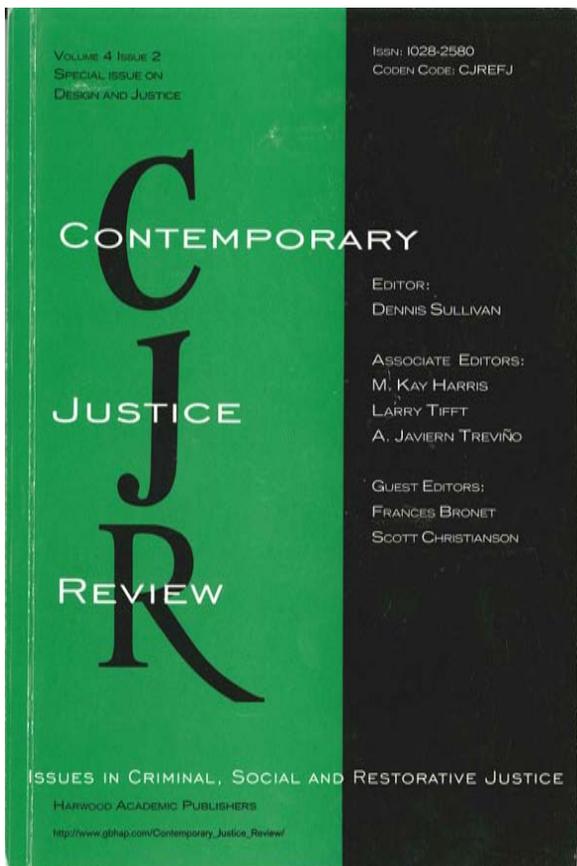
CONTEMPORARY C J R JUSTICE REVIEW

ISSUES IN CRIMINAL, SOCIAL AND RESTORATIVE JUSTICE

Guest Editor's Introduction

DESIGN AND HOW IT AFFECTS HUMAN NEEDS-MET, PERSONAL PARTICIPATION IN DAILY LIFE, AND OUR SENSE AND PRACTICE OF JUSTICE

FRANCES BRONET

Rensselaer Polytechnic Institute

Two summers ago, John Schumacher, Dennis Sullivan, and I met to discuss the possibilities of John and myself putting together a special issue on design and justice for *CJR*. It seems so very long ago. In the following few brief months, we lost John to a short but very intense battle with cancer. It is so hard to believe that the cancer won. John's work and friendship have been central to my research, my pedagogy, and my relationships to those around me. I am glad that he and I had so much unfinished business. I feel his guidance in the words that he E-mailed me last year, the year before, and even five years before that. These electronic saves have permitted our ongoing debates about the use of space, design, and justice to continue.

In the past few months, Scott Christianson, a scholar in criminal justice has joined me and this issue of the journal is finally done though the issue itself will never be done. It is dedicated to the work and life of John A. Schumacher.

In our call for papers on design and justice, John and I identified a number of topics that we regarded as central to the discussion. We believed that how we design buildings, communities, social processes, and social arrangements affects the quality of our lives in its every last detail. What is it, then, to design justly, or for a design or designer to be just? We proposed that

2001

QUILTING SPACE
ALTERNATIVE MODELS FOR ARCHITECTURAL AND CONSTRUCTION PRACTICE

Frances Bronet

INTRODUCTION

Although current western architectural and construction practice can now be carried out by diverse populations, conventional contemporary and traditional western construction practice was established by the ways of master masons and carpenters, with female contributions virtually absent.[1] Some nomadic and vernacular construction models did include a broader base of participants as well as a different pallet of operations, but even so women's contributions are not evident in standard records. Would there be differences in contemporary building strategies and production if alternative pedagogical and/or apprenticing models were available? In this chapter, I make the case that one way of expanding upon the normative products and processes of architectural production is to look at alternative participants in alternative methods as new models for design learning. This may fall under the rubric of those feminist pedagogic principles that develop ways to break down hierarchies, to work collaboratively and with participatory and ongoing processes. I examine a process that was invented by a group of first

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Product Design and Innovation: Evolution of an Interdisciplinary Design Curriculum*

FRANCES BRONET, RON EGLASH, GARY GABRIELE, DAVID HESS and LARRY KAGAN
Product Design and Innovation, Rensselaer Polytechnic Institute, Troy, NY 12180, USA.
E-mail: bronef@rpi.edu

Successful competition in the global economy is increasingly dependent on new products and services that reveal new business and infrastructure possibilities. New products and services must be regarded not only as commodities in a marketplace, but as social actors constraining or enabling the quality of our life. In recognition of these two perspectives, Product Design and Innovation (PDI) is a three-year old undergraduate dual degree program educating students for new product invention and development. PDI satisfies the requirements for the Bachelor of Science programs in Architecture and Science, Technology and Society (STS); or Mechanical Engineering and STS. Design programs played a lead role as the PDI curricular model for integrated and studio learning, linking all three dimensions of the program—the technical, the aesthetic, and the social—with an emphasis on creativity, the imaginative application of new technologies and materials, and the social and political dimensions through design.

BACKGROUND

THE PACE of technological change is unprecedented and the impacts of technological innovation are often profound. There is also a growing recognition that significant challenges await us in the years ahead if the nation is to compete successfully in a highly competitive global economy, while also seeking to share social well-being and restore the natural environment upon which all life—and technology—depends. While uncertainty and insecurity clearly exist, so do opportunities for innovative and creative thinking; traditional disciplinary boundaries are more permeable, and new connections can be forged.

Encouraging future engineers to 'contemplate their work in the larger context,' NSF Acting Deputy Director Joseph Bordogna [1] enlists philosopher José Ortega y Gasset to support his call for a greater emphasis on integration. Ortega writes, 'The need to create sound syntheses and systemization of knowledge . . . will call out a kind of scientific genius which hitherto has existed only as an aberration: the genius for integration. Of necessity this means specialization, as all creative effort does, but this time the [person] will be specializing in the construction of the whole'. With this as his inspiration, Bordogna asserts:

'Design becomes the leverage point of determining a product's impact on our lives. In this sense, when we educate any of our students engaged with the incorporation of technology we must instill in them not only technical expertise but we must also lead them to examine and question the goals and value-system of the society they are being prepared to build.'

To achieve these goals engineering design education must provide concrete experience in integrating first-rate technical competence with a thorough understanding of the social and cultural context of technologies and the design processes that shape them. The School of Architecture and the School of Humanities and Social Science (H + SS) saw this as a call to action for a proposal that could inform the general engineering community around us. This multidisciplinary approach to building science and engineering design education demands that the relevant knowledge base be expanded to include facility and expertise not currently being required of engineering students. This is often taken for granted by architectural educators, the collision of the formal with the social and technical through design, is a radical shift for engineering pedagogy.

Over the past eight years, supported by internal and national grants, professors from the Schools of Engineering, Architecture, and Humanities and Social Sciences (H&SS) have been working together to develop an inter-school, multidisciplinary design pedagogy. According to a survey that we conducted of industrial and product design programs around the country [2], these programs fall into two categories: one stresses technical or engineering expertise (housed in an engineering school), and the second stresses aesthetic or arts expertise (housed in an arts and/or architecture school). Since there is little, if any, overlap, they fail to integrate the insights and expertise of each other. Moreover, neither incorporates into the curriculum an adequate expertise in how products shape social and cultural relationships and how in turn these relationships shape products. The challenge is to provide training and experience in integrating all three kinds of expertise as equal

1

Design in Movement:
The Prospects of Interdisciplinary Design

FRANCES BRONET AND JOHN SCHUMACHER, *Rensselaer Polytechnic Institute*

**In what ways can architectural design define identity, or alternatively, challenge received identity? Based on a design pedagogy that experiments with both defamiliarization and dance, we distinguish two ways: (1) in the ready-made space of the eye, as meanings other than the received ones can emerge, or (2) in the space-in-the-making of the body, as the reading of meaning in ready-made space alone is challenged, and meaning also emerges in the order of our mutual movement with one another.
Our pedagogy represents a collaboration between an architect and a philosopher, both actively engaged in interdisciplinary education within and between their respective schools as well as with the School of Engineering. From the outset, we saw "design in movement" as a potential framework to foster side-by-side collaboration between disciplines (interdisciplinarity) rather than merely among disciplines (multidisciplinarity).**

IN THE PEDAGOGY OF DESIGN IN MOVEMENT PRESENTED HERE, WE USE dance as the basis for explaining what we mean when we contrast space—or movement *in* space—with movement. We take a certain dance/movement, that of "contact improvisation," as one limit of a continuum, the other limit of which is space (Chart 1). But before we can explain this dance/movement in terms of our design pedagogy, we have to develop the terms themselves. Our starting point is Kenneth Warriner's article, "Defamiliarization: The Tensive Play of Body and Eye."[2]

I
Eye and Body: Ready-Made Space and Space-in-the-Making

In the above-mentioned article, Warriner characterizes "two topologies of movement," that of the eye and that of the body. He refers to the work of Michel de Certeau, who writes "about the way people's descriptions of their situations form their notions of space and time" and about "the prevalence of actions or bodily movements in these accounts, in contrast to images."[3] "Description oscillates between terms of an alternative: either seeing (the knowledge of the order of places) or going (spatializing actions). Either it presents a tableau ('there are . . .'), or it organizes movements ('you enter, you go across,

Chart 1

you turn . . .'). Of these two hypotheses, the choices made . . . overwhelmingly favored the second."[4]

Once we lived entirely within the second hypothesis, for example, in the descriptions of the Hopi: "Distance includes what we call time in the sense of the temporal relation between events which have already happened. The Hopi conceive of time and motion in the objective realm in a purely operational sense—a matter of the complexity and magnitude of operations connecting events—so that the element of time is not separated from whatever element of space enters into the operations.[5] Hopi description, to use Warriner's terms, organizes movements rather than presents a tableau.

Descriptions of contact improvisation dance also involve the same distinction, as the contacters must cultivate a sense of body as opposed to eye, so as not to "interfere with or inhibit contact." Contacters should try to keep "the gaze going with the head rather than focused on the audience or one's partner": "when dancers have established a physical and kinetic familiarity with one another, visual contact can enrich their movement communication without overpowering it."[6] Or again: "Contacters come to regard the geography of the body differently than other types of dancers or pedestrians. Rather than distinguishing the body by its parts [as the eye would tend to do], they think more of body surfaces, as planes of support."[7]

Here Warriner would certainly recognize a reference to body over eye. When a body is related to other bodies in a tableau, the other bodies are here or there, but not with surfaces as planes of support because the bodies are not connected by movements, for example, using one body for support of another. To contact, however, you enter, you go across, you turn, so as to approach another body as a support, thereby turning its surface into a plane of support. Here we have a case of what Warriner calls "the constitutive capacity of bodily action."[8] That is, for the hypothesis of body as opposed to eye, we should speak of bodily actions as making space (space-making actions, not spatializing actions), what we think of as *space-in-the-making*. And for the hypothesis of eye as opposed to

SAMPLE BUILT WORK

FORTIN CONDOMINIUMS, ALBANY NY
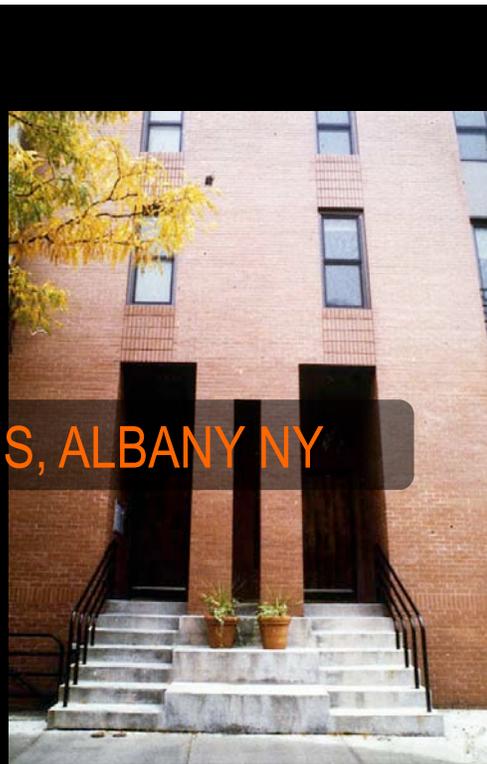
Frances Bronet Associates with
John Tobin & Richard Hoffman   1988

CIANCIARELLI HOUSE I, MONTREAL
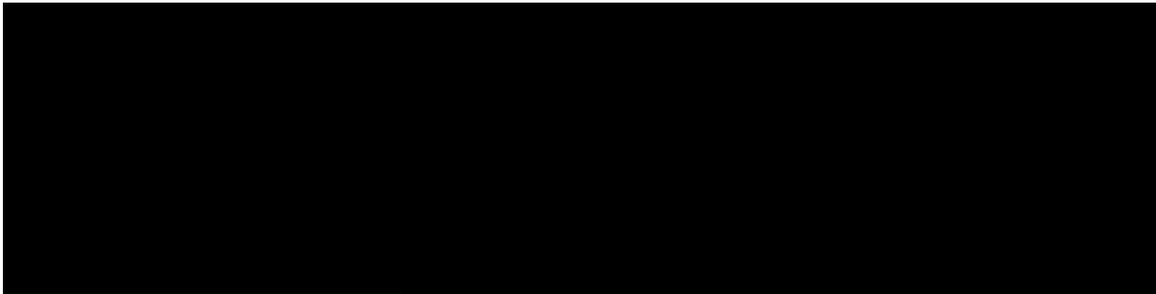
ILE DES SOEURS ROW HOUSING, QUEBEC

CENTRE DESIGN LAURIER, MONTREAL

at Dan S. Hanganu Architect 1989

"MOST STRIKING WORK OF 2006" ~ Daily Gazette

"Without Limits," Metroland

'Spill Out!' is rich with visual delights ~Times Union

"Environment and Dance Merge in 'Beating a Path'" Daily Gazette

SAMPLE DANCE INSTALLATIONS

Dances with Buildings," Albany Times Union

"Venue adds mystery to Beating a Path," The Daily Gazette

"Trailblazers," Metroland

"Oh, What a Tangled Web," Troy Record

"ONE OF THE YEAR'S MOST INNOVATIVE
REGIONAL PERFORMANCE WORKS"
~ Times Union

SPILLOUT

with Ellen Sinopoli Dance Co. **2006**

BEATING A PATH

with Ellen Sinopoli Dance Co. **1999, 2001**

DANCE INFUSION

Design 1, RPI, with Doug Verone, Terry Creach dance companies **1997**

EMBODIED
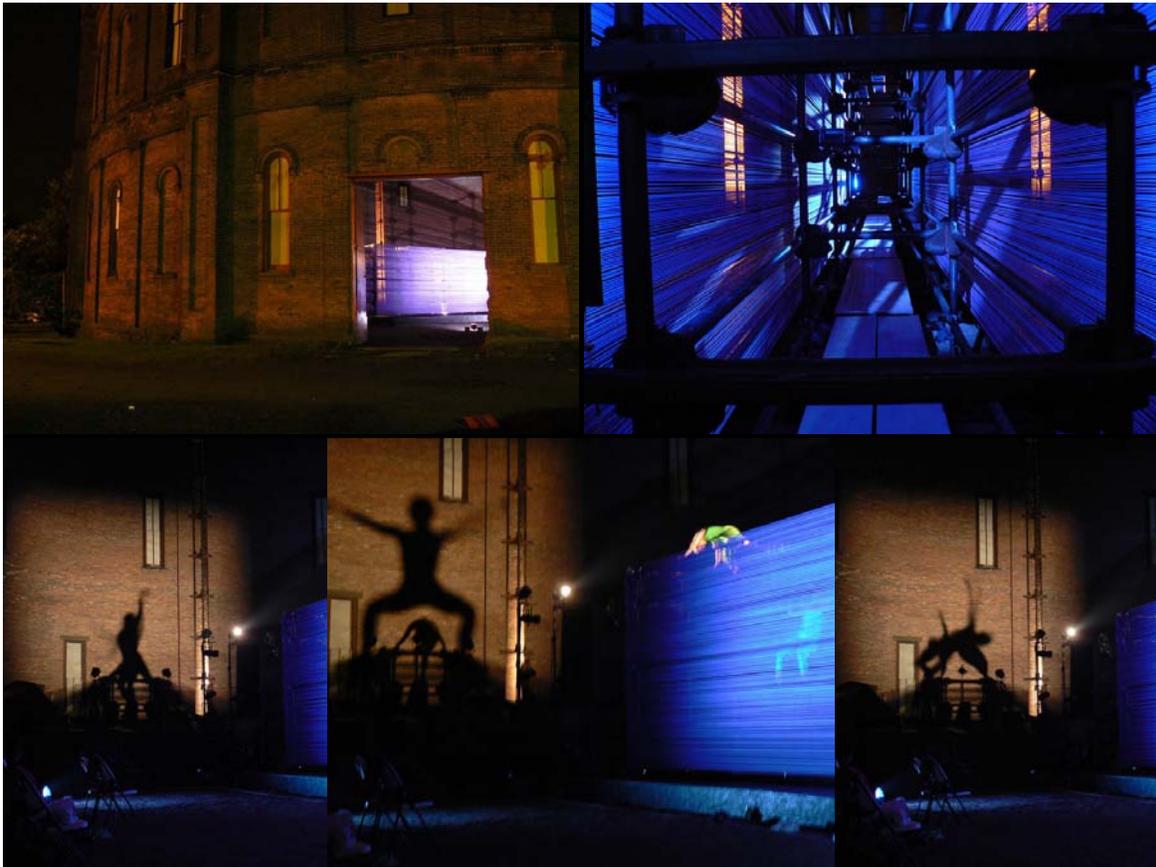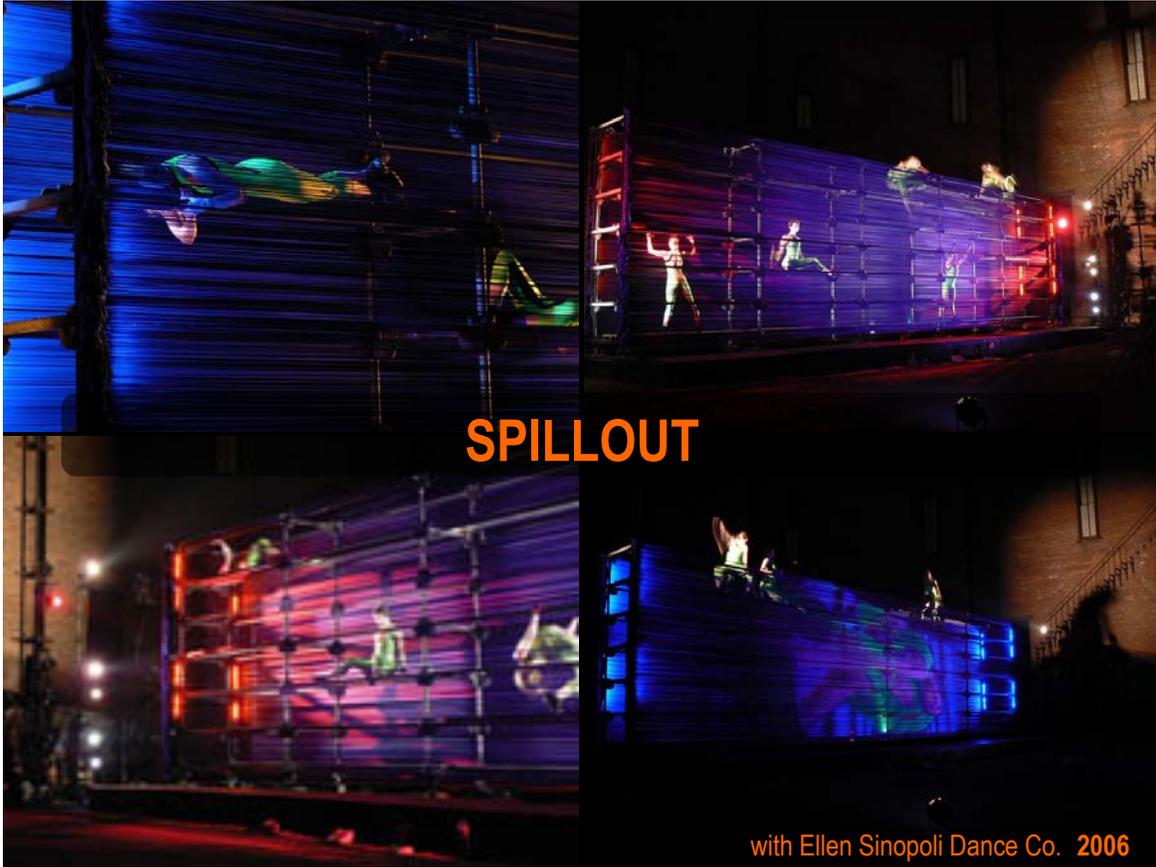
Design 1, RPI, with Elizabeth Streb **1997**

SAMPLE FUNDED RESEARCH

DESIGN IN MOVEMENT, 1999-2001

PRODUCT DESIGN IN INNOVATION, 1999-2003

DESIGN AS A CREATIVE MODEL FOR TECHNICAL EDUCATION, 2001-2010

Design as a Creative Model for Technical Inquiry is a multi-year project funded by the National Science Foundation to better prepare future teachers for the complex, multidisciplinary challenges of the twenty-first century.

National Science Foundation Funded Research

FUNDED COMMUNITY OUTREACH

SOUNDOFF AT THE APPROACH, Rensselaer County Riverfront Arts Fest, 1993

TROY GATEWAY INITIATIVE, funded by the Louis and Hortense Rubin Fellowship

SOCIAL SPACE AND ELECTRONIC INSTALLATION, with Miller, funded by National Endowment for the Arts

CONSTRUCTING A TWO-WAY BRIDGE with Campbell, Eglash and Miller, funded by the Department of Housing and Urban Development