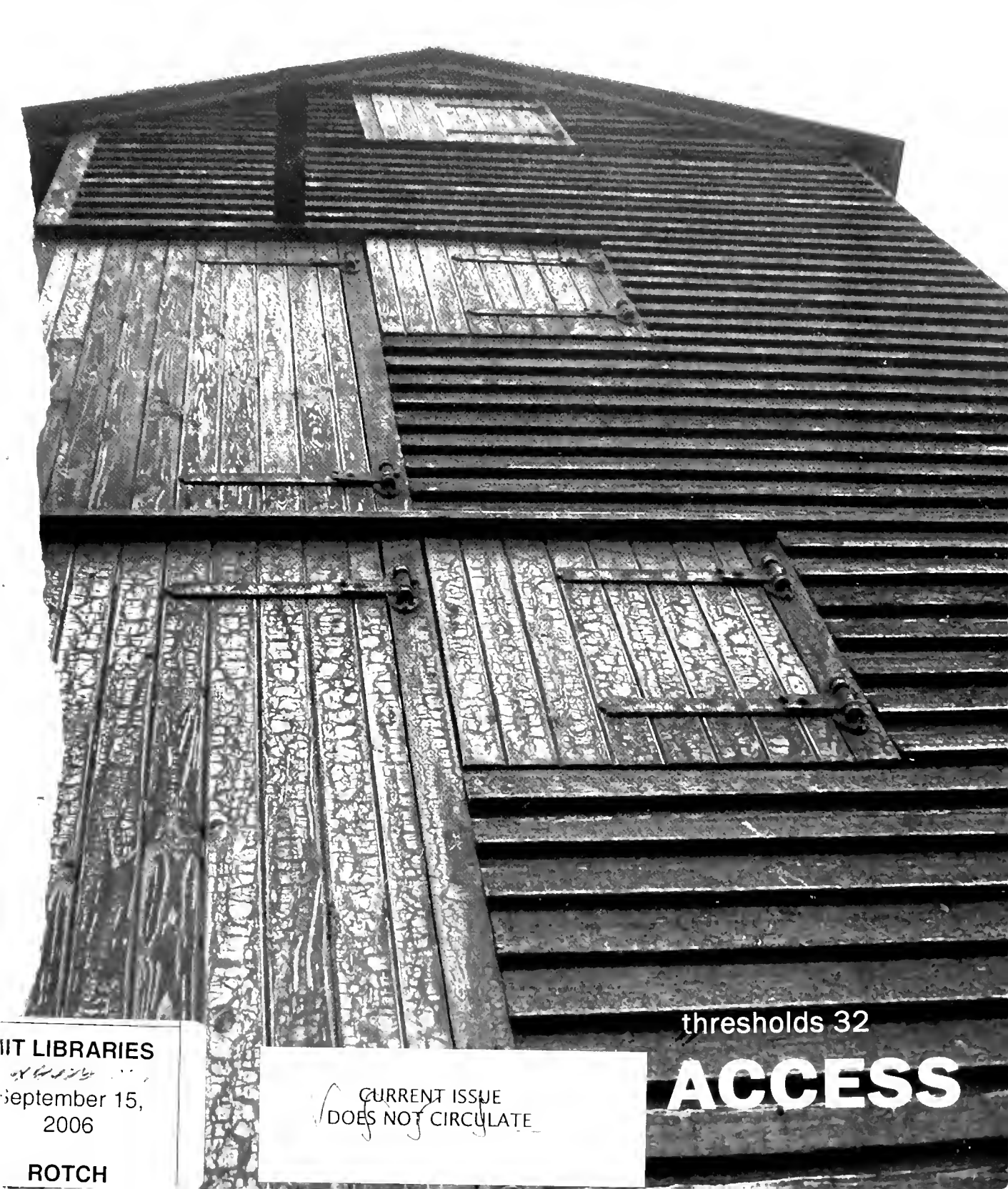
3 9080 02829 6561



thresholds 32

ACCESS

MIT LIBRARIES
September 15, 2006
ROTCH

CURRENT ISSUE
DOES NOT CIRCULATE

Editor

Z. Pamela Karimi

Assistant Editor

Sadia Shirazi

Graphic Designer

Pantea Karimi

Advisory Board

Mark Jarzombek, Chair

Stanford Anderson

Dennis Adams

Martin Bressani

Jean-Louis Cohen

Charles Correa

Arindam Dutta

Diane Ghirardo

Ellen Dunham-Jones

Robert Harwood

Hassan-Uddin Khan

Rodolphe el-Khoury

Leo Marx

Mary McLeod

Ikem Okoye

Vikram Prakash

Kevin Nute

Cherie Wendelken

Gwendolyn Wright

J. Meejin Yoon

Patrons

James Ackerman

Imran Ahmed

Mark and Elaine Beck

Tom Beischer

Robert F. Drum

Gail Fenske

Limmud Projects Inc.

R.T. Freeham Smith

Nancy Stieber

Robert Alexander Gonzales

Jorge Otero-Pailos

Annie Pedret

Vikram Prakash

Joseph M. Dux

Richard Skendzel

Cover image and theme photographs by Pantea Karimi
Nest Huts, Hastings, England, 2009

thresholds 32

ACCESS

Editorial Policy

Thresholds is published biannually in spring and fall by the Department of Architecture at Massachusetts Institute of Technology

Opinions in Thresholds are those of the authors alone and do not necessarily represent the views of the editors

No part of Thresholds may be photocopied or distributed without written authorization

Thresholds is funded primarily by the Department of Architecture at MIT. Alumni support also helps defray publication costs. Individuals donating $100 or more will be recognized in the journal as patrons

Correspondence

Thresholds

Massachusetts Institute of Technology
Department of Architecture, Room 7-337
77 Massachusetts Avenue
Cambridge, MA 02139

thresh@mit.edu
architecture.mit.edu/thresholds/

© 2006
Massachusetts Institute of TechnologyISSN 1091-711X
PSB 05-12-0888

Designed by Pantea Karimi
www.redcanvas.net

Printed by Puritan Press, Hollis, NH
Text set in Palatino Linotype, digitally published using Adobe Indesign

Acknowledgements

I would like to thank Pantea Karimi, Shadi Kashefi, Frank Forrest, Taha Dorsey, Sadia Shirazi, Deborah Kully, Matthew Benjamin Matteson, Robert Irwin, Lauren Kroiz, Mechtild Widrich, Razan Francis, Lucia Allais, Anne Deveau, Evlem Basaldi, Jack Valleli, Rebecca Chamberlain, Minerva Tirado, Jose Luis Arguello, Melissa Bachman, Elizabeth Pierre, Hamid Karimi as well as Professors Mark Jarzombek, Stanford Anderson, Arindam Dutta, Afsaneh Najmabadi, and Nasser Rabbat for their continued and tireless help and support

*This issue is dedicated to Adele and Kamran

Contents

Introduction

Z. Pamela Karimi

All progress and development in life depends on access, whether it is the ability to inhabit certain spaces, having essential resources available, or having access to important information and ideas. Access can be self-perpetuating, with each opened door offering a vista of even greater possibilities and opportunities. But many doors are at risk of again being closed, and the thresholds that some have crossed are denied to others. As technology and globalization draws the world's cultures and societies ever closer, the challenges of access granted and access denied confront us today like never before.

Recently, the world's largest archive of Nazi Germany, containing important information about victims of the Holocaust, was finally opened to historians. Meanwhile, hundreds of Europe's Afghani immigrants went on hunger strike to protest deportation, as their countrymen back home still smuggle themselves out of war and destitution into more stable and prosperous countries. As MIT began to unveil an online project, allowing educators, students, and self-learners around the globe to access the school's course materials, the Iranian government denied its citizens access to the BBC's Persian language Internet site. Doors being opened. Doors being closed.

Restricted access to certain geographical areas as well as architectural and virtual spaces can be found in all cultures throughout history, transcending belief systems and nationality. But the post-9/11 world has taken such phenomena to a new level, denying access to many people around the globe with the justification of improving security. In this context, the question of accessibility becomes even more topical and omnipresent. Today's new laws and regulations regarding accessibility have shaped my desire to address this topic from various viewpoints.

Even commonplace means of access that we take for granted have involved stories behind them. As contributor Mark Jarzombek reveals, the history of the corridor incorporated numerous cultural formations that served various purposes before becoming a typical feature of modern office buildings, residential housing, and schools. A different perspective is offered by Michael W. Meister, who elaborates on the topic of Early Hindu temples, showing the multiple ways in which the "access and axes" in these buildings both embodied the divine and defined people's access to sacred zones, thus working as "machines for social order." By looking at the Mosquée and Institut Musulman de Paris, Naomi Davidson analyzes the ways in which a single architectural space in early-twentieth-century Paris simultaneously promoted and discouraged access to Islamic tradition and faith.

These authors raise a broader question: What criteria determine access? At times it is based on economic, psychological, physical, geographical or political factors; other times it is decided by nationality, religion or ethnic background. For centuries, Jewish communities in Europe and the Middle East were not granted easy access to many places outside of their neighborhoods. Nigel Parry highlights a similar phenomenon relevant to our time. He describes the work of the foremost British graffiti artist, Banksy, who covers the concrete barrier along the West Bank with ironic murals that are pregnant with deep meanings regarding the concept of accessibility. Such barriers to access are inseparable from issues of history, memory, nostalgia, nationality, politics, and power. Garyfallia Katsavounidou's article considers these ideas as she tells the story of millions of people displaced in the last century during the compulsory exchange of populations between Greece and Turkey. The story is told through the Egnatia installation project, which could be described as a "laboratory of memory" that hopes "to leave traces of collective memories now forgotten and obliterated." The project attempts to preserve the past

for future generations, recalling the words of historian Pierre Nora: "Modern memory is, above all, archival: it relies entirely on the materiality of the trace, the immediacy of the word, the visibility of the image."[1] In this sense, Nicole Vlado presents a more personal method of (re)collecting and accessing memory as she makes casts of her own body parts in various postures and positions.

Restricted access is not just limited to certain buildings and geographical areas. Similar limitations extend also into the academic realm. The histories of art and architecture rely partially on archival evidence. In *Archive Fever: A Freudian Impression* (1995), Derrida reminds us how turning Freud's house in Vienna into a museum allowed the secretive to become public. Ole Fisher's article explores the ways in which the accessibility of such sources affect our perceptions of past scholarly work as he explores the difficulty of access to Nietzsche's archive both at the time of his illness and throughout the years following his death. William Brumfield, on the other hand, depicts the ease of exchange of architectural knowledge between Russia and the United States between 1870 and 1917, discussing how "no other form of endeavor in Russia expressed this relation to America as clearly as architecture, with its emphasis on both the pragmatic and the cultural."

Throughout history, it has been possible to gain access to a restricted place through masquerade and transvestite disguise. Mikhail Bakhtin describes how the medieval carnival brought a leveling of performer and spectator, where boundaries were eliminated and the distances between people were suspended. Over the centuries, homosocial spaces gained ground in many Islamic societies due to the inaccessibility of the harem to most men, and to the forbidden nature of public spaces to most women. Talinn Grigor demonstrates how gender-segregated buses in today's Tehran both reflect and overcome such past limitations. On a different note, photographs of Robert ParkeHarrison and his wife Shana depict "exaggerated" accessibility to the earth's natural resources, raising questions of when and where we should voluntarily limit ourselves. Sarah Stevens addresses a similar issue by looking at a recent history of mass marketing attempts to provide American consumers with over-saturated access to retail pharmacy shopping. And Elliot Felix and Douglas and Mitchell Joachim suggest a more humane approach to our hyper-consumerist and rat race life through their exceptional architectural proposals for New York City. Other articles deal with the concept of access in a more abstract sense, and yet all contributors insist on greater opportunity for accessing information, and reaching better solutions for architectural design. Thus while each author brings his or her own unique perspective, this issue can be considered a collective project, addressing a common area of concern that presents not only historical topics but also indirectly speaks to the mood of our post-9/11 world. In so doing, this issue of *Thresholds* hopes to generate discussion over the new challenges we face in this world. It is clear that access to ideas, concepts, and social networks that inspire creativity in artistic and architectural endeavors is important, but a far greater concern is ensuing that people throughout the world have access to basic human rights. The doors must be opened.

Notes

1 Pierre Nora, "Between Memory and History: Les Lieux de Memoire," *Representations* 26 (Spring 1989): 13

Figure 1. Felice Della Greca, manuscript treatise of 1644, house and garden plan, unbuilt

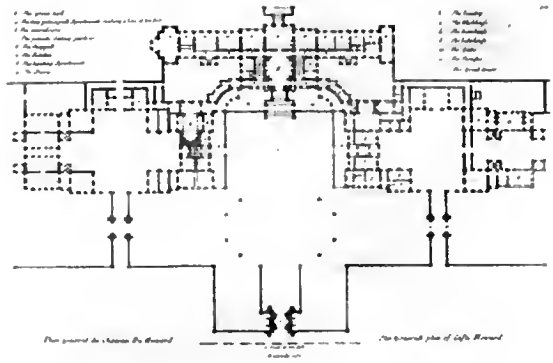


Figure 2. Castle Howard, York, commissioned 1698 John Vanbrugh

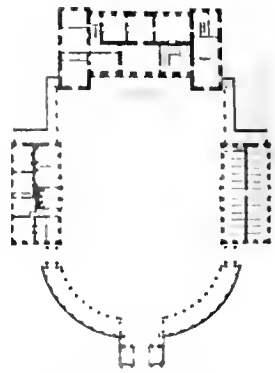


Figure 3. Burlington House, Picadilly, London, 1665-8. James Gibbs and Colen Campbell

Mark Jarzombek

From Corridor (Spanish) to Corridor (English); or, What's in Your Corridor?

Corridors these days are so ubiquitous that one can hardly imagine that they actually have "a history." But up until the 1850s, corridors were a rarity even in large public buildings, and insofar as they were even mentioned in the literature of the late eighteenth and early nineteenth centuries, they were inevitably described as dark and lonely places, sometimes even haunted. Marquis de Sade imagined them filled with trap doors; Charlotte Brontë visualized them as places for restless soul-searching; George Byron made them into convenient props for the Romantic soul. "But glimmering through the dusky corridor," he wrote in 1814 in *Corsair*, "Another [lamp] chequers o'er the shadow'd floor."[1] But by 1877, when Henry James wrote *The American*, the corridor had come of age in the world of business and government.

> He passed his arm into that of his companion and the two walked for some time up and down one of the less frequented corridors. Newman's imagination began to glow with the idea of converting his bright, impracticable friend into a first-class man of business.[2]

The cause of this turn-around will be the subject of the next paper. Here, I will only have space to discuss the pre-history, so to speak, of the corridor. I should add that I mean very specifically the *word* corridor, and not just any long passageway. *Nomen est omen.*

The purpose of this exercise is to add a layer of thought—modest perhaps, but not insignificant—to our understanding of the formation of modern spaces. I would like to suggest that the corridor's history engages various cultural formations before becoming the typical feature of the modern office and school; it had to jump across national boundaries (from Spain to England) and across the domains of various building typologies (from defensive military architecture to domestic architecture to civic architecture), migrations that do not easily anticipate the word's eventual position in architectural vocabulary as one of the last significant neologisms, becoming, in fact, a flash point in debates about modern epistemological conceptions. In today's world, where corridors have been often criticized for their association with the bureaucratic mind-set, it might come as a surprise that the corridor, at its most fundamental historical level, is a legacy of the Spanish Empire and is thus connected with a particular type of modernism, the origins of which have nothing to do with bureaucracy, but with a mid-seventeenth century image of a well-oiled imperial world.

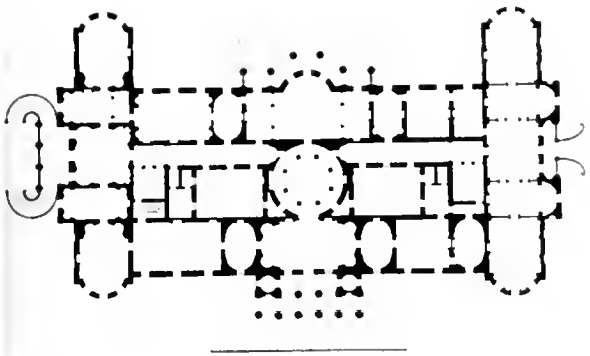


Figure 4 Luton Hoo, Bedfordshire, 1772 Robert Adam

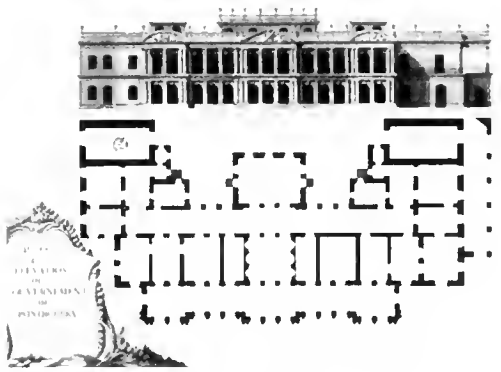


Figure 5 The Government House, Pondicherry India, 1752. Dumont

The "Coridoor" and its Origins

A *corridor*, initially, was not a space but a person, one who, as its Latin root suggests, could "run fast"; that at least was its primary definition in the famous *Tesoro de la Lengua Castellana o Española* of 1611, the first dictionary of the Spanish language. The dictionary lists several other meanings. A *corridor* could be a scout sent behind enemy lines to probe their defenses; he could be an intergovernmental messenger, and even a negotiator, arranging, in particular, mercantile deals and marriages.[3] In the sixteenth century, *corridore* were still in use by the Spanish government criss-crossing Europe with money, messages and confidential reports. The word's secondary meanings have to do with protected spaces on fortifications that allow for rapid communication or deployment of troops. This was the usage of the Italian version of the word, *corridoio* (a "running place"), which, as far as I can determine, never referred to a person. An early documentable example of the word can be found in Giovanni Villani's treatise on the history of Florence, the *Cronica Universale* (1324), where the author refers to a *corridoio* on the city walls of Florence.[4] One of the most famous *corridoio* of all time was erected in that city in 1565 by the Medici to connect the Pallazo Pitti with the Uffizi, running not around the city, but right into its center.[5]

This etymological history reminds us that up until the seventeenth century, in architecture proper, there were no corridors; a palazzo was entered by means of an *andito* (from the word *andare* "to go"), which might have given way to a *camminata* [6] (a "walking place") or a *passaggio*, which, if it was running along a courtyard might have been called, from the fifteenth century onward, a portico. Neither Palladio nor Serlio ever used the word corridor. They rarely even had hallways in their designs given that villas were usually composed of tightly interlocked rooms bound within pilastered skins.

One of the first documentable uses of the word in architecture that I have been able to trace is in a plan for a house designed in 1644 by Felice Della Greca in which the building's *entrata* is connected with the *giardino* in the rear by means of a "*coritore*," (the spelling no doubt reflecs the Italian's unfamiliarity with the term).[7] This *coritore* was not particularly grand and could easily have been mistaken for an *andito*, but it was precisely *not* an *andito*; nor was it a *corridoio*, for it had no military purpose. In emphasizing the equivalency between a "running

man" and a "running space," it was a status symbol, meant to imply that its owner was being kept abreast of world events by fleet-footed messengers. And so, in an almost magical moment of transliteration, from walking to running, and from local politics to world politics, a new element in the semantics of prestige was born, emphasizing not the dignified pace of old along an *andito*, but a pace that was purposeful and targeted—a pace, one has to add, that was of a modern dimension. For if there is anything that clearly marks the transition to modernity, it is the need for speed; and for the rulers of the Spanish Empire, who had to bring together information from Austria, Holland and the far-reaching colonies, speed was a necessity. Couriers were known to cover up to 185km per day, meaning that the Spanish commanders frequently got their information long before their opponents did.[8] The imprint of Spanish courier system is still with us in the word "taxi," which derives from the name Tassi, the family who were put in charge of facilitating the flow of Spain's European dispatches.

Anglicanizing the *Corridor*

The shift between an Italian *andito* and an Italianized-Spanish *coritore* might have been too subtle or perhaps even too regional to have changed architecture in any significant way if the term had not been adopted by the English, who used it not for just any building, but for one of the most prestigious palaces of the time, the huge Castle Howard, commissioned in 1698 for Charles Howard, third Earl of Carlisle. The building, designed by John Vanbrugh, has a central body that consists on its *piano nobile* of a great square hall with the principal apartment, also square, directly behind it. One stretch of space, labeled *corridoor*, cuts across the front of the great hall and curves around toward the side wings. A second *corridoor* runs along one side of the entire stretch of the apartment wing. One could, of course, argue that long thin buildings by necessity required corridors, but this is easily disproved if one looks at the ground plan of Petworth House, built more or less at the same time as Castle Howard; despite its vast frontage, it had no corridors, apart from the usual cramped passageways in the servant's quarters. One could also compare Castle Howard with Burlington House (1665-8) by James Gibbs, which was, of course, modeled on Palladian villas where there were no corridors (Fig. 1 & 2).

So why do *corridoors* suddenly appear in this building? It could be explained by the fact that many in Vanbrugh's generation, had a fascination for things Spanish. On a culinary front, the dish "Spanish olio," a mixture of meat and vegetables, had become all the rage in London, as had the English translation of Don Quixote.[9] Vanbrugh even wrote a play set in Spain, *The False Friend* (1709). One also has to take into consideration that in the late seventeenth century military terminology had begun to spread in common language.[10] Palaces were even laid out with fake fortifications, and the *corridor*, "a foreign word of Italian or Spanish extraction," as Ephraim Chambers defined it somewhat loosely in his *Cyclopaedia*, (ca. *1680*-1740), was still a pre-eminently military term.[11] Vanbrugh was certainly knowledgeable about military architecture as he had once thought of embarking on a military career. But the corridors of Castle Howard have to be understood within a larger perspective. Charles Howard, a strong supporter of the Whigs, was a prominent figure in the politics of the age, a minister for William III, member of the Privy Council and also, briefly, Lord of the Treasury. William III (1650-1702), a Dutch aristocrat, ruled England together with Mary II, and allied himself with the Spanish against the French who had invaded Holland in 1672. Once installed as King of England, he maintained close relations with Spain, signing the Treaty of Madrid in 1670 and the Treaty of Windsor in 1680 and another in 1685, all aimed to rid the Caribbean of French buccaneers. The treaties also formally launched the English Caribbean expansion, with Britain taking formal control of Jamaica and the Cayman Islands and thus establishing a strong foothold in the lucrative sugar industry.

The warm relations between England and Spain paid off in the War of the Grand Alliance against France with a victory for England and Spain. The war came to an end in 1697, one year before the commissioning of Castle Howard, which means that the building served purposefully and ostentatiously as a proclamation of England's arrival on the world stage. In that respect, it was the predecessor to the more famous Blenheim Castle, also designed by Vanbrugh though with the help of William Hawksmoor, which, as mandated by Parliament, celebrated England's victory over the French in a battle at Blenheim, Germany. That building too had *corridoors* running away from the huge main hall. It is not an accident that in Colen Campbell's 1715 *Vitruvius Britannicus* Blenheim Castle and Castle Howard were the only two buildings among the dozens featured in the book that had corridors. The word was novel enough, however, that Vanbrugh, in a letter to the Duchess of Marlborough, felt the need to explain it: "The word Corridor, Madam, is foreign, and signifies in plain English, no more than a Passage, it is now however generally used as an English Word."[12] The condescending casualness of the explanation should not belie the implications of this innovation. The *corridoors* of

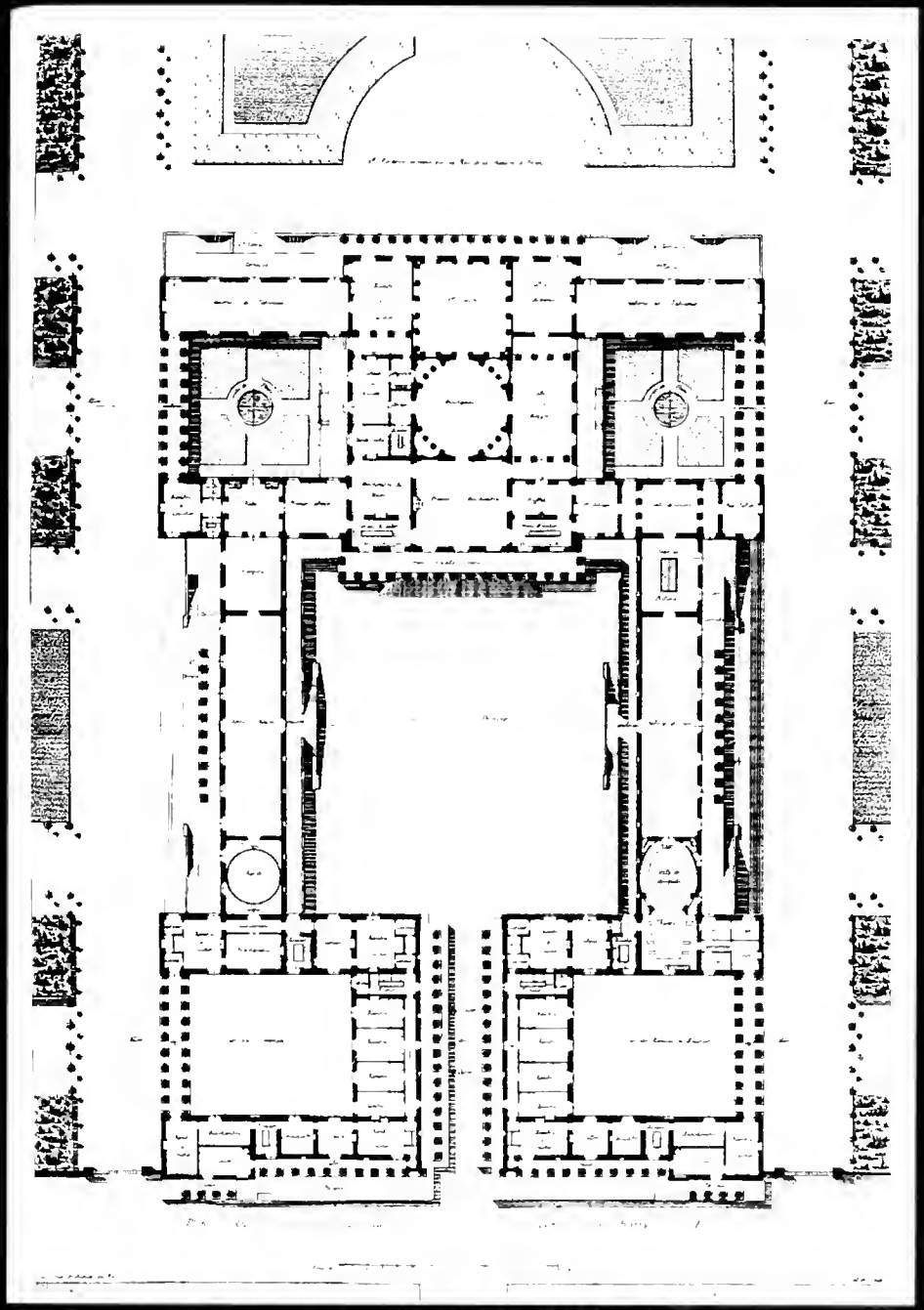


Figure 6. Design for a *Grande Maison*, unexecuted, ca. 1780. Claude Nicholas Ledoux

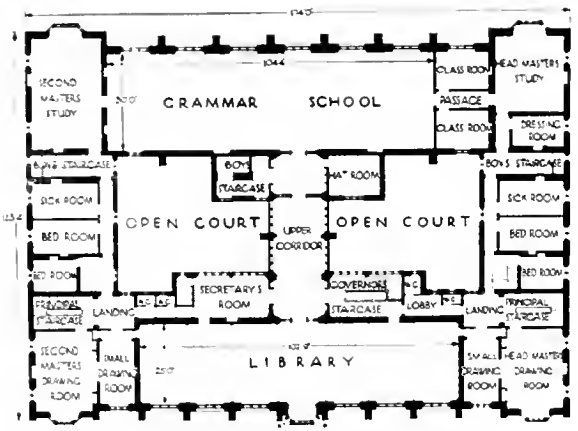


Figure 7. King Edward's School, Birmingham, 1838. Charles Barry

Castle Howard with their purposeful overlapping of the military and the political, demonstrated, in the language of architecture, England's imperialist intentions and its usurpation of the technology associated with its new status as a colonial empire, namely speed.

It was left to Robert Adam in a house now known as Luton Hoo (1772) in Bedfordshire to tame the corridor and coordinate it with the ideals of Italian planning (Fig. 3). Because the house was designed for the noted Tory, John Stuart, 3rd Earl of Bute (1713 -1792), the corridor was clearly meant to reflect the impression of majesty the Tories, by then in control of English politics, wanted to see expressed in their architecture. Stuart, on the accession of George III in 1760, was the king's Privy Counselor and for a while even Prime Minister (1762-3), famous for having arranged the marriage between George III and the German Princess Sophia Charlotte of Mecklenburg-Strelitz. In 1763, John Stuart negotiated the peace treaty between England and France that ended the Seven Years War. Though the treaty was not popular in England where many thought that Stuart, a Scotsman, had been too soft on the French, history has born out the fact that the treaty, whatever its weaknesses, had established England as the world's chief colonial empire.

Luton Hoo, which served as Stuart's retirement estate, was clearly meant to commemorate his international career. A wide corridor cleaves the house into two and terminates in grand staircases at both ends.[13] Matching oval spaces to the right and left of the central Salon serve as transitions between the corridor and the bedroom suites. The integration of the staircases with the placement of bathrooms, "powdering rooms," and service stairs in the shape of a flat U are also innovative. The very public and the very private have been extracted from the plan, so to speak, to be placed within their own circulatory core. The rooms in the house were not viewed as spaces of transit to other rooms, as was usual, but relatively tranquil entities, dialectically distinct from the bustling activities of the circulatory system. In fact, one could see the "served spaces" as having been freed from the clutter of the "service spaces" so that the served spaces, at the periphery, could better take command of the views, the landscape and gardens, as designed by the most famous landscape designer of the day, Capability Brown.[14]

John Stuart was considered one of England's leading botanists, and his extensive library with some thirty thousand volumes—one of the most complete scientific libraries in Europe—dominates the entire right-hand flank of the design. Perhaps one can see in this an early example of the shift of the corridor from a political space to an epistemological one.[15] I would thus venture to suggest that the building was designed as an anthropomorphic entity, with the Great Hall, the heart; the Salon, the head; the Portico, the eye; the two enclosed courtyards, the lungs; and the corridor, stairs and bathrooms, the circulatory system. The military interpretation is, however, also still possible, for the plan, unusual even for Adam, has unmistakable similarities to the Government House, in Pondicherry India, completed in 1752 (Fig. 4), which had a series of rooms accessed from the rear by a continuous corridor,[16] except that at Luton Hoo, speed had been separated—more so than at Castle Howard—from program, this being, very truly, the prototype of the modern corridor. The corridor, in other words, did not bring one into the depth of the building, but to a threshold, both real and conceptual—a within in the within.

In France, in the meantime, the word *corridor* also began to make its way into the architectural vocabulary, but one rarely sees the word anywhere on a plan other than in the servant's quarters, as can be seen in the design for a *grande maison* of Claude Nicholas Ledoux, for example, from about 1780 (Fig. 5). It would have been anathema to culture of the French elite to have had a corridor in a bedroom suite where the spatial alignment of rooms was less important than the degree of intimacy which was modulated by a series of ante-chambers and where privacy of bodily functions was often a non-issue, the king himself often receiving diplomats while dressing.[17] Furthermore, the Palladian imperative to work without internal circulation—carried forth in mid-seventeenth century designs like that for the Barberini Palace (161628-38)—remained

a tradition in France until well into the nineteenth century. As a consequence, the corridor as a significant element in design remained rare in France. Beaux-Arts architects would inevitably use what we today might call courtyard-corridors, but which they consistently called *galleries*, *colonnades*, or *colonnades couvert*, with their allusions to historical precedent.

The Darkening of the Corridor

Despite the innovations of Castle Howard and Luton Hoo, the corridor was in truth a relative rarity even in England and especially during the Georgian and Regency eras, when architects remained strongly committed to the Palladian ideal.[18] William Kent's Holkam Hall (1734) is just one example, even though the plan struggles to maintain cohesion in its arrangement of rooms. By the turn of the nineteenth century, the corridor had certainly lost its mystique and came to be equated not with the world of international power-brokerage, but with remote passageways in castles and the nocturnal wanderings of old men in creaky mansions. Rarely used in architecture, corridor was drifting toward extinction, its functionality now its primary definition.[19] Robert Kerr, author of *The Gentleman's House* (1864), for example, positioned the corridor lower in status to the French-derived gallerie because of its "utilitarian character."[20]

The corridor's negative associations hindered its progress into respectability even in a time when civic architecture was developing rapidly. Well into the 1820s, courthouses, one must remember, did not have corridors of any significance. Lawyers and clients were expected to meet in nearby inns or coffeehouses. Corridors could be found on the lower floor to connect offices, but this was driven by a need for the rationalization of space rather than by civic purpose. Even grand buildings, such as Schloss Wilhelmshöhe by Christoph Heinrich Jussow (1792), the US Capitol (1793) or the Massachusetts State House in Boston (completed 1798) had no corridors insofar as their prototypes were for the most part French (Fig. 6). Even the King Edward's School (1938), designed by Charles Barry, better known as the architect of the English Parliament building, had no corridors (Fig. 7). With this in mind, the redemption of corridic space in the mid-nineteenth century is actually quite remarkable, but that is another story, which will be subject of a subsequent article.

* The second part of this essay "Le Corbusier and the Post-Corridic Alternative" will be published in Thresholds 33

Notes

1 George Byron, *Corsair* (London: Printed by Thomas Davidson for John Murray, 1814), sec xix

2 Henry James, *The American* (Boston Houghton Mifflin Company, 1907), chap xvii

3 *Tesoro de la Lengua Castellana o Española* (1611), ed Martin de Riquer (Barcelona S A Horta, 1943), 363

4 Giovanni Villani, *Cronica Universale*, 227. Villani (1275–1348) was a historian of Florence and a Florentine government functionary who authored this twelve-volume history of the city "ma aggiunsevi per ammenda gli arconcelli al corridoio di sopra." I would like to thank David Friedman for this citation It is possible that the *corridoio* originated with the crusaders, who, often fighting against great odds needed to move soldiers rapidly about the fortifications.

5. The French king Francis I had an underground corridor built between his palace and the residence of the aged Leonardo da Vinci

6 See for example, Canto XXXIV of Dante's *Inferno*, in which he writes, "Non era camminata di palagio la 'v'eravam, ma natural burella ch'avea mal suolo e di lume disagio [It was not any palace corridor, there where we were, but dungeon natural, with floor uneven and unease of light]."

7 For an image of the plan see David R Coffin, *Gardens and Gardening in Papal Rome* (Princeton. Princeton University press, 1981), 161

8. http //www history.ac uk/reviews/paper/macpherson html, Internet, accessed 6 April 2005

9 Edna Healey, *The Queen's House, A Social History of Buckingham Palace* (New York Caroll & Graf, 1997), 10

10 Christopher Ridgway and Robert Williams *Sir John Vanbrugh and Landscape Architecture in Baroque England, 1690-1730* (Gloucestershire Sutton, 2000), 55

11 "Corridor, in Fortification, A Road or Way along the Edge of the Ditch, withoutside, encompassing the whole fortification See Ditch The Corridor is ordinarily about 20 yards broad The word comes from the Italian Coridore, or the Spanish Coridor Corridor is also used in Architecture for a Gallery, or long Isle, around a Building, leading to several Chambers at a distance from each other." See further, Ephraim Chambers, *Cyclopaedia* (Dublin Printed by John Chambers, 1787), available from http //digicoll library wisc edu/cgi-bin/HistSciTech/HistSciTech-idx?id=HistSciTech Cyclopaedia01, Internet

12 Charles Saumarez Smith, *The Building of Castle Howard* (London Faber and Faber, 1990), 54

13 In the 1830s the building was transformed by Robert Smirke

14 I want to thank my colleague Arindam Dutta for pointing out the importance of this particular aspect of the design

15 Another precedent, evoking the still very distant uses of the corridor in the twentieth century, was the Gloucester Infirmary (1761) where we see the emergent institutional culture adopt the manner of the grand house, radically simplified and modified, of course Here the corridor links the two wards, the central hall has become the chapel with the operating room above it on the first floor It was designed, so it has been argued by Luke Singleton The design was made around 1756 Patients were admitted in 1761 See further, http //www british-history ac uk/report.asp?comp id=42309,Internet, accessed 1 April 2005

16 Pondicherry on the west coast of India was a French colony, but seized by the British three times during the eighteenth century My argument, however, is not based on a possible cultural transmission, it is purely based on formal grounds

17 Another comparison can be made with the Palazzo Corsini (begun in 1736) in Rome, which has galleries connecting important spaces and serving to define the structure's over-all geometry Though here too there is a corridor, it is little more than a service-ally, squeezed into the fabric of the building

18 Walpole in Strawberry Hill constructed what today would be called a corridor, but he called it a passage

19 Today we say that panoptic prisons have corridors But Jeremy Bentham called them galleries They were, however, no doubt corridor-like One must also remember that they were not circulation spaces, but optical spaces and free of circulation

20 Robert Kerr, *The Gentleman's House* (New York, NY Johnson Reprint Corp , 1972), 169

Figure 1 Institut Musulman de Paris

Naomi Davidson[1]

"Accessible to all Muslims and to the Parisian Public":

The Mosquée de Paris and French Islam in the Capital

The minaret of the Mosquée de Paris and Institut Musulman rises above its green-tiled roof into the sky of Paris' fifth *arrondissement*, in the heart of the Latin Quarter. Across the street from the Jardin des Plantes' museum campus, its *café maure* and *hammam* (public bath) have long been touted as exotic attractions to generations of tourists making their way through the French capital. The Mosquée, whose construction was completed in 1926, was the metropole's first modern mosque, built with the financial support of the government after the recent passage of the law of 1905, which separated Church and State. A series of complex negotiations between the metropolitan administration, the colonial governments of North Africa, Parisian officials, and Muslim elites ultimately gave form to the institution which to this day serves as the main representative of Islam in France to the French state.[2] The Mosquée and its Institut Musulman embodied its founders' vision of *islam français*, or a "traditional" Moroccan-inflected Islam inscribed firmly within a French republican and laïc, or secular, model. It was through the medium of this republican Islam, at once French and other, that the metropolitan and colonial states administered the Paris region's North African immigrant population during the early decades of the 20th century. The use of Islam as a tool to mediate the relationship between the state and *maghrébin* immigrations signaled the administrations' belief in Muslims' inability to actually be laïc subjects, and their simultaneous inclusion and exclusion in the French republic.

In this essay, I will argue that the architectural and aesthetic plans for the Mosquée and Institut Musulman were essential to the creation and diffusion of *islam français*. The placement of the complex with its "Muslim architectural character" in the heart of Paris' intellectual

neighborhood signaled visually the tension between its role as a secular, cultural, and religious institution. During the period in question, the working class Muslim population of Paris was relatively small and transient, and the Mosquée was imagined by its creators as a space destined for North African and Middle Eastern Muslim elites touring the capital, and non-Muslim French tourists interested in Islam. French Islam, or *islam français*, was enshrined in a space that was inaccessible to the capital's Muslim population because of its geographic location, decor, and religious practices. The Mosquée thus served as a physical manifestation of the paradoxical inclusion/exclusion which the "secular" vision of *islam français* offered Muslims living in France.

On the eve of the First World War, France's position as a political power in the Muslim world was challenged by England's imperial interests in the Middle East. In order to maintain its position as the world's premier "Muslim power," the French administration on both sides of the Mediterranean had to articulate a *politique musulmane* which would allow it to maintain its hold on its empire.[3] The carnage of the First World War and the deaths of Muslim colonial soldiers provided the catalyst to re-launch the campaign to build a mosque for the French capital, which had been afloat since 1895.[4] The idea of a mosque as a war memorial and gesture of gratitude was widely acclaimed across the political spectrum as a powerful propaganda tool, but plans to build a religious site with state funds on metropolitan soil posed the problem of a conflict with the law of 1905.[5] Senator Edouard Herriot, one of the institution's strongest proponents, explained during the parliamentary debates on the question that "there [was] no contradiction" in the state's decision to finance the institution, for what the French and colonial administrations were funding was an Institut Musulman which would allow for the study of Muslim civilization, law, history, and Arabic grammar. In other words, the state was funding a secular site. Yet at the same time, Herriot declared that state was also within its rights to fund a religious edifice since in the colonies "we very legitimately give churches to Catholics, temples to Protestants and synagogues to Jews."[6] Morocco's Resident General Lyautey, who opposed the plan to build the complex, saw the pairing of the Mosquée and Institut as a "cunning" maneuver by metropolitan politicians to avoid controversy over funding a religious site.[7]

I argue that the play between the "secular" and "religious" sites was not merely political slight of hand, but an integral part of the process of defining *islam français*. This vision of Islam was defined implicitly in discussions of where the complex housing the Mosquée and Institut should be built and how it should be decorated. It was this physical site which served as the grounds for negotiating what French Islam would look like. The French supporters of the Mosquée believed firmly that Islam was a religion which invaded all aspects of daily life in both the public and private spheres, and that Muslim rituals needed to be performed in a particular kind of space. Their choice to use a mosque to embody their conception of Islam was thus a logical one, though in fact Muslim ritual does not require a sacralized space, nor does Muslim religious belief accord the visual the same importance it had in this French imagining.[8] Yet of course the Mosquée was not merely a religious site, it was a monument to France's power in the Muslim world, and as such, was a "repositor[y] of meaning" used to make visible France's relationship with its Muslim subjects on a daily basis.[9]

The *islam français* embodied by the Institut Musulman was a system of thought particular to "rejuvenated" Moroccan Islam, whose "isolation" for centuries brought it "closer to the purest [Muslim] belief" but whose encounter with "modern life" and "progress" through the French presence was bringing this archaic Islam into modernity.[10] This new Islam had much in common with French republicanism, or, as President Doumergue explained at the site's inauguration, "the Muslim savants...have exalted the respect of individual dignity and human liberty. They have called for...the reign of...fraternity and equal justice. Democracy has no fundaments other than these."[11] Paris' municipal council's decision to donate the land formerly used by the Hôpital de la Pitié for the complex's construction seemed "curiously predestined" to scholar Emile Dermengham, who noted that Muslim ambassadors frequented the neighborhood during the epoch of Louis XVI.[12] The location of the Institut in the fifth *arrondissement* gave credence to the assertion that the Islam celebrated in the site was compatible with French civilization. As the Préfet de la Seine exclaimed at the site's inauguration, "are we not right next to the Panthéon? Do not the works of the Persian Saadi and the Arab Averroès appear on the shelves of the library" next to the French classics?[13] Thus the Institut, which was always discursively situated in the university district but never described as an actual physical site, made clear that Islam français was compatible with French values without necessitating the abandonment of Muslim intellectual traditions.

It was the Mosquée, rather than the Institut, which did the work of being bound to "Muslim" ritual as filtered through French perceptions of Moroccan practices and

aesthetics. When its proponents discussed the Mosquée's creation, they did not situate it in Paris' intellectual center; that was the space occupied by the Institut. The Mosquée was not discursively situated in any particular neighborhood. It was essential that the site be easily accessible to visitors to the capital, but its precise geographical location was far less emphasized than its design. Its aesthetic character was of primary importance because the Mosquée embodied an Islam which had "a hold on its faithful," requiring them to perform particular rituals in a given setting, since daily life and religious practices were inextricably linked for Muslims.[14] The Mosquée's architects[15] referenced Morocco, whose Muslim aesthetics were much appreciated in France, in their designs so as to assure its appeal to Muslim and non-Muslim visitors.

Nowhere is the tension between the Latin Quarter Institut Musulman and the Moroccan-modeled Mosquée more visible than in a drawing distributed with a commemorative brochure for the site's inauguration (Fig. 1). In the drawing, the Mosquée's complex occupies a virtually empty space. It could be anywhere in Paris, or anywhere in the world. The legends at the bottom right and left corners of the drawing engender further confusion, for the French text identifies the site as the "Paris Muslim Institute" while the Arabic caption refers to "the Paris Mosque and Muslim Institute." In the illustration there is nothing to signal an institute designed to creating links between French and Muslim civilization: what is signaled, not least by the way the eye is drawn first to the minaret towering over the complex, is a Muslim religious site which seems out of place in 1920s Paris.

This was exactly the aim of the site's architects, who were active proponents of the "new architecture" being developed in Morocco, "a collaboration between French science and intelligence with indigenous craftsmanship and tradition."[16] The Muslim elite association charged with the Mosquée's construction voted to give the building "an African architectural character," specifically that of Fez's mosque-medarsa Abou-Inan.[17] This decision was praised by metropolitan architectural critics, who considered that "Muslim constructions, unlike ours, have not evolved and must, on the contrary, remain traditional."[18] Lyautey's Service des Beaux Arts instituted campaigns to preserve entire districts, virtually freezing medinas in time, though Gwendolyn Wright has argued that this was not incompatible with its orientation "towards charming streetscapes that would appeal to French residents and tourists."[19]

The architects' textual description, which accompanied their drawing of the site (Fig. 2) of their project highlights all the elements which the popular press would echo as reasons to visit the Mosquée de Paris.

The site, its architects promised, would "be of the purest Arab style in composition, construction, and furnishing, while keeping in mind modern comfort and the special dispensations the Parisian climate requires."[20] The complex included a restaurant, "accessible to all Muslims and to the Parisian public, where only Arab cuisine prepared with the greatest care will be served," as well as a *hammam* whose management would be "confided to a proven Muslim specialist." The elements associated with religious ritual as described in this document include the minaret, whose description is somewhat cursory when compared with other aspects of the building. The Ablutions Room, "installed according to ritual, and destined for the purification of the body before prayer," led to the patio which preceded the Prayer Room, which was properly oriented towards Mecca. Small changing rooms on either side allowed "Muslims dressed in European clothes to change into ritual clothing for prayer."[21] The section of the Mosquée reserved for prayer would be lit discreetly "so as to preserve mystery and meditation." The promise of "mystery" held out by the Mosquée was enthusiastically received by the press on both sides of the Mediterranean. One newspaper urged its readers to visit the site, arguing that "it will provide a change for Parisians from the cardboard boxes with which one pretends to convey, in expositions, the mysterious charm of the intimacy of African houses."[22] *L'Illustration* recommended a trip to the Mosquée to those who wanted to re-experience the food and color they had so enjoyed on trips to the Maghreb.[23] From the beginning, the Mosquée's founders planned to charge admission to the site from non-Muslim visitors, making it clear that they were fully conscious of its tourist potential.[24]

The Mosquée complex, so celebrated by politicians and the transnational Muslim elite, not to mention *indigènophile* Parisians, played a minor role, if at all, in the lives of average Muslims living in the capital. Nevertheless, national and municipal officials used the *islam français* of the Mosquée as the primary tool to mediate their relationship to the North African immigrant working class. These people, primarily single men, were simultaneously identified by their nationality and by their presumed "Muslim-ness," whether they would have chosen to identify themselves as such or not. If they did in fact engage in Muslim practices, which took place outside of the confines of the Mosquée, these observances were dismissed as "pagan." The small North African population of Paris during this period was saturated with a religion

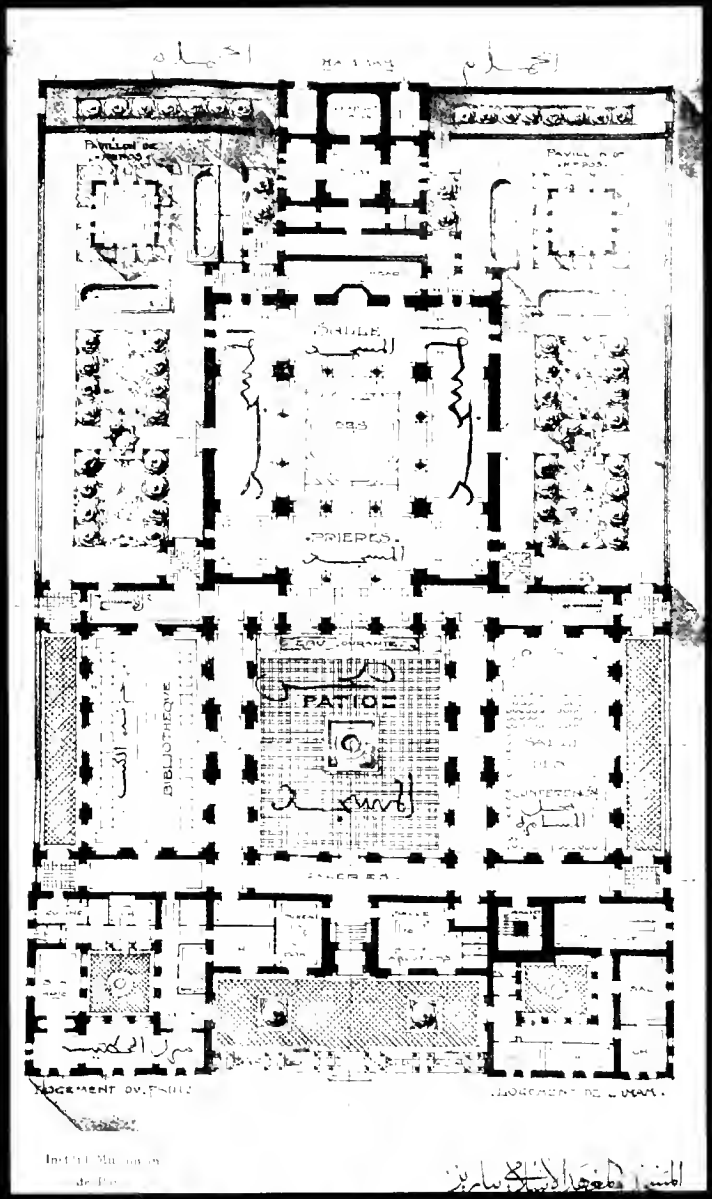


Figure 2. Architects' blueprints for the Mosquée de Paris

which they would not necessarily have identified as theirs, and which thus precluded their ability to ever become *laïc* subjects since their nationality and religion were inextricably linked.

The Mosquée was inaccessible to most of the city's Muslim residents for reasons having to do with its location, the schedules for prayers and holiday observances, and not least the site's well-heeled "clientele." The guests of honor for landmark occasions as well as for the annual cycle of holidays were Muslim dignitaries passing through Paris and representatives of the metropolitan and colonial administrations. Si Kaddour, the site's director, admitted that workers' factory schedules made it nearly impossible for them to travel from the northern and western suburbs where they worked to the center of Paris to celebrate the holidays or to come to Friday noon prayers, yet imams from the Mosquée rarely if ever ventured out to those neighborhoods. As an official sent from Morocco to investigate the activities of Moroccan emigrants explained, the Mosquée "is far from their neighborhoods. It is expensive for their budgets. The *hammam*, the café and the restaurant attached to the Mosquée are luxurious spaces destined for Parisians or for foreigners looking for exotic thrills and in which the shabby clothes and workers' helmets would be a sorry sight."[25] North African nationalist groups in Paris condemned the institution primarily as a piece of colonial propaganda and an "insult to Islam," but also because it was built in part with donations from workers, who were excluded from it.[26] Yet the significant absence of Paris' North African workers from the celebrations of *islam français* was also a conscious choice and not merely the result of the site's inaccessibility. Although French observers qualified their practices as a "very particular Islam, with its sheen of paganism,"[27] emigrants had a well-established and highly organized network of sites for social and religious gatherings. These meetings took place in private homes or in cafés or restaurants, in which people prayed together, or featured visits from religious leaders who traveled from North Africa on tours of the metropole. On these occasions, people would "eat couscous, drink mint tea, listen raptly to stories...hear musicians, singers and dancers..." and raise money for mutual aid projects.[28] Much as the Mosquée remained inaccessible, whether by choice or not, for Muslim workers, their Muslim practices remained inaccessible to the proponents of *islam français*.

In conclusion, the complex originally conceived as a fairly straightforward political move in response to external threats quickly became something much more complicated. The Mosquée de Paris and Institut Musulman came to embody a secular Islam, *islam français*, compatible with *laïcité* though rooted in "traditional" Moroccan Islam. The Institut Musulman celebrated the similarities between French and Muslim civilizations, while the Mosquée's Moroccan-inspired aesthetics guaranteed the "authenticity" of the religious practices to be enacted there. Yet the belief that Muslim practice was intrinsically physical and invaded all aspects of daily life, confounding the public and private spheres, also made clear that the proponents of *islam français* did not actually believe it was possible for Muslims to actually access the *laïc* sphere. This simultaneous move to rhetorically include but practically exclude Paris' colonial North African working class from French republicanism was enacted physically in the site of the Mosquée de Paris. The institution and its modern Islam were as inaccessible to them as was the luxurious museum-like site in the heart of the capital.

Notes

1. This article is drawn from the first chapter of my dissertation, entitled "*Un espoir en devenir*: The Mosquee de Paris and the Creation of French Islams" at the University of Chicago's history department.

2. The Mosquée's director, or *recteur*, serves as the President of the *Conseil français du culte musulman*, the Muslim association that acts as an intermediary between Muslims in France and the French state.

3. For a discussion of this issue, see Henry Laurens, "La politique musulmane de la France" in *Orientales II: La IIIème République et l'Islam* (Paris: CNRS Editions, 2004). See also Pascal Le Pautremat, *La Politique Musulmane de la France au XXe siècle* (Paris: Maisonneuve & Larose, 2003)

4. Paul Bourdarie, one of the Mosquée's strongest proponets, provides a summary of the site's history in "L'Institut Musulman et la Mosquée de Paris," Extrait de *La Revue Indigene* (October-November 1919)

5. The most often-cited article of the law of 1905 is its second, which states that "the Republic does not recognize, salary, or subsidize any religion." The law did not restrict religious practice or the construction of religious edifices, but it did change the way these practices and sites were funded. The situation of the Mosquee as a Muslim site was further complicated because of the way the law was applied in Algeria. A regime of "temporary" exceptions meant that Muslim religious affairs continued to be financed by the colonial administration. For a complete discussion of the application of the law in Algeria, see Raberh Achi, "La separation des Eglises et de l'Etat à l'epreuve de la situation coloniale: Les usages de la derogation dans l'administration du culte musulman en Algerie (1905-1959)," *Politix* 17, no. 66 (September 2004): 81-106.

6. Herriot's complete arguments can be found in the Journal Officiel of July 1, 1920

7. Letter from Lyautey to the Minister of Foreign Affairs, 24 May 1922. AMAE Afrique 1918-1940/Affaires musulmanes/11.

8. As Oleg Grabar has argued, "traditional Islamic culture . . . identified itself through means other than the visual." See his "Symbols and Signs in Islamic Architecture," *in Architecture and Community: Building in the Islamic World Today*, ed. Renata Holod (Millerton, NY: Aperture, 1983). See also Barbara Daly Metcalf's introduction to her edited volume, *Making Muslim Space in North America and Europe* (Berkeley: University of California Press, 1996)

9. I borrow this phrase from Daniel Sherman's discussion of French memorial monuments after WWI. See his *The Construction of Memory in Interwar France* (Chicago: University of Chicago Press, 1999), 216

10. René Weiss, *Reception à l'Hôtel de Ville de Sa Majesté Moulay Youssef, Sultan du Maroc; Inauguration de l'Institut Musulman et de la Mosquée* (Paris: Imprimerie Nationale, 1927), 2

11. Doumergue's speech is cited in Weiss, 36. It also celebrates the friendship between "the Muslim elite and the French elite." Non-elite Muslims in North Africa were solicited for donations to aid in the construction of this site, but as this citation suggests, the Mosquée was not intended for their use.

12. Emile Dermengham, "Musulmans de Paris." *La Grande Revue* 799 (December 1934): 15-21

13. Weiss, 45

14. These sentiments were expressed by many of the Mosquee's proponents. This particular citation comes from a letter sent by Lyautey's deputy to the Minister of Foreign Affairs, 7 January 1916. AN Fonds Lyautey 475AP/95/Lettres au departement 1916. See also Commissariat General à l'Information et à la Propagande. "Projet de loi relatif a l'édification a Paris d'un Institut Musulman" n.d. AMAE Afrique 1918-1940/Affaires musulmanes/11

15. Although the original plans for the site were drawn up by Maurice Tranchant de Lunel, the former Directeur du Service des Beaux-Arts under Lyautey's administration. The architects who would eventually take charge of the complex's construction were Maurice Mantout, Robert Fournez, and Charles Heubes. Mantout and Fournez had also both been employed as architects in the Moroccan Service des Beaux-Arts

16. Henri Descamps, *L'architecture moderne au Maroc* (Paris: Librairie de la Construction moderne, 1931), 1

17. Letter from the Mosquée's first director, Si Kaddour ben Ghabrit, 6 October 1920. AMAE Afrique 1918-1940/Affaires musulmanes/11.

18. Antony Goissaud, "L'Institut Musulman et la Mosquee de Paris." *La Construction moderne* 3 (2 November 1924): 50-55

19. Gwendolyn Wright, *The Politics of Design in French Colonial Urbanism* (Chicago: University of Chicago Press, 1991), 134

20. This citation, and those which follow, are taken from "Note descriptive de la Mosquee et de ses dependances dressée par M. MANTOUT, Architecte de la Societe des Habous des Lieux Saints de l'Islam." n.d. AMAE Afrique 1918-1940/Affaires musulmanes/11

21. Although worshippers must remove their shoes before entering the Prayer Room, no ritual dress is required.

22. *Le Petit Journal* 25 February 1922

23. "Un decor d'Orient sous le Ciel de Paris." *L'Illustration* 26 (November 1926): 582

24. One of the Mosquee's architects, fresh from his success, would in fact go on to construct the Moroccan pavilion of the 1931 Colonial Exposition in Paris. The mosaics used to decorate the Mosquee itself were in fact taken from an earlier Colonial Exposition in Marseille, see the correspondence of the Mosquée's director from March 1923 in AMAE Afrique/Affaires musulmanes/12.

25. Rapport du Lt-Colonel Justinard sur les travailleurs marocains dans la banlieue parisienne. 26 November 1930. AMAE K Afrique/Questions générales 1818-1940/ Emploi de la main d'oeuvre indigene dans la Metropole 1929-1931

26. Messali Hadj, the leader of the Etoile Nord-Africaine, expressed this particular critique. Cited in Pascal Blanchard et al., *Le Paris arabe* (Paris: La Decouverte, 2003), 132

27. Letter from the Prefet de la Seine to the Minister of Foreign Affairs, 13 October 1926. AMAE K Afrique/Questions generales 1918-1940/Emploi de la main d'oeuvre indigene dans la Metropole, 1926-1928

28. Note au Sujet de tournees de Ziaras faites par des Chefs indigenes en France pendant l'annee 1938 par Lt. Huot. 10 October 1938. AMAE K Afrique/Questions generales 1918-1940/Emploi de la main d'oeuvre indigene dans la Metropole, 1926-1928

The Architect's Brother
(The Architect's Brother series, 1993-1994)

Z.Pamela Karimi and Frank Forrest

Picturing the "Exhausted Globe":[1]

An Interview with Robert and Shana ParkeHarrison

Q. Many of your photographs show man's desire to gain "access" to something beyond him through technological inventions and scientific activities. You often depict a devastated land in which man has perhaps gone too far in seeking this access. How can human beings reconcile this striving for "progress" with the negative consequences that often result, environmental degradation being just one?

A. This is a central question for us. In society's constant quest for the carefree life, we often disregard the consequences of technology on our social interactions, and on the environment. The issue of the boundaries of technology and the negative effects it can have on society and the environment are barely considered, if at all. So who but the individual determines the limits of technology? In our work we deal with the best and worst humans have to offer. The works represent our fascination with these issues by visually representing our ability to create, and our ability to destroy. Throughout our work, new technological functions are given to discarded contraptions of contemporary culture. And through our creations and actions we try to explore this very question and contradiction we all face: with convenience and innovation there is a price to be paid. Is there a way to survive and create technologies that could not harm or deplete resources yet still serve our needs? Is there technology that can actually reverse the damage that we have already caused? These are intriguing questions we want to explore. We use the stage of an archetypal landscape, the barren, lifeless field, to act out these questions.

Q. "Earth is too crowded for Utopia" is the title of a recent story on the BBC, suggesting that the global population is greater than the earth can sustain. Considering this, we would like to know the reason why only one person occupies the vast, dreamlike environment in almost all of

Oppenheimer's Garden (Earth Elegies series, 1999-2000)

your photos. Is it time to "take things into one's own hands" or is something else implied?

A. Our work offers more questions than answers. Indeed, each individual can make a difference. By focusing on one person, the viewer is often better able to identify with the actions of the protagonist. But having said that, we have used other people in our images. Currently, this is on our minds even more. Over the years we have built a body of work that is interconnected, while dealing with various concepts. One thread ties the work together and that is the constant protagonist. The ability to work with one person enables us to focus on specific tasks, actions, and rituals in the work. Being physically part of one's work creates a strong connection to the content. We conceive of the images, but also act them out. This performative element roots the work in a physical and personal connection. Focusing each image on one specific person is similar to the idea, "What is the sound of one hand clapping?" Through this single character we are experiencing an intimate and focused perspective that we hope many people can relate to personally. Metaphorically, he is represented alone, seeking ways to reconnect to a lost langnage of the earth. He tries to interpret his relationship to these lifeless and barren surroundings. He is always in search of and exploring ingenious and futile acts that are based more in poetics and hope than in scientific fact. He represents our constant search for fulfillment and hope for a better place, or represents the reckless and damaging tendencies of humanity.

Q. Journalist Christopher Millis once described the figure in your photos as "Charlie Chaplin meets the Sierra Club."[2] Charlie Chaplin's *Modern Times* expresses the fear that people are not controlling their technology, but technology is controlling them. Fritz Lang's *Metropolis* also reflects such an anxiety. Given our own "modern times," this issue is still relevant, and yet most of your photos often give the sense of the individual controlling everything. Is this a utopian vision?

A. The character in our work is not necessary controlling all of his technologies, but is approaching it on the brink of hope and failure. In the images the moment of duality is actually our goal. The idea that this moment or act could end in failure or success truly represents our lives. Constantly, we are faced with failure, yet guided by the hope of success. Found throughout our work is the sense of moments balancing on the brink of falling or flying, healing or harming, mending or destroying. If ever there is a sense in our work that he is represented as controlling everything, it is balanced by the fact that this control will only end in failure, or futility. We understand that as we create we are constantly faced with this revealing notion, with failure comes success and we truly work out of failure and error, but to represent only failure in our vision would be unbalanced. Utopian visions are often doomed by a lack of understanding that perfection can never be attained. Within failure is success. The key is to understand this and use it. It is a force in nature and also a force revealed even in our search for technological perfection.

Q. Whether dealing with DaVinci's wings or Oppenheimer's bombs, the approach in your work remains humorous. The strength of *Cloud Cleaner* lies in multiple meanings: ridiculous and purposeful, silly and serious. In most of your photographs a solitary man in a wrinkled suit and white shirt tries to save the natural world that is in a state of decay. In fact, behind the naive surface of most of your works there is a serious message—a feeling of hope for repairing our damaged planet. Can you elaborate on this feature of your work?

A. We do attempt to layer meanings in our work. We do this to allow for multiple entrances into the work. We are drawn to the work of Anselm Kiefer, Louise Bourgeois, Joseph Beuys, and Robert Wilson, because of this very quality of layering meanings. We explore possibilities for repairing the earth, but equally important we delve into the psychology of individuals, their relationship to others (isolation), to technology and to nature. We enjoy the notion of the absurd often found in black comedy films like *Brazil*. Films by Jacques Tati offer interesting solutions for dealing with the complexities of our political and technological world. We are also drawn to the writing of Samuel Beckett. Existential nightmares actually become precariously balanced with humor. For us it is part of our own sensibilities as artists. We are always faced with failure and the ridiculous as we create our often-idiotic performances before the camera. We work in an impulsive manner, yet we are guided by a strong desire to communicate something about the human condition and our lives. This often does come out as humorous, and serious and thoughtful and deliberate and idiosyncratic.

Exchange (Earth Elegies series, 1999-2000)

Q. *Mending the Earth* and *Suspension* are so startling because they represent impossible tasks. They show at once comically surreal schemes as well as serious anguish and exhaustion from trying to turn a dream into reality. These pictures seem to say, if human beings could easily suspend the movement of a cloud or patch up a damaged land, or even turn themselves into machine for producing clouds (as shown in *Cloudburst* from the "Industrial Land" series), we would have had a radically different life on Earth. The machine in *Cloudburst* is not just a tool; it signifies a lifestyle. Can you expand on this?

A. Our images develop out of a process of both imagination and research, but in the end the images exist as metaphoric and dreamlike possibilities that are obviously not possible. Our images rely on the combination of the imaginative world confronting true and important issues facing our world today. The point of our work is not to offer realistic solutions for a better world, but rather to offer viewers possibilities. These images become a state of consciousness...to see alternative, imaginative realities and to consider the power of the imagination and poetry.

Q. In the 1970s the artist Gordon Matta-Clark bought what were described as "inaccessible" houses at incredibly

cheap prices and cut them up for artistic installations. In doing so, Matta-Clark "designate[d] spaces that would not be seen and certainly not [be] occupied."[4] One major intention of Matta-Clark was to question our perceptions of property value that are often influenced by the norms of "laissez faire" real estate developers. Your works, on the other hand, portray unreal environments in states of decay and devoid of real estate value, which you often strive to rescue. In an attempt to bring life to a dead piece of land or a lifeless plant—as shown in *Bloodline* and *Exchange*—you seem to donate your own blood (or maybe this photo signifies a symbiotic relationship between man and earth in which each depends on the other for its existence). Perhaps you and Matta-Clark share the same sensibility about things we waste, damage, and consider valueless.

A. *Bloodline* and *Witnessland* are seminal pieces within our work. It is due to the symbolic expression of self-sacrifice, of giving one's lifeblood back to the earth, that these images were made. We certainly resurrect various objects and even aspects of the earth. Like those from Gordon Matta-Clark and the artists of the Arte Provera[4] movement to Duchamp, we collaborate with obsolete objects for use and meaning in our tales about the human condition. Our work places importance on the earth, not with relationship to its real estate value, but rather as the life force. The interactions between the protagonist, his objects, and the earth represent the possibilities of human ingenuity to find a new, less abusive relationship to nature. The images show a reconnection and reverence for the relationship between humans and nature.

Q. Many of your photos seem to frame artificial environments created in your studio and are outcomes of putting together bits and pieces of items and images you collect. Despite their inherent artificial quality, your photos illustrate genuine natural sites that just don't happen to exist. The vigor of your works lies in the multiple meanings they bear upon: natural and man-made, archaic and hi-tech. As W.S. Merwin has put it elsewhere, "you will wonder to what extent it should be described as natural, to what extent man-made."[5]

Mending the Earth (Earth Elegies series, 1999-2000)

Suspension (Earth Elegies series, 1999-2000)

Bloodline (Witnessland series, 1995–1996)

da Vinci's Wing (Industrial Land series, 1997)

A. Actually, almost all of our images are made in real landscapes. The props are built and transported to landscapes. Sometimes real landscapes are merged with old photographs of other landscapes. In that way, yes, we do merge the artificial with the real. Today, within our digitally altered visual world, this is also a relevant issue. In graduate school we were fascinated by the writing of Jean Baudrillard. His observations of American culture articulated what we see as a world and culture that exists within a constant artificial reality. Also, at that time in the early 90's, while living in the desert of the Southwestern U.S., we were influenced by observing how the landscape and nature were being altered and manipulated for development and industry. We were not interested in creating heavily technological realities nor futuristic scenes, but rather simple basic artifices. Elements of those early influences have continued throughout our work. Our whole human existence is artificial due to the way we choose to manipulate nature and its resources for survival and, more significantly, for comfort.

Q. Given that a major theme of our journal is architecture, how was it that you chose "The Architect's Brother" as the title of your exhibit last year at the DeCordova Museum? This title also refers to a specific photograph. Since the majority of your photos lack what we would call the built environment (i.e., buildings), why this title to encompass the entire exhibit?

A. Architects, while creative, work with logic and structure, designing spaces that require highly technical manipulations/uses of materials, within limitations at times, to create environments. The protagonist in the images often works in ways contrary to how an architect works. He creates from waste, idiosyncratic, illogical solutions/attempts that are based on impulsive or spiritual reactions. He's the non-linear, idiosyncratic architect. We utilize titles to refer to new meanings and associations that further the image. As artists we have the freedom to not be specific and even disorient the reading of our work. We have received some interesting associations concerning the title of the exhibition. Some associations have been curious while other readings of this title have been beyond even our own intentions. Once the work and the titles of our pieces leave the studio we intentionally relinquish control as to how an audience interprets the work. This is the thrill and fear of exhibiting your work, but without this connection with an audience our work is incomplete.

Q. Compared to other media, what "access" does the medium of photography offer you to express your ideas?

A. Of course, the photograph is merely the end of a process that includes theatre, puppetry, sculpture, installation, performance, and painting. Photography allows us to make "believable" images. Clearly they are not truthful images—most photographs are not truthful—but rather they are subjective. We use photography to combine many different mediums and creative approaches into a visual piece. Through that selective frame we can create another world and reality, where the mechanics behind achieving the illusions are not seen. Photography offers us the ability to distort reality by exploiting the powerful notion that " if it exists in a photograph, then it must have happened." To draw or paint the scene would create a different experience for our images. This characteristic of a photograph becomes interesting when considering how digital technology is impacting our sense of reality in a photographic image. The majority of our work is not digital, thus making the sense of the real even more mysterious and startling for the viewer. Even as we explore the digital in current work, we still maintain a strong sense of the real, by relying less on digital manipulation and more on illusion created before the camera. To exceed this sense of the real could create an overly altered reality and—for our artistic vision—would alter the content of our images.

Cloud Cleaner (Earth Elegies series, 1999-2000)

Cloudburst (Promisedland series, 1998)

Notes

1 "Exhausted Globe" is the title of ParkeHarrisons' photographic series from 1997

2 Christopher Millis, "Lighter than Air: Robert ParkeHarrison's Lofty Earth Mission" [article online], available from http://www.bostonphoenix.com/boston/arts/art/documents, Internet; accessed October 7, 2004

3 Gordon Matta-Clark cited in Pamela Lee, *Objects to be Destroyed: The Work of Gordon Matta-Clark* (Cambridge: MIT Press, 2000), 103

4 This Italian movement used worthless materials to produce art

5 W.S. Merwin, "Unchoping a Tree," in *Robert ParkeHarrison: The Architect's Brother* (Santa Fe: Twin Palms Publishers, 2000), n.p.

William C. Brumfield

America as Emblem of Modernity in Russian Architecture, 1870-1917

In a long digression on architecture in one of the 1873 issues of his *Diary of a Writer*, Fedor Dostoevskii made the following sardonic comment on contemporary Petersburg: "And here, at last, is the architecture of the modern, enormous hotel-efficiency, Americanism, hundreds of rooms, an enormous industrial enterprise: right away you see that we too have got railways and have suddenly discovered that we ourselves are efficient people."[1] Here, as in so many other areas, the great writer noted the salient features of an issue that would be much pursued by specialists and professionals, for the terms "enormous" and "efficient" define just the qualities that Russian observers valued in American architecture. When it came to European architecture of the same period, Russians showed an awareness of nuance and style, and they mentioned the "right" names from the perspective of architectural history. Yet, in the case of America, Russian journals made an isolated reference to Henry Hobson Richardson or Daniel Burnham and John Root but otherwise exhibited an indifference to the specifics of a developing American architectural idiom. What they saw was enormous, colossal, incredible, and efficient.

The Russian architectural press, which conveyed these accounts of American architecture to its Russian audience, was essentially a product of the second half of the nineteenth century; its development was directly related to the professionalization of Russian architects. The beginnings of cohesion in the profession date from the 1860s, when architects in both St. Petersburg and Moscow realized the need to create an association that would rise above narrow, commercial interests to address problems confronting architects as a group. To be sure, commercialism provided the major financial impetus for a professional organization, as the economic forces of nascent capitalism led to the replacement of the older patronage system of architectural commission with a more competitive, contractual approach to the business of building. But in order to promote the interests of professional development and to regulate the practice of architecture, a form of organization that transcended the individual architect or architectural firm was essential.

The Great Reforms of the 1860s facilitated the economic progress necessary for the expansion of architecture beyond the commissions of the state, the court, and a few wealthy property owners, and they also created the legal conditions for the foundation of private associations. Although certain Petersburg architects had begun to explore the prospect of founding a professional group as early as 1862, the first formal organization was the Moscow Architectural Society, chartered in October 1867.[2] From the outset this organization disseminated new technical information and served as a center for the establishment of standards in building materials and practices. In addition to its advisory function in technical matters, the society initiated a series of open architectural competitions as early as 1868, thus establishing a precedent to be followed in the awarding of major building contracts during the latter half of the century. An ambitious attempt by the society to sponsor a general conference of architects in 1873 failed for bureaucratic reasons, and it was not until 1892 that the First Congress of Russian Architects took place.[3]

In the meantime, architects in the capital obtained imperial approval to found the Petersburg Society of Architects, chartered in October 1870, whose functions paralleled those of the Moscow Architectural Society. At the beginning of 1872, the Petersburg group published the first issue of the journal *Zodchii* (Architect), which appeared monthly, and later weekly, up until 1917. For forty-five years this authoritative publication not only served as a record of the architectural profession in Russia, but also provided a conduit for information on technical innovations in Western Europe and the United States. It would be difficult to overestimate the importance of *Zodchii* in supporting professional solidarity among architects and establishing a platform from which to advance ideas regarding architecture's "mission" in the creation of a new urban environment.[4]

There were other architectural publications in Russia, and a few of them made occasional reference to America; but *Zodchii* remained the major source for information on architecture and civil engineering. The general areas of interest covered in the journal's reports on America included: city planning, construction technology, architectural education, building materials and standards, and the related topic of disasters, particularly fires. Many of the items were taken from American and European architectural journals, as well as from general Russian

publications such as *Birzhevye vedomosti* (Stock Exchange News), which had obvious reasons of its own to be interested in the progress and economic development represented by new American construction. In addition, *Zodchii* frequently published lectures given at the Petersburg Society of Architects by members who had traveled to the United States, and thus provided firsthand observations of the New World.

From the first year of publication, and every year thereafter, *Zodchii* included news items on the American architectural scene, such as a short comment in 1872 on the new building for the New York City post office.[5] The construction of buildings for public institutions in America's booming cities gained the frequent attention of *Zodchii*, whose editors understood that there was a corresponding need for such buildings to serve Russian society in the period following the Great Reforms. In 1873, for example, there were reports on communal housing for women working in New York's factories;[6] readers of such articles might have been reminded of the housing crisis affecting workers in Russia's large cities. The rapidity of American building methods elicited expressions of wonder that are repeated with ritualistic emphasis throughout the 1872-1917 period. An early burst of enthusiasm appeared in an 1873 article—which drew extensively from American publications—on the reconstruction of Chicago after the Great Fire of 1871. The effusive praise reveals much about Russian architectural taste during this period, as well as its fascination with technological innovation:

> All of them [Chicago's new "building-palaces"] are built in the latest American style, which represents a mixture of classical, Romanesque, gothic, and Renaissance styles; here one can see the widespread use of iron structural components, luxurious entryways even for private houses, balconies on all floors, magnificent roofs and domes encircled with beautiful balustrades. Many of these buildings exceed in luxury and refinement the best buildings of the European capitals and are decorated with statues and colonnades. It is hard to understand how this could have been created in something like a year and a half. Such unusual speed is partially explained by the use of great quantities of iron, including entire facades consisting of a row of iron columns connected by iron beams, and also by wooden construction work (such as at the Palmer Hotel) carried out at night by artificial lighting, and with machines lifting pre-fabricated elements to a height of four stories.[7]

The article's final sentence, echoing similar opinions from *Birzhevye vedomosti*, proclaimed that the new Chicago reflects, "The results of moral and material activity such as we have seen nowhere else in the history of the cultural development of mankind."[8]

Indeed, there seems to have been no limit to Russian credulity in the face of American technological ingenuity, as is evident from an item on the "Beach pneumatic tube," intended to carry passengers around the city at a "remarkable speed" far exceeding that of railroads.[9] There was in fact an experimental pneumatic subway opened in 1870 under Broadway Avenue in Manhattan, but its speed and potential for development seem to have been considerably less than remarkable. Pneumatic systems were, however, used for transporting mail in New York by the turn of the century.

Throughout the 1870s, *Zodchii* published a wide variety of articles on developments in American architecture and technology. The subjects ranged from Edison's "Electric telegraph" to engineering topics such as plans for a canal in Nicaragua, bridges in Philadelphia and New York, and American methods for producing ice—a topic of interest even to Russians because the rapid growth of cities required more reliable methods of cold storage for perishable foodstuffs.[10] A direct correlation between Russian and American interests appeared in a favorable review of the Russo-American Rubber Company pavilion at the 1876 Centennial Exhibition in Philadelphia, in which Russians recorded American comments on Russian art.[11] Yet attention remained primarily on American builders, whose accomplishments made St. Petersburg's building boom seem modest.

In general, contributors to *Zodchii* showed little interest in exploring the principles underlying the new American architecture, but there were occasional comments that showed the Russians' perceptions of what the American experience meant for the development of architecture. In an article about the journal *American Architect and Building News*—a frequent source of information for *Zodchii*—the reviewer not only provided a detailed description of the American publication, but also commented on what he saw as the pervasive influence of the nineteenth-century French theoretician Etienne Viollet-le-Duc, whose writings played a major role in discussions on the nature of Russian architecture during this period. Particularly noted is Viollet-le-Duc's influence on American "practicality" and on American architects' return to medieval architecture as a source of guidance, not in a literal or historicist sense, but for a new understanding of structural support systems in building.[12]

Technology and Architecture at the End of the Nineteenth Century

It can be argued that Russian architects were receptive to favorable reports on the American republic by virtue of their obvious professional interests in economic growth and technical progress. Although architecture had its social and ideological uses in Russian society, Russian architects could praise American buildings and technology without implying political views of either monarchic or radical tint. Indeed, expressions of wonder continued unabated from *Zodchii*'s correspondents. An 1879 report on Leadville, a mining town in Colorado, noted that it "sprang up as if by magic" in this "land of wonders." Surely such references would have suggested visions of the rapid exploitation of the rich unsettled regions of Siberia and other parts of Russia. A report on the development of the telephone in America stated: "One can indeed call America the land of application of scientific theories to practice and to life. While we engage in debates over the practicality and future of the telephone, city telephone networks are being created in America."[14]

America was frequently referred to as the standard for comparison in construction and technology, as can be seen, for example, in an article on the efficiency of American housing construction: "Our masons, carpenters, and other craftsmen—would be amazed at the speed and daring of the Americans." This highly favorable account took notice of cooperation between New York's housing contractors and municipal authorities in the laying of utility lines and the subsequent paving of streets and sidewalks. Also noted was the reliance on prefabricated, standardized components—for example, window frames and doors—in the design of urban homes,[14] efficiencies that would later become a central part of Soviet housing construction, but on an altogether different scale. Another news item described the opening of New York's Metropolitan Opera House, with the usual hyperbole "enormous."

Beginning in 1882, most of the brief technical news items on American architecture appeared in *Nedelia stroitelia* (Builder's Week), the newly established weekly supplement to *Zodchii*. *Nedelia stroitelia* contained excerpts from the journal *Scientific American*, as well as reports from American publications on new buildings, technical innovations, and occasional disasters. Theater fires were noted with particular frequency. In 1885, *Nedelia stroitelia* paraphrased an article from the popular journal *Niva* on the recent completion of the Washington Monument. Referring to the monument as "colossal," *Nedelia stroitelia* took a very critical view of "an unattractive and crude structure" and said "the monument is striking by the lack of all taste."[15] The tone of this report cannot, it seems, be attributed to anti-American sentiment, but rather to the monument's sharp break with contemporary tastes regarding heavily ornamented memorials—for example, London's Albert Memorial, completed in 1872 by Sir George Gilbert Scott, and the early 1880s entries in the competition for the design of the Church of the Resurrection of the Savior on the Blood in St. Petersburg.

Most of the reports on America in *Zodchii* and *Nedelia stroitelia* dealt with commercial architecture in cities, from Boston and Philadelphia to New Orleans and San Francisco. The centers of attention, however, were Chicago and New York, which represented the most concentrated expression of the American ethos. In the mid-1880s, *Nedelia stroitelia* reported on projects for the building of a New York City subway, techniques of elevator construction, the number of houses and firemen in the city, water systems, sanitation, the city's telephone network, and the dedication of the Statue of Liberty. Land prices in New York were "fabulous," but the operative word was "colossal"—as in a "colossal new bridge" between New York and New Jersey, or the "colossal building" for the newspaper New York World, which was twenty-six stories, constructed from iron, steel, and brick.[16] Although the reporter had difficulty in describing a building of such unprecedented scale, the Russians had finally discovered the skyscraper; during the next decade, reports on this American form would appear regularly in the Russian architectural press.

Appropriately, the first detailed descriptions of the skyscraper appeared in articles on Chicago, where preparations for the 1893 Columbian Exposition stimulated an interest in the city unparalleled since the Great Fire of 1871. The exposition was the subject of extensive reports, such as an analysis of the planning and construction of the site, with statistics from the German publication *Deutsche Bauzeitung*. The account mentioned the firm Holabird and Roche, a rare occasion in which the Russian press identified American architects.[17] Among other news items on the exposition was an ecstatic report on the project to construct an all-electric house, described as a glimpse into the future.[18] A general review of construction in Chicago noted that for six years a new type of structure, based on a skeletal steel frame on a reinforced concrete foundation, had been developed; but the reports were tentative and made no mention of specific architects.[19]

In 1893, the crescendo of attention surrounding the Chicago exposition reached a peak. The first issues of *Nedelia stroitelia* contained lead articles describing the

pavilions and the frenetic, last-minute preparations in the area between Jackson and Washington parks. In addition to reciting the fair's greatest architectural achievements and its surpassing dimensions, the unsigned correspondent acknowledged the guiding presence of Messrs. John Root—whose death in 1891 was noted—and Daniel Burnham, who served as chief of construction for the exposition.[20] After 1893, there appears to have been no further notice of these two pioneers of the Chicago School in the Russian press.

Some observers looked beyond the extravaganza of the exposition to the more solid achievements of the Chicago School. One compact but informative report noted that "giant buildings here bear the strange name 'Sky Scrapers'" and contended that Chicago was particularly "rich in these buildings," despite a growing reluctance to insure them.[21] The nineteen-story Auditorium Hotel, more commonly known as the Auditorium (1886-90), was described as an example of the speed of construction possible with the new technology. The description included an abundance of statistics concerning the building's cost, its height, its weight, the number of bricks needed for construction, and the length of its water and gas pipes. Yet there is no mention of the style of this spectacular building, nor of the architect, Louis Sullivan. For Russian architectural critics, "style" was to be found in Europe; America was the land of statistics and technology.

American Pragmatism and the New Urban Environment

However significant the role played by the French school in American design, Russian observers were more interested in the practical results of American technical developments. In 1895, Viktor Evald—the editor of *Zodchii* and one of the most frequent commentators on American civil engineering—provided an account of skyscraper construction in New York and Chicago, with particular attention to methods of foundation support for the steel frames. Impressed by the size and technology of such large structures, Evald took a dim view of their aesthetic qualities and predicted that they would create an urban environment in which "some of the main streets will be enclosed between two rows of tall, gloomy cubes, with small, separate windows in which the sun never peers. Such streets will resemble narrow canals or streams, flowing at the base of deep ravines."[22] This poetic image was followed by the observation that American skyscrapers were intended for use between eight and five, after which time the central areas of American cities became depopulated.

Subsequently, Evald wrote a book entitled *Structural Characteristics of Buildings in North America*, and in 1899 he continued his analysis of the American skyscraper with an extensive report on a fire at the sixteen-story Home Life Insurance Company building on Broadway Avenue, constructed in 1893. His observations regarding the still-far-from-ideal methods of fire prevention in tall buildings were based, in large part, on data from the German publication *Thonindustrie-Zeitung*, which represented the producers of fire-retardant ceramic shields.

By the beginning of the century, reports on skyscrapers and fires in American cities appeared in roughly equal measure. In 1903, *Zodchii* published a technical review of recent progress in the area of skyscraper construction, with special attention to new methods of insulating the steel frame from the effects of intense heat (many of these advances were introduced after the Pittsburgh fire of 1897). Drawing upon books by Joseph Freitag and William Birkmire—prominent American civil engineers specializing in the design of skyscrapers—the writer attributed the extraordinary increase in tall buildings in America to three basic developments: the cheap and efficient production of high-quality rolled steel; the production of new types of fire-resistant coating for steel frames; and the introduction of rapid elevators.[23]

Fire had, of course, been an enemy of Russian cities from time immemorial, yet there was a specific interest in the spectacular effects of fire on the new American urban environment, even though the lessons to be learned from these conflagrations had limited applications in Russia. The 1904 issues of *Zodchii* contained several items on this subject, among which was a report on the devastating Iroquois Theater fire, in which some four hundred died, and a survey of measures for fire safety in other major Chicago theaters, including the Auditorium.[24] A subsequent article described methods of fire prevention developed by the firm Adler and Sullivan.[25] The culmination of this inflammatory obsession appeared in the journal's extensive coverage of the great Baltimore fire of February 1904. Based on reports in the *New York Herald*, *Zodchii* provided a general description of the disaster and its effect on the city in the first article.[26] The second article took a more technical approach, examining the conditions of large structures after the fire. The conclusion, bolstered by information from the German publication *Stahl und Eisen*, discussed the remarkable progress in protecting steel frames from fire damage.[27]

Figure 1. Northern Insurance Company building, Moscow, 1909-1911. Ivan Rerberg, Marian Peretiatkevich, Viacheslav Olturzhevski (Crumfield M59-32)

Visions of the Skyscraper

For most of its final decade of publication, *Zodchii* reported with regularity on new developments concerning American skyscrapers. Articles appeared on the Singer Building in 1906, on the Metropolitan Life Building in 1907, and on buildings by Francis Kimball in 1908. There were also reports on the completion of other major structures, such as New York's Penn Station and the New York Public Library. A brief notice in 1908 commented on the "gigantomania" of Ernest Flagg, probably the most active builder of skyscrapers in New York: "[Flagg] dreams of constructing a building as high as one thousand feet.... Even the Yankees have had second thoughts about this. There are reasonable people thinking of raising the question of a law to set limits on the flights of artists beyond the clouds."[28] Yet after 1908, for no clear reason, the number of articles on America underwent a sharp, if temporary, decline. In 1909, the only item on America dealt with air pollution in Chicago; in 1910, there was a single report on a new bridge in Philadelphia; and in 1911, R. Bernhard reviewed R. Vogel's book *Das amerikanische Haus*, reflecting a growing curiosity about the American design of the detached house and its suitability as a model for suburban development around Moscow.

The reappearance of articles on American architecture and technology in *Zodchii* was due, in large measure, to the Sixth International Congress on Materials Testing, held at New York's Engineering Societies Building in 1912. Given the standards of the time, it is noteworthy that the journal's correspondent was a woman, Maria Koroleva, about whom regrettably little is known. Her dispatches provide detailed and highly technical accounts of the proceedings, as well as an analysis of the construction of New York's Woolworth Building by Cass Gilbert.[29] To Russian observers, the Woolworth Building represented an extreme example of the American mania for the office tower—a mania that went beyond the limits of economic feasibility, according to the writer of an article on the building, who also noted that its primary function was to serve as a trademark for the Woolworth firms.[30] In a series of postcards entitled "Moscow in the Future," dating from 1913, visionaries in Russia were producing fanciful sketches of a "new Moscow," which bore a distinct resemblance to midtown Manhattan."[31] Indeed, the first tentative steps in this direction had already been taken with the completion of Ivan Rerberg's modest tower for the Northern Insurance Company in central Moscow in 1911.[32] (Fig.1)

The increasingly specific technical descriptions of the engineering involved in the construction of skyscrapers and their skeletal steel frames indicate that Russian builders were prepared to undertake such projects. World War I and subsequent events, however, postponed the large-scale application of this technology until the late 1940s. The most significant statement of this convergence between American and Russian goals in civil engineering appeared in Nikolai Lakhtin's two-part survey of the latest techniques for the use of steel and reinforced concrete in New York's skyscrapers.[33] For Lakhtin Russia's economic future clearly pointed toward the American model in urban architecture:

> Industry, trade, and technology are developing, prices for land parcels are growing, telephones and other communications cannot always satisfy demand; in short, circumstances analogous to those in America are gradually arising in our urban centers. These circumstances make it necessary to construct tall buildings, which must be erected on a steel frame.[34]

With this imperative in mind, Lakhtin analyzed the tall building from foundation to wind braces and made detailed drawings of key points in the steel column and girder structure. The same message, regarding the convergence of Russian and American architectural conditions, was propagated at the Fifth Congress of Russian Architects in 1913 by Lakhtin and Edmond Perrimond, both of whom had recently attended conferences in America and returned to Russia convinced of the relevance of the new American architecture.[35]

With the onset of war, visions of growth, progress, and technical development receded, and with them the possibilities of an American-style construction boom in Russia. These visions were undoubtedly unrealistic or premature; Lakhtin once went so far as to compare the subsoil of St. Petersburg with that of New York to assess whether it could support tall buildings. During the war years, references to America dwindled, with the exception of a series of detailed articles written in 1916 by Roman Beker on small community library buildings in America. Beker presented a highly favorable view of these structures because of their design, and also because they seemed to express the democratic belief in education for the people.[36] In 1917, America's entry into the war on the side of the Entente produced renewed interest in the United States; but at the end of 1917, *Zodchii* ceased publication. In a wholly unintended irony, the last article published in the journal bore the title "American Engineers and the War."[37]

American Architecture as Cultural Model

An element of fantasy reigns over many Russian perceptions of American architecture, even those expressed in the pages of solid professional journals—not to mention the more imaginative, if less reliable, passages from literary works such as Maksim Gorkii's *City of the Yellow Devil* (1906). This air of unreality must be attributed in part to the different levels of development between Russia and America at the time, and to the great distance separating the two countries. Yet for all of these limitations, there is evidence to suggest that the extensive Russian reporting on American architecture established a receptivity to technology that would continue—and in some respects increase—after the revolution, despite barriers to exchanges of information.[38]

Beyond the specific function of America as a model in civil engineering and architectural design, there is the broader issue of cultural perception, which *Zodchii* was uniquely qualified to convey. Although technical concerns are of obvious importance to members of the architectural profession, architecture as an art and as a building technology also participates in the social and cultural values of the environment that it shapes. In this respect, Russian reports and articles on American architecture reveal a continual measuring. America is seen as the ultimate standard, regardless of Russia's more immediate relation to Europe. Paradoxically, this taking of measure reflects, on a deeper level, a type of nationalism that seeks a model commensurate with its own aspirations. Only America, with its continental sweep and boundless energy, provided a comparable scale for the challenges confronting Russian builders.

No other form of endeavor in Russia expressed this relation to America as clearly as architecture, with its emphasis on both the pragmatic and the cultural. Whatever suspicions Russian thinkers such as Dostoevskii might harbor toward American culture, the material from *Zodchii* suggests that the two countries have often perceived in each other a set of values and characteristics that are tacitly admired and accepted as one's own. Hence the willingness of Russian observers to repeat the terms of American boosterism—"colossal," "enormous," and "fast"—even while offering skeptical comments. These are the terms that have appealed to the Russians' own sense of destiny—terms that, despite immeasurable social and cultural differences, indicate in the broadest sense the presence of shared ideals.

Notes

1. Fedor M. Dostoevskii, *Polnoe sobranie sochinenii v tridtsati tomakh* (Leningrad: Nauka, 1980), 21:106.
2. For a history of the foundation of the Moscow Architectural Society, see Iu. S. Laralov, ed., *100 let obshchestvennykh arkhitekturnykh organizatsii V SSSR, 1867-1967* (Moscow: Souz arkhitektorov, 1967), 6-11.
3. Laralov, ed., *100 let*, 12.
4. The complicated publishing history of *Zodchii* and its supplement *Nedelia stroitelia* is presented in Laralov, ed., 100 let, 103-4.
5. *Zodchii*, 1872, no. 3: 46.
6. Ibid., 1873, no. 9: 110, based on material taken from *Birzhevye vedomosti*.
7. Ibid., 1873, no. 9: 107-8.
8. Ibid.
9. Ibid., 1873, no. 7-8: 94.
10. See *Zodchii*, 1876, no. 7: 85, based on material from *Armenian Architect* and *Building News*.
11. Ibid., no. 11-12: 120.
12. Ibid., 1877, no. 3: 29-30.
13. Ibid., 1880, no. 3-4: 33.
14. Ibid., no. 6: 49-50.
15. *Nedelia stroitelia*, 1885, no. 15: 3.
16. Ibid., 1891, no. 3-4: 20.
17. Ibid., no. 39-40: 385-86.
18. Ibid., no. 26: 288.
19. Ibid., 1892, no. 46: 313.
20. Ibid., 1893, no. 1: 2-3, and no. 3: 10-11.
21. Ibid., no. 11: 62.
22. Ibid., 1895, no. 29:155, the article is entitled "Sky Cities."
23. Ibid., 1903, no. 51: 605-8.
24. Ibid., 1904, no. 8: 86-89, and no. 11: 137-38, with material from *Deutsche Bauzeitung*.
25. Ibid., no. 17: 207-8.
26. Ibid., no. 26: 303.
27. Ibid., no. 39: 431-35, with numerous photographs of tall buildings standing among the ruins.
28. Ibid., 1908, no. 40: 375.
29. Ibid., 1912, no. 46: 455-59, no. 47: 467-70, and no. 48: 479-81.
30. Ibid., 1912, no. 52: 522.
31. See E. I. Kirichenko, *Moskva: Pamiatniki arkhitektury 1830-1910-kh godov* (Moscow: Iskusstvo, 1977), 95-99.
32. The tower has survived very well in contemporary Moscow. See photograph in William Craft Brumfield, *The Origins of Modernism in Russian Architecture* (Berkeley: University of California Press, 1991), 284.
33. *Zodchii*, 1913, no. 18: 203-11, and no. 19: 215-21.
34. Ibid., no. 18:204.
35. Compare to Koroleva's report on papers read at the technology section of the Fifth Congress, *Zodchii*, 1914, no. 3: 27.
36. Ibid., 1916, no. 46: 412-16, and the three subsequent issues, with floor plans, photographs, and a bibliography.
37. Ibid., 1917, no. 47-52: 226-29.
38. Extensive reports based on personal observations of American architecture began appearing again in the Russian architectural press in the 1980s. For example, *Stroitel'naia gazeta* published an interview with a faculty member at the Leningrad Engineering and Construction Institute, who had visited American construction sites in 1985 and gave a positive account of what he saw. Even the terms used are reminiscent of those in *Zodchii*. "Bystree—znachit pribylnei" (Faster means more profitable), *Stroitel'naia gazeta*, March 3, 1987: 3.

Figure 1. Elephanta, Maharashtra, Shaivite cave, sanctum with *lingam*, ca. 540 A.D.

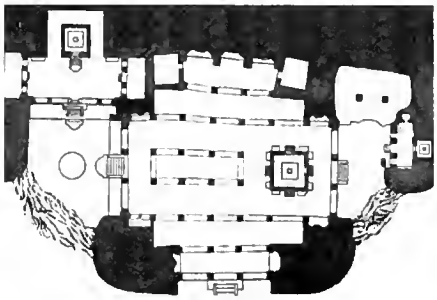


Figure 2. Elephanta, ground plan

Figure 3. Elephanta, image of Shiva Mahadeva

Michael W. Meister

Access and Axes of Indian Temples

At the beginning, before the creation of the world, sex, and death, the Creator Prajapati formed Rudra-Brahma as a pillar to separate sky and water and to start time. This pillar, called Skambha ("the frame of creation"), instead retreated to the bottom of the cosmic ocean, and waited for procreation to begin by other means. "By how much did Skambha enter the existent? How much of him lies along that which will exist?" asks the sacred Hindu text *Atharva Veda* (AV X.7.9).[1] First built more than a millennium after the *Atharva Veda* was compiled, an early Indian stone temple echoes Skambha's condensed crouching form.

The cubical block of the sanctum in the famed sixth-century A.D. Shaiva cave on Elephanta island near Mumbai lies compressed between the floor and ceiling of a mountain excavation (Fig. 1). Its four cardinal doorways are protected by giant guardian figures. This cella can be approached from two directions: on axis from an eastern court along the central aisle of a pillared hall, or indirectly, from the north, along an axis facing an immense bust of the "Great Lord" Mahadeva Shiva, incarnate with cardinal faces (Fig. 3). This Shiva image rests within the mountain, as if looking into the cave's excavation from beyond a southern entry-portico[2] (Fig. 2).

Access to early temples was at first limited to the deity and its cult functionaries. Temple 17, built at Sanchi (an early first-century Buddhist site) ca. 425 A.D., has often been called the earliest surviving stone Hindu temple, intended to shelter an icon of a deity (Fig. 4). It consists of a small masonry cube with an inner sanctum and four-pillared portico, suitable for the approach of only one person at a time. Such a temple was a point of power, seen as a "crossing" (*tirtha*), a mechanism for seducing the divine into the created world, and a tool for the transformation of the worshiper.

This manifestation of the divine was gradually marked on temple walls by axes in the ground plan that project sacred interior spaces onto offsets of the exterior walls, providing facets where sculptures of varying aspects of the divinity and creation could be placed and viewed (Figs. 5 & 6). In some temples in the seventh century, however, these cardinal projections show shuttered doors rather than images, emphasizing the secure nature of the shrine and limiting visual access of the deity to those whose function was to administer to it in the sanctum (Figs. 7 & 8).

Image-worship increasingly replaced rites of sacrifice by the seventh and eighth centuries, and temple rituals began to focus more on the role of an audience of devotees and the experience of worship. The cosmological plan of the temple expanded, but access to the shrine and sanctum remained limited and controlled. These temples were "monuments of manifestation"[3] in Stella Kramrisch's words—cosmic mountains, but also markers of creation, palaces of the gods, and machines for social order

Figure 4. Sanchi, Madhya Pradesh, temple 17, ca. 425

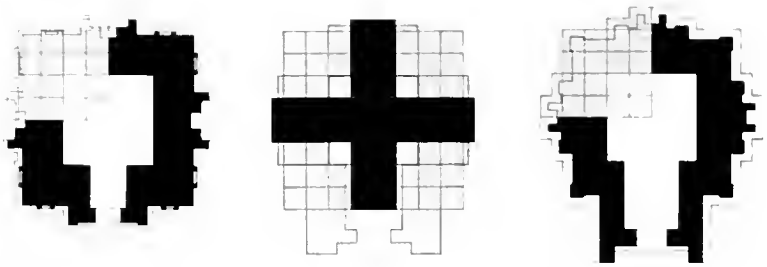


Figure 5. Projection of sacred space onto walls of the temple: Bhubaneshwar, Orissa, Parasurameshvara temple, ca. 600 (left); Mahua, MP, Shiva temple no. 1, ca. 650-75

Figure 6. Bhubaneshwar, Parasurameshvara temple, south view

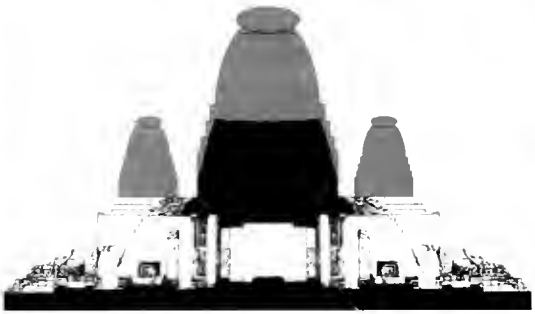


Figure 9. Masrur, Himachal Pradesh, Shaivite temple, ca. 725-75, section

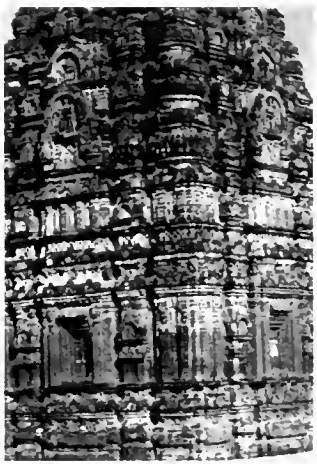


Figure 8. Sirpur, Lakshmana temple, view from southwest

Figure 7. Sirpur, Chattisgarh, Lakshmana temple, wall with blind shutters, ca. 600-25

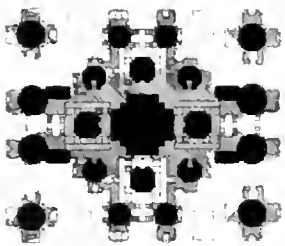


Figure 10. Masrur, ground plan

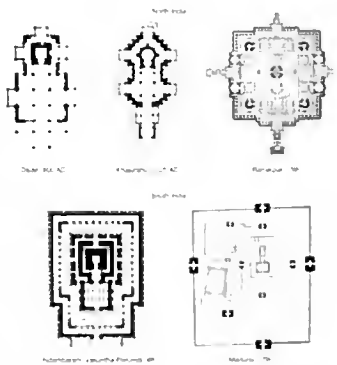


Figure 11. Expansion of temple plans: North and South India

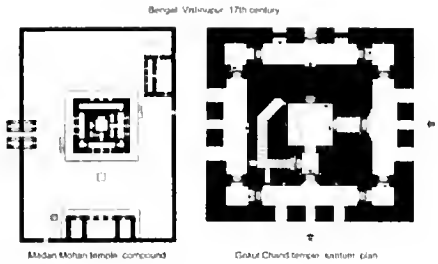


Figure 12. Vishnupur, Bengal, Eastern India in the 17th century

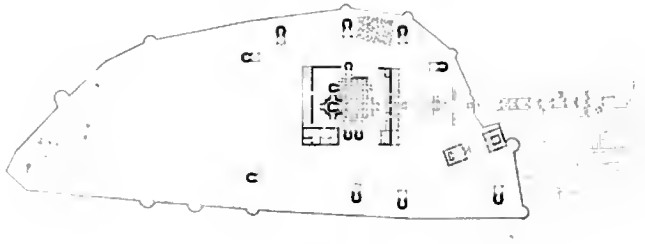


Figure 13. Osian, Rajasthan, Sachiyamata hill, temple complex, 8th—20th century

(Figs. 9 & 10). Temple Hinduism gradually took on political and social roles that transformed the temple, expanding its plan along a path of human approach, an "axis of access." As architecture and changing usage evolved over many centuries, open halls were added to walled halls, additional pavilions were built, enclosing fences became compounds, and compounds grew to cities. In South India, seasonal festivals and rites evolved that brought the deity out into the city and countryside, giving access to populations not allowed entry to the sanctum (Fig. 11).

As I have noted elsewhere, "The Hindu temple must also act as access and approach for aspirants and worshipers. This role changes the temple from a centralized, bilaterally symmetrical structure (reflecting the nature of the cosmogonic process) to one with a defined longitudinal axis. On that axis the worshipers approach their personal divinity within the sanctum; but also on that axis the aspirants increasingly can place themselves, in halls built for that purpose, as if under the umbrella of the sacrificer, positioning themselves for ascent."[4]

Two alignments, however, coexist. One is centralized, symmetrical, and expresses a cosmic order in which the deity dwells. The other is linear, signifying the approach of humans in this world. In seventeenth-century Bengal, a new type of temple was created, built in brick, for rituals "hidden" from Islamic hegemony. These temples retain an east-west axis for priests to enter the sanctum and attend to the god. But they also have a north-south axis to provide visual access to an assembly of devotees who sing and dance in the temple's court, "emphasizing the participation of the community" (Fig. 12).[5] These temples take on the form of a village compound. Such dual axes for esoteric and popular rituals had already been augured at Elephanta (Fig. 3), yet here communities of worshipers commanded access that in previous centuries had often been limited or denied.

The remarkable thing is that the once-closed machine of the temple has, over time, taken on the flexibility to adapt to radically changing social circumstances, giving access to a variety and multitude of communities (Fig. 13). Even as the Creator Prajapati's Skambha cowered in the primordial waters long ago, the potential for creation of the sexually charged, multivalent, multicultural universes served by Hindu temples had become its ordering force.[6]

Early Hinduism focused on rites of sacrifice. Temples to shelter images of deities were built in early medieval India as instruments of priestly cults. To patronize cult communities became a means to extend kingship. Yet through such community patronage, temples gradually became public institutions.[7] Today communities have taken the place of kings, and temples function in fresh ways, with a renewal of multiple pivots of access.

Notes

1 *Atharva-veda Samhita*, trans. William Dwight Whitney, rev. and ed. Charles Rockwell Lanman, *Harvard Oriental Series*, vol. 7–8 (Cambridge: Harvard University, 1905)

2. Stella Kramrisch, *The Presence of Śiva* (Princeton: Princeton University Press, 1981), 443-68

3. Stella Kramrisch, *The Hindu Temple* (Calcutta: University of Calcutta, 1946), passim

4. Michael W. Meister, "Temple: Hindu Temples," in *The Encyclopedia of Religion*, ed. Mircea Eliade (New York: Macmillan Publishing Company) vol. 14, 372. "'The whole intention of the Vedic Tradition and of the sacrifice is to define the Way by which the aspirant ... can ascend [the three] worlds,' wrote Ananda Coomaraswamy. 'Earth, Air, and Sky ... compose the vertical Axis of the Universe.... [These are] the Way by which the Devas first strode up and down these worlds ... and the Way for the Sacrificer now to do likewise.'"

5. Pika Ghosh, *Temple to Love, Architecture and Devotion in Seventeenth-Century Bengal* (Bloomington & Indianapolis: Indiana University Press, 2005), 138

6. Michael W. Meister, "Sweetmeats or Corpses? Community, Conversion, and Sacred Places," in *Open Boundaries, Jain Communities and Cultures in Indian History*, ed. John E. Cort (Albany: State University of New York, 1998), 111-38

7. Arjun Appadurai, "Kings, Sects and Temples in South India, 1350–1700 A.D.," in *South Indian Temples*, ed. Burton Stein (New Delhi: Vikas Publishing House, 1978), 47-73

Soft pod skin and muscle

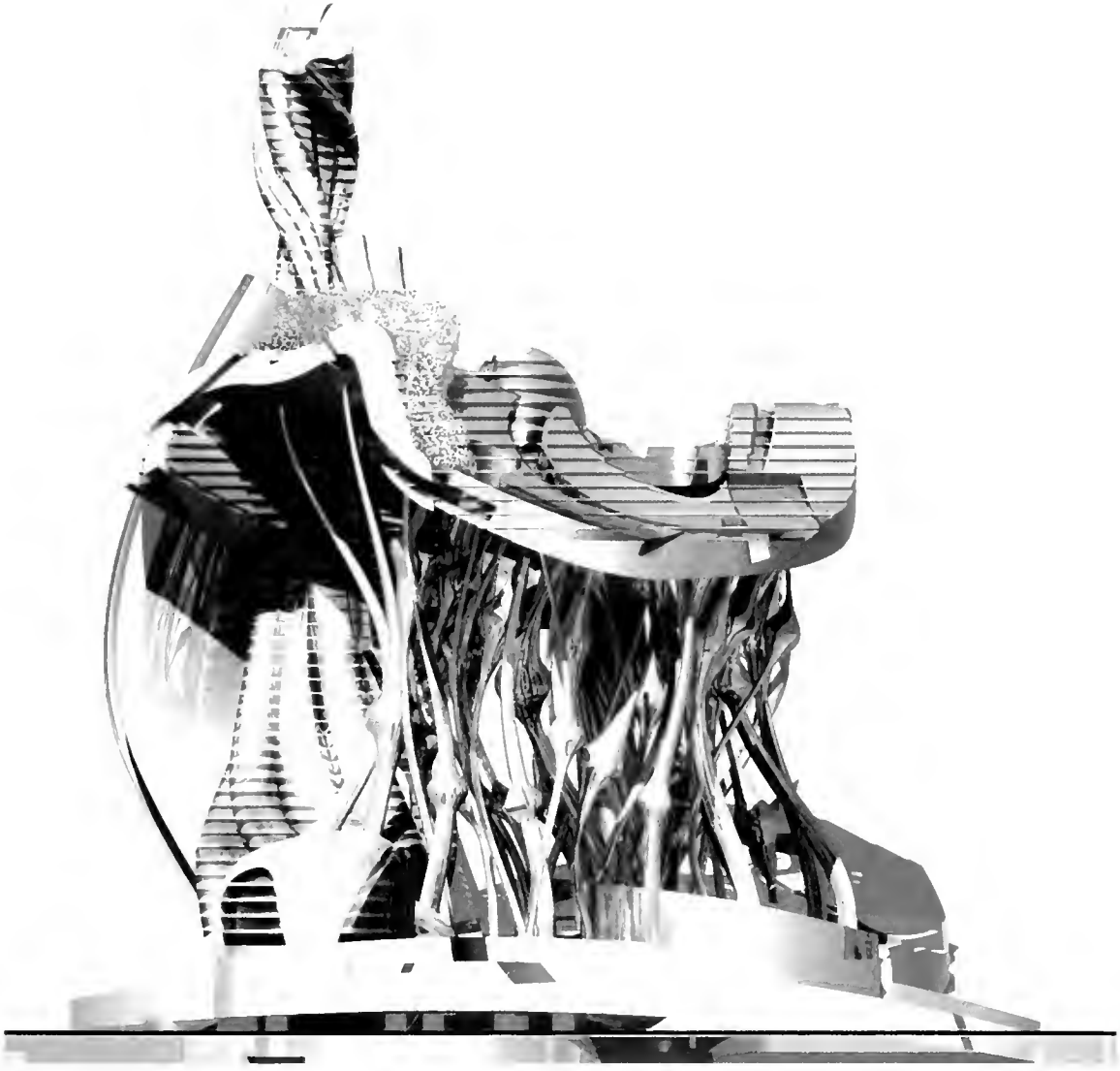
A project by OJ Studio: Neri Oxman and Mitchell Joachim

PeristalCity: A Circulatory Habitat Cluster for Manhattan

New York City's first skyscraper, or what might be considered as such, was built in 1902 (Flatiron building). Since then, skyscrapers have come to define the city's distinctive skyline. Despite their captivating image, skyscrapers in New York City (as well as in other cities throughout the world) have not yet overcome the limitations of their most basic function: the vertical navigation of their inhabitants.

The elevators in these buildings have long constrained compositional forms. More significantly, these elevators limit the arrangement of social practices with regards to both labor and leisure. But elevators stifle more than just our movement by virtue of their rectangular rigid planes and fleeting cars. Temporally speaking, the vast space of the elevator shaft is almost always vacant, and thus useless. But suppose we embraced a different interpretation of that inactive and sequestered domain which much of this central shaft represents. It would demand a vital shift, or at least a conceptual reworking, towards an active utilization of such a space. This possibility is precisely what our design explores.

By substituting a dynamic spatial application for the traditional organization of a skyscraper's core, we dissolve the dichotomy between circulation and static habitable environments. We have eliminated typological stacking where limited social practices are allocated to different floors. Instead, we propose a spatial layout that establishes heterogeneous movements, and not just assorted practices, as the criteria for a dynamic assemblage. The following set of statements will explain how this is envisioned:



Front view of sky surface and urban cluster

Concept: Circulation = Space

An inhabitable pocket is contained within a flexible element. It is a module that flows in a vertical trajectory, responding to other neighboring units, and with the surrounding members. Their positioning is determined and managed by a responsive signaling system.

Technology: Fluidic Muscle Tectonics

Peristalsis is derived from the ancient Greek *peristaltikos*, which means contraction. Today the word is often used in medicine, referring to the rippling motion of muscles in tubular organs, which are characterized by the alternate contraction as well as relaxation of the muscles that propel the contents onward. Although its use in medicine predominated, this phenomenon became a point of departure for the technology that enables this form of spatial and social dynamics.

Fluidic muscle technology provides much flexibility of use when designing with pneumatic structures (these are mostly inflatable structural forms stabilized wholly or mainly by pressure differences of gases or liquids). This is a soft, pliable, sealed, and non-mechanical innovation, which encapsulates the volume of the structure with textile-reinforced hoses executing a peristaltic action. Thus, the spatial modules are able to create an articulated motion that is symbiotically connected to an urban armature, a large frame that stabilizes those "peristaltic sacks" in place.

Social Construct: Urban Cluster/Mixed Use

Here, at West Side railyards, we imagine a metropolitan assemblage that registers mobility and freedom. As a vibrant set of mixed and multi-use programs, it operates both in section and plan, allowing for dynamic vertical reallocation and planar expansion of the space. On the ground plane a multistory plinth fits the cluster into the metabolism of the cityscape. The assemblage acts as an elevated setting for cultural and multimode uses (e.g. auditoriums, esplanades, piers, and parking).

Environment: Sky-Surface as Community Realm

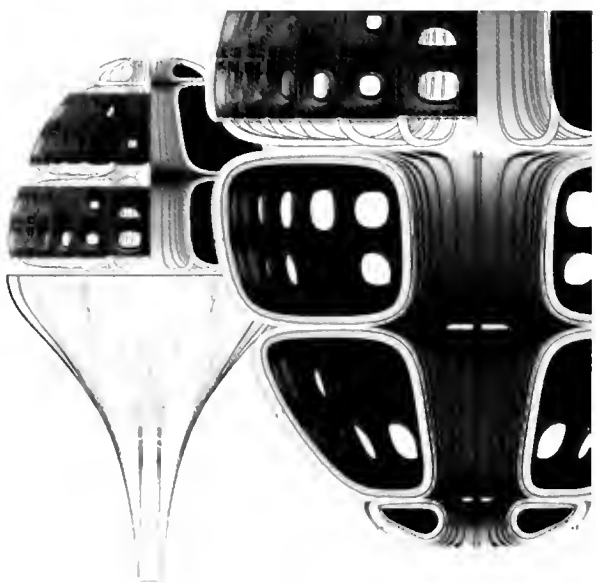
The sky-surface is the eventual destination for the transportable unit occupants, with pleasurable retreats and striking vistas overlooking the Hudson. At this juncture the collective body of the cluster is granted the capability to gather democratically.

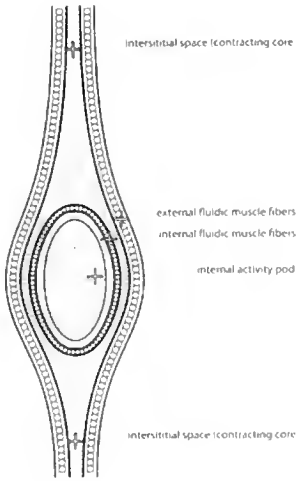
Perspective: Urban Window

The peristaltic-fabric is designed as a sequential organization around an "urban window" condition—a visual gateway to both city and waterfront allowing a selection of interchanging viewing angles and heights. This temporal effect re-reads the city constantly, promoting a quality of transparency in the context of urban mass. A micro cosmos is born which inter-relates habitation to light, air, space, and views across scales of individual units, clusters and cities.

If there is one feature that characterizes the Modernist project in the twentieth century and represents its aspirations, it is the skyscraper. This project has attempted to reconsider and critically revisit this well-celebrated typology in the context of the ever-growing city of the twenty-first century. It aims to develop the notion of vertical mobility as an approach to the changing needs of both the individual and the collective.
As the sole signifier of vertical rigidity, both programmatic and performative, elevator and core have been dematerialized through the invention of PeristalCity.

Inside the pods



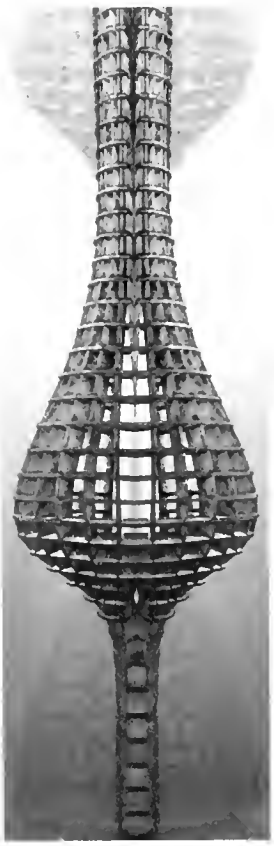


Internal muscles and skin section

Multistory plinth at West Side railyards

Pod model

Plan of pods
and solar chart



A circulatory habitat cluster for Manhattan

Bobco Metal Headquarters. Display section

Administrative tunnel

A Project by the Null Lab

The Bobco Metals Company

In December 2004, 500 leading art critics voted Marcel Duchamp's "Fountain," an autographed urinal, one of the five most influential works of modern art in the world; it trumped Pablo Picasso's paintings "Les Demoiselles d'Avignon" and "Guernica." "Fountain" is an extreme exercise in "found art," the undisguised use of objects that are not normally considered art.[1] These works usually have a mundane utilitarian function, yet they derive their significance from the designation placed upon them by the artist. Creation of an architectural space in traditional terms represents an intentional activity—in this sense, sites are inhabited by being "found."

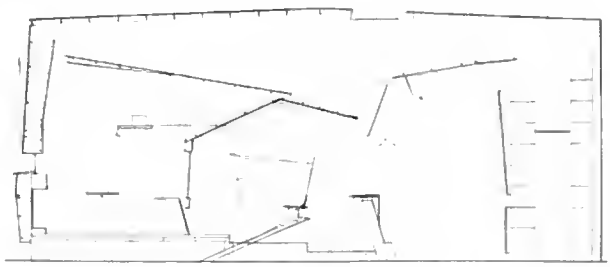
We here at Null Lab have been influenced by this concept, and its application can be seen in our work with Bobco Metals, a self-described "metals supermarket."
The project unfolded as we explored the fabric of South Central Los Angeles on foot. Situated along the Alameda corridor, a narrow concrete intestine that digests metal cars and trains and discharges them at the Long Beach Port, Bobco Metals is no Arcadia. The harsh, even ferocious urban vibe bestowed a kind of dramatic merit on a landscape covered by deteriorated concrete and littered with graffiti, razor wire and the occasional bullet hole. Everywhere, objects were chaotically separated in accordance with some hidden logic. This pedestrian-free zone sits on the border of South Central Los Angeles, where gang wars have been fought for thirty odd years. The Bobco Metals Project came to represent a protest against standard modes of production, as well as a statement that nothing is new, only found. The remix of steel and hardware represents the structure of a "desire machine"—a machine that abandons interpretation because no analytical thought and no memory pushes itself between the space and your sensory system. In this project, we de-gravitated the metallic particles and the forms themselves, then shaped a "crystalline narration" in response to the strange and disturbed nature of its milieu. Gilles Deleuze has pointed out that in such a narration, the sensory-motor schemata collapses:

> [H]aving lost its sensory-motor connections, concrete space ceases to be organized according to tensions and resolution of tension, according to goals, obstacles, means or even detours... there is the overlapping of perspectives which does not allow the grasping of a given object because there are no dimensions in relation to which the unique set would be ordered.[2]

In the Bobco Metals project, layered manifolds and planes present a viable complexity in the order of established architectural tectonics. One of the most significant achievements of such a system is the abolition of the relationship between polar modes: the room and the hallway, the inside and the outside, etc.

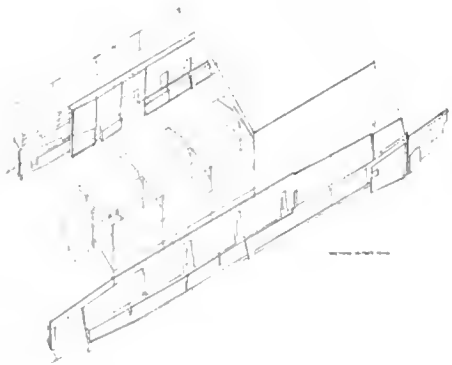
Administrative tunnel and display windows

Exterior view of Bobco Metal headquarters



Cross-section showing the positioning of the panels

Layers continuously produce unpredictable effects by multiplying themselves and creating interfaces for new currents. In the Bobco Metals project, layered manifolds and planes present a viable complexity in the order of established architectural tectonics. One of the most significant achievements of such a system is the abolition of the relationship between polar modes: the room and the hallway, the inside and the outside, etc. Layers continuously produce unpredictable effects by multiplying themselves and creating interfaces for new currents. Recent pattern recognition technology has provided us with physical (quantitative) mappings of affective and expressionist (qualitative) values. If in this sense, there is a geometry associated with fear or lust, it is our ambition to trace them for the geometries of architecture. Similarly, on a movie set, dramatic tension is extracted from actors not only through direction and rehearsals, but also by placing the actor in the context of intensified lights, aimed cameras, towering scaffolds and artificial walls. Such post-functional and artificial space could serve the same purpose of dramatization when placed against the mundane interactions of everyday life. Our process of design begins with the inner works, with causes and effects that are natural and generative, yet extreme.



Axonometric drawing of Bobco Metal headquarters

Notes

1. http:// reuters.co.uk/news; Internet, accessed 1 December 2004
2. Gilles Deleuze, *Cinema 2: The Time-Image*, trans. Hugh Tomlinson and Robert Galeta (London: Athlone Press, 1989), 128-129

Figure 1. Above left, Villa Silberblick, 1898 (before van de Velde's alterations); right, Villa Silberblick/Nietzsche-Archive, 1904 (after van de Velde's alterations)

Ole W. Fischer

Nietzsche-Archive in Weimar: A Retroactive *Studiolo*[1] of Henry van de Velde

In early January, 1889, the German philosopher Friedrich Nietzsche (1844-1900), a professor of philology in early retirement, sent several obscure letters to friends and colleagues from Torino signed "Dionysos," "Nietzsche Caesar," or "the Crucified."[2] His alarmed friend Franz Overbeck arrived in Torino from Basel on January 8th and found Nietzsche already losing control of his senses. Overbeck decided to take Nietzsche back with him to Basel's asylum—the first station in an eleven-and-a-half-year twilight of madness.

After Nietzsche's breakdown, his manuscripts, letters and parts of his library remained in Torino, as well as in other locations from his unstable life: in Italian cities and alpine villages, with friends in Basel and family in Naumburg. With the ebbing of hope for Nietzsche's mental recovery, the question arose of what to do with his literary remains, especially since the last months of his rational life were extraordinarily productive. Nietzsche's mother was overwhelmed with caring for him and as a pastor's widow she was repelled by the radical writings of her son, but she conceded to allow Franz Overbeck and Heinrich Köselitz (Nietzsche's former student and secretary respectively), to function as literary executors. In 1893, Nietzsche's younger sister Elisabeth Förster returned from a failed anti-Semitic colony experiment in Paraguay, where she had lost her husband, wealth, and mission, and immediately took over as the representative of Nietzsche's interests and seized his literary remains.[3] She gathered together his manuscripts, struggled with Nietzsche's publisher for the proof sheets with his annotations, asked all correspondence partners for a return or copy of his letters, and collected his library and private papers.

In 1894 Elisabeth Förster-Nietzsche (the name she used from then on), was able to open the "Nietzsche-Archiv" on the first floor of her mother's house in the small city of Naumburg. The sick philosopher himself lived upstairs. Soon her literary circles, afternoon teas, piano soirées and other social activities interfered with looking after her brother, and Elisabeth chose to move to Weimar, to participate in the social life of the Grand Duke's court and to profit from the glorious cultural shine of Friedrich Schiller and Johann Wolfgang Goethe—the emblems of German literature and poetry. In the spring of 1896, a grant from Meta von Salis, a writer friend of Nietzsche, provided Elisabeth with a villa in the hills overlooking Weimar, because the death of their mother had made it necessary to re-unify the archive and care for the mad philosopher-brother under the same roof. Nietzsche himself was transported at night in a special train cabin from Naumburg to Weimar.

In the meantime Elisabeth had twice started an edition of Nietzsche's works. Although she was in charge of the copyrights of the published works and had managed to

collect almost all of the literary remains, she disassociated herself several times from the editors she had engaged: first she fired Köselitz, who had been working as an editor since 1893. Then she hired and fired Fritz Kögel, Rudolf Steiner—the later founder of Anthroposophy—as well as Ernst and August Honeffer within a few years. Finally, in 1898 Köselitz, the only one able to read Nietzsche's cryptic handwriting, came back and helped her to start the editing project of the 20-volume, "Complete Works," which was not finished before 1913.[4] This work, together with a pocketbook edition, a selection of Nietzsche's writings and an edition of the collected letters were a big success. Translated soon into French, English, and many other languages these volumes were the basis of "Nietzsche" as the cultural phenomenon that we are still infected with today.[5]

However, the Nietzsche-Archive remained a private institution, or more precisely, a one-woman-property, which brought unfortunate side effects to the publishing policy. With the unscrupulous help of her editors, Elisabeth held back Nietzsche's finished, but unpublished autobiographical work *Ecce Homo*,[6] revised several of his letters, and compiled his so-called masterpiece, *Will to Power*. In addition, she vindicated her own image of her brother with a series of biographies.[7] This met criticism from the beginning by Nietzsche's former friends such as Overbeck as well as former editors and employees of Elisabeth. Nevertheless, Elisabeth enjoyed great confidence from almost all public intellectuals of her time. She was still induced by her brother, as she showed the "fallen eagle," the most important "piece" in her collection, to "special guests" of the archive. Following the example of Cosima Wagner as high priestess of the Wagner cult in Bayreuth, Elisabeth cultivated her role of devoted sister, wise woman, and hostess of a cultural circle in Weimar. With the help of the patron Count Harry Kessler the archive soon turned into a center for avant-gardes.

Elisabeth understood the importance of art and media in modern society (as well as the new laws on copyright) and monopolized the production of Nietzsche portraits, sculptures and photographs by various artists. In fact, she made use of photographs of her brother from the time before his breakdown and only preferred paintings, etchings, and sculptures of the sick philosopher. Finally, with the help of Kessler, she succeeded in finding the appropriate artists Hans Olde and Max Klinger, who were able to handle the delicate problem of representing Nietzsche whose character hovered between intimate martyr and heroic prophet. Elisabeth handed out pieces and fragments of Nietzsche's writings to several of the new art and literature magazines, which were emerging around the turn of the century in Berlin, Vienna, Darmstadt, Frankfurt, Munich, and Leipzig. These publications helped to connect the philosophy of Nietzsche with new aesthetic movements and thus raised the demand for Nietzsche's works. The increase in income through donations and royalties made it possible for Elisabeth not only to pay for transcribing, correcting, and editing Nietzsche's works, but also to enjoy living in bourgeois comfort. Already in 1898 she started to make alterations to the villa "Silberblick" (gleam of silver). The building belonged de facto to Meta von Salis and Elizabeth's actions led to a break-up of this friendship. But after the death of Nietzsche in August 1900, it became obvious that she was in need of a new attraction for the archive: an interior design by the style reformer van de Velde.

The Flemish painter, autodidactic designer, and architect Henry van de Velde was recognized as an early enthusiastic follower of the "philosopher with the hammer." After his break-through as a precursor of art nouveau at the exhibition of Dresden in 1896, van de Velde's star began to shine in Germany and within the same circles that were interested in Nietzsche's "New Man." In spring 1901, he gave a lecture series about the theoretical foundation of the "New Style" in the well-known salon of Cornelia Richter in Berlin, and Kessler introduced him at one of his soirées to Elisabeth. She in turn invited van de Velde and Kessler on a *pèlerinage* to Nietzsche's tomb on 25 August 1901, the first anniversary of his death. In 1901, after he had left behind the idea of a new guild society with the bankruptcy of his arts-and-crafts workshops in Berlin and Brussels, van de Velde became immediately interested in the idea of reforming the applied arts production in the grand duchy of Weimar. Elisabeth, on the other hand, wanted to re-animate the idea of a cultural Weimar movement. After the "golden age" of the poets Schiller and Goethe, followed by the "silver age" of the composer and virtuoso Franz Liszt, she thought of a "New Weimar" of literature, arts, architecture and life reform with the help of van de Velde under the banner of Nietzsche's philosophy. To reinforce her diplomatic maneuvers for his appointment at court, in fall of 1901, she hired van de Velde to modify the archival villa Silberblick.Changes in the design of the archive could reinforce Elisabeth's autonomy, who had also taken over the ownership of the archival villa that same year. Van de Velde, who as early as 1890s had seen Nietzsche's philosophy as a fundamental critique for bourgeois culture and artistic production, and who had sensed his "mission" in a renewal of the applied arts, now saw the chance to combine his interests in aesthetic reform and new style with an homage to "his" philosopher.

Furthermore, the design of the Nietzsche-Archive became an exemplary case study of van de Velde's concept of "ornamental transcription," or, programmatic art in the sense of late Romantic music theory. Van de Velde was aware of this model of conceptual reference to external thoughts of philosophy or literature as formulated by Richard Wagner and Franz Liszt. He applied those ideas to architecture, furnishing and book design. Programmatic art was meant to disarm the latent distrust put forward by idealistic philosophy against music (and architecture) in the aesthetics of Kant, Hegel or Schelling, who preferred philosophy and poetry. They disregarded music (and architecture) as meaningless entertainment or emotional expression, and therefore as inferior arts. According to Wagner, music is able to refer to an external philosophic "program" by the title of the work, an explanatory theoretical text of the composer (where the name "program" is taken from), and a significant way of structuring the abstract material into themes or the so-called leitmotifs. Wagner goes on to explain that Beethoven consciously transgressed the canonic symphonic form with the vocal finale of his Symphony no. 9 in order to transcend and express highest emotion: the celebration of joy of a liberated mankind. This moment was in Wagner's eyes the rebirth of the *Gesamtkunstwerk* (synthesis of arts) of ancient Greek tragedy. Van de Velde adopted this idea of synthesis of arts interpenetrating all aspects of life. But even more relevant for van de Velde's aesthetic thought was the rejection of mimicry and imitation in the concept of programmatic art, providing an abstract object with philosophic meaning beyond the application of symbolic ornament or classical tectonic language. Nietzsche, who had reflected on Wagner and the metaphysics of music in his early writings, proposed yet another important motive of non-figural representation: he suggested an identity of internal and external worlds, a characteristic of the post-Christian thinker with his built environment, which reformulates the pre-Socratic idea of *physis* as an organic unity of spirit and matter or what Nietzsche called the "architecture for the perceptive."[8]

At the Nietzsche-Archive van de Velde operated with a series of manipulations that can be read as "programmatic": he improved the unsatisfactory entrance of the house by adding a street-facing portico to the simple cubic building (Fig. 1). To mark its status as a public institution, he labeled it with the inscription "Nietzsche-Archiv" carved in stone in broad roman letters. This gesture did not correspond to the status of a private villa, but had to be understood in the context of programmatic art as "title" of this work. For building the new façade van de Velde continued to use the brick and stucco of the existing structure, but rather than resembling

Figure 3. Above, Nietzsche-Archive by Henry van de Velde, view from the Entrance (East). The stele by Max Klinger can be seen in the back; below view from the West (Weimar, 1992)

Figure 4. Nietzsche-Archive. The picture was taken in early 1980s, shortly before renovations

the original's Neo-Renaissance wall and opening, the new street façade is a compositional play of surfaces and proportions. This anthropomorphic positioning of openings can be directly connected to Nietzsche's idea of physiognomic expression, as in the "architecture for the perceptive." The excessive height of the dark oak entrance door serves as part of this geometric frame, but for the approaching guest it offers another enigma: instead of a door handle there is a set of sculptural brazen handholds with labyrinth ornamentation (Fig. 2). This might reflect on the unclear status of the house as both shrine and villa, literary archive and last domicile of the philosopher, but at the same time it structured the proportion of power of inside and outside: the arriving guest had to request access. In addition, van de Velde noted in an earlier version of his memoirs, in the chapter "The Nietzsche-Archive and the New Weimar" that he intended to give the archive an appearance "more solemn and monumental like a *Schatzkammer* [treasure chamber]"[9]—the leitmotif of this work.

Once inside, there is a dark entrance hall. A crystalline lamp[10] over the doorway illuminates cloakrooms containing a series of brass coat hooks, which work as joints between the capitalist chaos outside and the synthesis of art inside, constructing a new society of "Nietzscheans." A few steps to the right, a double door opens to the "treasure" of the archive: the library with "His" books and manuscripts.

This oblong room, a merging of two smaller rooms, has a rather low ceiling for its size. Since van de Velde could not easily change the height within an existing house, he chose a repetitive vertical structure as "organic ribs" to arrange the walls and virtually elevate and carry the white plafond. These planks hold the shelves for books, but integrate openings— with movable window grilles to prohibit unwanted visitors—as well as other furniture, even a chamber piano. The color palette of this room ranges from natural red beech to fraise-colored plush and intensive red curtains, heightened by white stucco and brass details. The only contrast is the grayish-blue carpet—the room as a whole invoked the atmosphere of the alpenglow[11] of Nietzsche's Zarathustra. Van de Velde put another "title" reference inside his work, this time in the form of the initial of the philosopher's name: a brass *N* in a circle is embedded in the wall above the tiled stove. Nietzsche himself, apart from his books on the shelves and his manuscripts in the cupboards, is "present" in a life-size marble *stele* (or vertical sculptural object) by Max Klinger. The only object in the room that is not designed by van de Velde, is this *stele*, which rests on a platform against a surface of colored glass illuminated by evening light. (Fig. 3)

But why did van de Velde deliberately blur the status of the main room between private salon and sacred temple, literary archive and intimate library? The answer might be found in the program of the "New Weimar" and its direct rivalry with the cult of Goethe, manifest in the conversion of Goethe's house in Weimar to a national museum in 1885 as well as the new Goethe-Schiller-Archives, built in 1896. The Nietzsche-Archive had to undergo comparison with the palazzo of the thinker, poet and minister (three characteristics of Goethe) with its exquisite classical interiors and artwork. Goethe had brought back the idea of the humanist *studiolo* from his *Italian Journey* (1786-87) and remodeled his house into a personal microcosm: the succession of salons, dining hall, study chamber, scientific collection, garden and library were read as an ideal portrait of the educated bourgeois. Van de Velde's strategy of staging a mood of authenticity, a plausible yet retroactive studiolo for the dead philosopher, was extraordinary successful. For Nietzsche, who had never consciously understood that he had vegetated four years in Weimar, van de Velde created a physiologic resemblance of architecture and philosophy and constructed an organic atmosphere for "the perceptive" with a synthetic work of art in his new style. The interiors of the Nietzsche-Archive (and van de Velde's book illustrations) soon became synonymous with "Nietzsche design," providing evidence of the modernity and superiority of "his" philosopher.

Figure 2. Villa Silberblick/Nietzsche-Archive, Portico, 1904

Epilogue

After WWII, the Nietzsche-Archive was closed down because of its association with the Nazi regime. The incriminating contact became manifest in a neoclassicist "Nietzsche memorial hall" next to the Nietzsche-Archive from 1938, also remained unfinished. Nietzsche's manuscripts and books, together with Elisabeth's literary remains, were confiscated by the East German authorities and transferred to the socialist predecessor of the Weimar Classics Foundation or *Nationale Forschungs- und Gedenkstätte (der Deutschen Klassik)* Weimar. Since Georg Lukás had denounced Nietzsche's philosophy as proto-fascism, [12] there was almost no opportunity for serious research on archival stocks of Nietzsche in East Germany. The Nietzsche-Archive building was "hidden" by the new owners,[13] the inscription destroyed, the villa modified and reused as a seminar building and guesthouse of the socialist "National Research and Memorial Place in Weimar."[14] (Fig. 4)

In the 1960s, the Italian philosopher Giorgio Colli and the Italian philologist Mazzino Montinari started their project of a new critical edition of Nietzsche's works. An ideological re-evaluation of art nouveau and early modernism in the 1960s and 70s opened the dialogue for a renovation of the archive building as well as its interior, which was begun in 1984, five years before the fall of the Berlin Wall, and remained unfinished until 1991 in the re-united Germany.

Today the Nietzsche-Archive is a museum of the national Weimar Classics Foundation. It is open to the public, but the manuscripts are stored in the Goethe-Schiller-Archives. Friedrich Nietzsche's as well as his sister's books belong to the Anna Amalia Library of the same Weimar Classics Foundation in Weimar and are only accessible for institutional research. Ironically, the private archive of the philosopher's sister was after all united with its national rival and Nietzsche's original writings became even part of the world's cultural heritage,[15] but not in the sense imagined: the Nietzsche-Archive is an archive with empty shelves

Notes

1 The term is Italian and refers to Renaissance artist and humanist studios, like the studiolo of Federico da Montefeltro (Urbino), the studiolo of Isabella d'Este (Mantua) or that of Francesco I de Medici (Palazzo Vecchio, Florence). See further, Wolfgang Liebenwein, *Studiolo. Die Entstehung eines Raumtyps und seine Entwicklung bis um 1600* (Berlin: Gebr. Mann, 1977).

2 Friedrich Nietzsche, *Samtliche Briefe. Kritische Studienausgabe in 8 Banden*, eds. Giorgi Colli and Mazzino Montinari (Berlin & New York: Walther de Gruyter, 2003) 567-579.

3 For a detailed biography see, H. F. Peters, *Zarathustra's Sister: The case of Elisabeth and Friedrich Nietzsche* (New York: Crown, 1977); Carol Diethe, *Nietzsche's Sister and The will to Power: A Biography of Elisabeth Forster-Nietzsche* (Urbana: University of Illinois Press, 2003).

4 Friedrich Nietzsche, *Nietzsche's Werke, Großoktav-Ausgabe* (Leipzig: Naumann, 1899-1909, Kroner, 1909). An index of the previous 19 volumes of works and fragments was published in 1926. For the first English edition see Friedrich Nietzsche, *The Complete Works of Friedrich Nietzsche*, ed., Oscar Levy (Edinburgh & London: T. N. Foulis, 1909).

5. In 2002, the *Weimarer Nietzsche-Bibliographie* counted over 22,000 publications with reference to Nietzsche.

6 Nietzsche finished *Ecce Homo* in 1888, however; due to several "offensive paragraphs" as well as Nietzsche's explicit criticism of his sister and mother, the manuscript remained unpublished until 1908.

7. Elisabeth Forster-Nietzsche, *Das Leben Friedrich Nietzsche's. 2. Bande* (Leipzig: Naumann, 1895-1904). *Der junge Nietzsche* (Leipzig: Kroner, 1912); idem, *Der einsame Nietzsche* (Leipzig: Kroner, 1914); idem. *Wagner und Nietzsche zur Zeit ihrer Freundschaft* (Munchen: Muller, 1915); idem. *Friedrich Nietzsche und die Frauen seiner Zeit* (Munchen: C. H. Beck, 1935). The inaccuracy of the edition of the Nietzsche-Archive was obvious and no better edition existed until 1967 when *Friedrich Nietzsche Werke. Kritische Gesamtausgabe* was published by Giorgi Colli and Mazzino Montinari. The final transcription and edition of the handwritten fragments has remained unfinished up until today—106 years after Nietzsche's death.

8 *"Architecture for the perceptive.* There is and probably will be a need to perceive what our great cities lack above all: still, wide extensive places for reflection; places with tall, spacious, lengthy colonnades for inclement or unduly sunny weather where no traffic noise or street cries can penetrate, and where a finer sensibility would forbid even a priest from praying aloud: buildings and locations that express as a whole the sublimity of bethinking and of stepping aside. The time is past when the Church possessed the monopoly of reflection, when the *vita contemplativa* primarily had to be a *vita religiosa*, and yet that is the idea expressed in everything the Church has built. I do not know how we could ever content ourselves with its buildings, even stripped of their ecclesiastical function, they speak far too emotive and too constrained a language, as the houses of God and as the showplaces of intercourse with another world, for us as godless people to think our thoughts in them. We want to have ourselves translated into stones and plants, we want to have ourselves to stroll in, when we take a turn in those porticoes and gardens." Friedrich Nietzsche, *Die frohliche Wissenschaft, book 4, § 280, in Friedrich Nietzsche: Samtliche Werke Kritische Studienausgabe [KSA] in 15 Banden*, Band 3, eds. Giorgi Colli and Mazzino Montinari (Berlin & New York: Walter de Gruyter, 1988), 524-525.

9 Henry van de Velde, "Grand Manuscrit Autobiographique" [memoirs] *FS X 1-2, 414, Archives Henry van de Velde*, Bibliotheque Royal, Brussels. The quote, "solennel et monumental d'une 'Schatzkammer'," appears in Henry van de Velde, *Récit de ma vie II*, eds. Anne van Loo and Fabrice van de Kerckhove (Brussels: Versa, 1992), 155.

10 The analysis of crystal as a metaphoric motive in Nietzsche's Zarathustra as well as its effects on expressionist architects such as Paul Scheerbart and Bruno Taut is beyond the scope of this essay.

11 A reddish glow seen near sunset or sunrise on the summits of mountains. This reddish glow has been read as reference to the mountain setting, the Parsi worship of the sun and the blood metaphors in Nietzsche's *Zarathustra*. All three: the metaphor of sun/light/fire, the metaphor of the clear and crisp mountain atmosphere, and the metaphor of blood can be found in Nietzsche's Zarathustra and were reflected by van de Velde in his Nietzsche-Archive works.

12. Georg Lukács, *Der deutsche Faschismus und Nietzsche* (Paris: C.A.L.P.O., 1945); idem, *Die Zerstorung der Vernunft* (Berlin: Aufbau-Verlag, 1954).

13 The name "Nietzsche-Archiv" was erased from the city plans as well as from street signs, and people were instructed to use the new name. Some elder locals told me that visitors asking for the Nietzsche-Archive had to be reported to the police.

14 Affected by this alteration was the second floor of the Nietzsche-Archive with the "private" chambers of Elisabeth Forster-Nietzsche and the death room of Friedrich Nietzsche, which were destroyed at that time. These rooms were not touched by van de Velde's restoration of 1902-03, some of the furniture remained in the possession of the repository of Goethe National Museum in Weimar.

15 Since 2001, the Goethe-Schiller-Archives have been part of UNESCO's "Memory of the World" program.

Figure 1. Row-houses for workers housing with "practically worthless" balconies, Sunila, 1936

Figure 2. Link houses that stepped up the hill in section, Sunila

Sarah Menin

Accessing the Essence of Architecture: "In-between" Nature and Modernity in Aalto's Engineers Housing in Sunila

There is a stream of awareness just below the level of day-to-day self-consciousness that monitors the field of spatial relationships around us....For it is not only for an insight into our mysterious moments of elation that we look to it but also as the catalyst for those responses of alienation and exasperation provoked by the buildings that, as we vaguely say, "do not work."[1]

In his essay "The Natural Imagination," Colin St John Wilson describes the architectural experience as an ineffable yet "inescapable" natural condition of life. In this he grasps at an energy that often goes unrecognized. To speak of architecture at this depth is perhaps to speak of an essence that both feeds and is fed by the human life that inhabits it.

Aldo van Eyck articulated a process of re-establishing a connection between the need for shelter and the full nature of that need. Making this connection was crucial, he argued, "for each man and all men, since they no longer do it for themselves."[2] If a building does not address these instincts it may subtly, even imperceptibly, alienate us from the same deep realms of being. At this threshold much architecture has stumbled, failing to interpret and enact appropriate solutions to the fundamental (but ineffable) problem of facilitating access to this inter and intra-personal psycho-social realm. Our experiential response to such architectural failure is, as Wilson suggests, "alienation and exasperation."[3] It is emotional stress. Wilson continues:

> All our awareness is grounded in forms of spatial experience and that spatial experience is not pure but charged with emotional stress from our "first-born affinities." There is a domain of experience, born before the use of words, yet structured like a language replete with its own expectations, memory and powers of communication: a domain that is indeed the primary source of the one language that is truly universal and to which we have given the name of "body language."[4]

Wilson rightly suggests, "it is intrinsically these sensations [of body language] that are the primary vehicle for architectural experience."[5]

After the Russian Revolution, a newly independent Finland strove to modernize by looking westward—out of reach of the Russian Bear (be it Red or White).[6] When Finns rushed to replace wooden dwellings with modern concrete row houses, the Finnish architect Alvar Aalto feared that the new architecture would create a sense of alienation. Although by no means encouraging a return to the backwoods, Aalto felt that the indigenous buildings could better satisfy the human need for shelter. In their haste to avoid Red dictatorship, the Finns would encounter another, subtler sort of dictatorship, later described by Aalto as "the slavery of human beings to technical futilities that in themselves do not contain one piece of real humanity."[7] Here Aalto was referring to the limited rationalism of Modernity.

In the 1930s, Finnish architecture, like Finnish society, stood poised between the wilderness backwoods and the rationale of industrial European Modernity. Alvar Aalto sought to forge both a physical and a phenomenal relationship between these two in an extended commission from the Ahlström Company to design a series of housing projects for employees of a vast pulp factory in Sunila. These projects, largely designed between 1935-37 with some additional housing blocks in the mid-1940s and early 1950s, ranged from minimal housing for workers to more generous dwellings for engineers and managers.[8] In Karl Fleig's synopsis of Aalto's oeuvre we see the progression through these commissions, highlighting the growth of Aalto's preoccupation with threshold and transition details. [9] The content of such architectural detailing was Aalto's concern, too, for the alienating effects of modern life on the well-being of *uomo piccolo*—little man as he affectionately called his users.[10] Aalto judged that many modern buildings did not enrich the psycho-physical life, but all too often created further schisms between humans and the environment, between people, and more importantly within the person. This was due, Aalto believed, to the buildings' rigidity and inflexibility.[11] If architecture had the task "to aid in the solution of wide-ranging humanistic, socio-economic, and psychological problems," he argued, it "must be allowed as much internal and formal flexibility as possible."[12] Humans, he felt, were forced into architecture that ill-fitted their needs—architecture that was not rational "from the human point of view."[13] I would suggest that this preoccupation spoke, too, of Aalto's own deep schisms within, and the importance of the rejuvenating contact with nature to comfort and heal.[14] Aalto wanted to offer in his architecture that which he knew to be essential within himself, and between himself and the world.

In Sunila, Aalto's concern for the process of entering, and for the richness of being "in-between" inside and outside, gradually came to the fore.[15] His first workers housing in Sunila had no balconies, and appeared at first glance to be scantily garbed in the stripped Modernism of Gropius' Siemensstadt Housing, but he argued that "every family had no difficulty in gaining direct access to the landscape." [16] Aalto's second scheme contained, by his own admission, "practically worthless" token balconies (Fig.1), like the ones his friend Gropius had offered students at the Bauhaus.[17] This important failure pushed Aalto to make access to nature not just a desire, but an essential aspect of his housing design. He began to explore the intrinsic relation between architecture and landscape, advancing ideas of "the trinity of the human being, the room, and the garden" and its out-working in "outside rooms" that he had put forward ten years before.[18] He became determined to offer "access to the landscape" from all dwellings, believing that sudden alienation from nature, which had occurred because of Finland's "ever-increasing mechanization," was responsible for many social ills. Yet Aalto knew, too, that "also our own actions estrange us from nature." [19] In his third housing scheme in Sunila, Aalto created link houses that stepped up the hill in section (Fig.2), providing more extensive balconies, a typology he used again in Kauttua.[20]

After these "workers" housing schemes, Aalto had the opportunity to further explore the relationship between architecture and landscape in the more generous specification allowed in the housing for engineers. Here, on a flatter piece of woodland ground, he flexed the plan instead of the section, allowing it to open up to the south and the sun like a flower. Unlike the very rational rectilinearity of the earlier housing schemes, the plan flexes (Fig.3) in what he later called "elastic" or "flexible standardisation," accommodating views of the natural environment and the need of the users for more privacy and individuality. By the 1930s such a conscious accommodation of both natural and human circumstances had become a central tenet of Aalto's design process, and was not unlike Haring's *Leistungsform* or content-derived form.

The access to these "engineer's" row houses is of particular interest. Trees grow against the whitewashed façade, while an "in-between" space or architectural "moment" creates a transition between two places and two states of mind (Fig.4). Here the "moment" both divides and unites the tree and whitewashed façade, easing one to and fro: forward into the white Modernity and backward, into the folkloric realm of *Tapio*, the forest god (Fig.5).

Figure 3. Both images show southerly aspect of engineer's Housing, Sunila, Aalto, 1938

With the vernacular accent of his mother tongue, Aalto enunciates this gesture of welcome into Modernity, this easing between nature and culture. He uses wood, whose Latin root (*materia*) is closely related to the word mater, meaning mother and maternal love.[21] This is a playful reminder of the essence of the argument, the preverbal, physical reality of primal embrace from which our body-space language grows. Aalto believed that wood was "psychologically very valuable,"[22] perhaps due to its rich "kinship with man and living nature," and the "pleasant sensation" of its tactile quality. Thereafter, Aalto accessed the potential of Modernism with wood.

The smooth round-wood does not alienate the body, Aalto argued. It does not conduct heat away from the hand, as metal does.[23] The wood thus provides a tectonic transition. From forest the visitor passes through a trellised gateway that marks the territorial entrance to the cold white façade of the north wall (Fig.3). Yet against the hard façade the gateway appears vulnerable, a palimpsest of the Finnish tradition and mysticism of forest lore thrust up against whitewashed rationalism.[24] It is also a gesture of subliminal encouragement to dwell, more fully, in the new architecture, reassuring us that the old relationship with nature can be maintained, or made anew. It marks an acknowledgement of something archetypal. Aalto thus manifests a transition because the Finns "no longer did it for themselves," as Van Eyck put it. They no longer dwelt, eye to hand to mouth, in the forest,[25] no longer marked the subtle boundaries of their shelter or settlements, and thus were losing conscious sight of the psycho-social reality that is inherent in the physical realm.

The round-wood trellis is a psycho-spatial episode, functioning, in Aalto's terms, "to tie the threads of a living present with those of a living past."[26] Yet crucially, Aalto wrote that such manoeuvres were a "point of departure,"[27] existing in order to "meet today's needs."[28] The clear tectonic connections between these trellises and the vernacular Finnish enclosures do not suggest that Aalto sought to re-create ethnological specimens. Rather, they form a caveat to Functionalism, reminding us that limited Functionalism and the "intoxication with Modernism"[29] failed to address some realities of human life. Rationalism, he felt, "often suffers from a lack of humanity," and needed to be "expanded." Such "in-between" episodes at Sunila were Aalto's way of addressing the "human question." I suggest that, in both the form of wooden entrance detail and the particular tectonic manifestation, Aalto sought to draw the users deeper into themselves, a "moderating pause" in which to acclimatize,[30] at the same time rooting Modernism in both the cultural past and the environmental present. In this architectural pause he was reaching for what was missing in much of Finland's new, urban architecture as it raced, full-tilt, into that "rootless, airborne internationalism."[31]

Skeptical about the promises of the Modern epoch, Aalto's work constantly questioned the status quo of the Modern dictatorship, as he saw it, believing it could be transformed "into its apparent opposite, to love with critical sensibility."[32] Here Aalto nails his colors to the

Figure 5. Vernacular enclosure, Lieksa Folk Museum, Finland

mast, and his wooden poles to the whitewashed façade of Modernist architecture. In doing so, he offered "little man" a way in to the alienating modern epoch. He established a crucial rubric for accessing and simultaneously subverting Modernity. This is important to the current argument, since by even suggesting the need for a transition between inside and outside Aalto was searching deep in the very nature of architecture as shelter, and was intuitively speaking at the psychological as well as the physical level. Here we return to the mother tongue—the physical language of space and embrace.

In this way, I suggest, Aalto's entrance to his Sunila engineer's housing offered the users the early opportunity to dwell more fully in his housing, to access the benefits of Modern living by carrying with them the rooting relationship of nature without and nature within. This is not as far-fetched an idea as it might seem. If architecture invites and does not repel or alienate, those who use it may do so in a more relaxed way. In "The Natural Imagination" Wilson suggests that architecture can accommodate, and even embody something of the emotional drama of human life. He relates the deepest root of this idea to the work of the psychoanalyst Melanie Klein.[33] Like his friend, art theorist Adrian Stokes,[34] Wilson utilizes Klein's theories of the development of the infant psyche, and most importantly her identification of the two polar "positions" or modes of experience, Envelopment and Exposure, and the delicate and fecund place between these. This psycho-spatial grammar, rooted in the first holding environment, is extrapolated in various forms (both positive and negative) into our human futures. Aalto suggested, "One way to produce a more humane built environment is to expand our definition of rationalism." In "Rationalism and Man" (1935) he went on to speculate that the most important area of demand that an architect must address is "invisible to the eye: this area perhaps conceals the demands that are closest to the human individual and thus elude definition." Therein, he concluded lie, "the purely human questions."[35] It was this architectural essence or "energy" that Wilson explores in the opening quotation, above.

Aalto thought that the age-old feel for materials was severed in early Modernism. Therefore it is no accident that the "in-between" episode in Sunila is made from wood. To Aalto it mattered deeply that metal conducted heat away from the hand and wood did not.[36] For this reason Aalto used wood on occasions when he wanted to extend an invitation to the deepest realms of architecture. But he chose wood, too, for its association with nature and therefore the capacity to rehearse, in the heart of the building, the relationship with the forest. Within his buildings, and in-between them and their immediate environment, he invited the user to keep relating to the natural environment. Aalto's writing reinforces his architectural argument that we deny our inner-life at a great cost,[37] and indeed, for Aalto personally nature played a crucial regenerative role in his own life-long struggle with deep psychological disturbance.[38] Aalto's work offers the users a way in to their "hidden" experience—what Suzanne K. Langer called the realm of

Figure 4. Wooden "in-between" episode, Engineer's housing, Sunila, Aalto 1939

"threads of unrecorded reality"[39]: threads connecting the living present with the living past, both personally and culturally. As I suggest elsewhere, Aalto was able to shore up his own vulnerable self by weaving such disparate and often broken threads into his creative work.[40] At its best, architecture subtly invites us to be more fully human, and aspires to remind us of our relation to the "other," be it another person, or some natural phenomenon. The architectural moments Aalto creates, such as the threshold in Sunila's Engineer's Housing, seek to encompass the whole human condition—"his comedy and tragedy both."[41]

* Thanks are due to Rurik Wasastjerna of the *ProSunila* organisation which campaigns for the restoration and upkeep of Aalto's complex in Sunila, Finland, and Sandy Wilson for his inspiration and friendship.

Notes

1 Colin St John Wilson, "The Natural Imagination," *Architectural Reflections* (Manchester: Manchester University Press, 2000), 18

2 The quote is derived from a 1962 untitled paper by Aldo Van Eyck, reprinted in *Team 10 Primer*, ed. Alison Smithson (Cambridge: MIT Press, 1968), 43

3 Wilson, 16-17

4 Ibid

5. Ibid ,12

6 Having always been downtrodden beneath the kingdoms of Russia and Sweden, and being in no mind to allow Russians to over run her again, the rapid expansion of her fledgling economy was a bulwark against further, Soviet, dictatorship

7 Alvar Aalto, "The Architectural Struggle," 1957, reprinted in *Alvar Aalto Sketches*, ed. Goran Schildt, trans. Stuart Wrede (Cambridge: MIT Press, c1978), 145

8 The plan for the whole area was conceived at the start, although the housing projects proceeded in series. Aalto wrote, "Only the south slopes of the hills are for dwellings, the valleys are traffic ways and gardens. On the north slopes the pine forest shall remain undisturbed." *Alvar Aalto*, ed. Karl Fleig (Zurich: Verlag fur Architektur Artemis, 1990), 96

9 Aalto, "Art and Technology," 1955, reprinted in Schildt, 128

10 Ibid., 129

11 Aalto, "Rationalism and Man," Ibid., 50

12 Aalto, "The Influence of Construction and Materials on Modern Architecture," 1938, Ibid., 61

13 "Rationalism and Man," Ibid., 50

14 Sarah Menin and Flora Samuel, *Nature and Space: Aalto and Le Corbusier* (London: Routledge, 2003)

15 This interest in inside/outside had been a concern for Aalto during his early neo-classical style of design as is demonstrated in his famous Pompeian sketch of the aedicular atrium moment in the Villa for his brother

16 Aalto cited in Fleig, 96. Fleig's synopsis of Aalto's work was compiled in collaboration with Aalto, who had a hand in writing up the project descriptions

17 Sarah Menin, "The Meandering Wave from Sunila to Marseille," *PTAH 1* (Helsinki: The Alvar Aalto Academy, 2003): 42-51

18 Aalto had illustrated his argument with both Pompeian villas and Le Corbusier's Esprit Nouveau Pavilion. Alvar Aalto, "From Doorstep to Living Room" reprinted in *Alvar Aalto in His Own Words*, ed. Goran Schildt (New York: Rizzoli, 1997), 49-55. Herein Aalto wrote of "the trinity of human being, room and garden," 50

19 Aalto, "Between Humanism and Materialism," Schildt (1978), 131. This idea grew into a new housing typology, three floors of accommodation stepped into a hill, with direct access at the rear to nature. After achieving this in Sunila he repeated it, most successfully in the Kauttua Workers Housing scheme.

20 Ibid

21 Macfarlane, J. *Dictionary of Latin and English Languages* (London: Eyre and Spottiswoode, n.d.)

22 Aalto, "Wood as a Building Material," 1956, reprinted in Schildt (1978), 142

23 Aalto, "Rationalism and Man," 1935, reprinted in Schildt (1997), 91

24 Aalto, "Experimental House," Schildt (1978), 116

25 J. Pallasmaa, "Eye, Hand, Head and Heart: Conceptual Knowledge and Tacit Embodied Wisdom in Architecture," in *The Four Faces of Architecture*, eds. L. Villner and A. Abarkan (Stockholm: RIT, 2005), 61-72

26 Aalto used these words to describe Gunnar Asplund's architectural legacy in "E.G. Asplund in Memorium," Schildt (1978), 66

27 Aalto, "The Dwelling as a Problem," Schildt (1978), 31

28 Aalto, "Between Humanism and Materialism," Schildt (1978), 131

29 Aalto, "Rationalism and Man," Schildt (1978), 47

30 Wilson, "The Natural Imagination," 16

31 Aalto, "Art and Technology," 1955, reprinted in Schildt (1978), 129

32 Aalto, "Centenary Speech," Schildt (1978), 163

33 Wilson, "The Natural Imagination". See also Sarah Menin and Stephen Kite, An Architecture of Invitation: Colin St John Wilson, Ashgate, 2005

34 Adrian Stokes, *Three Essays: The Luxury and Necessity of Paintings* (London: Tavistock, 1961)

35 Aalto, "Rationalism and Man," 1935, Schildt (1997), 91

36 Ibid., 90-1

37 Menin, "Aalto and the Tutelary Goddesses," in Andrew Ballantyne, ed., *Architectures: Modernism and After* (New York: Blackwell, 2003), 57-87

38 Menin and Samuel, *Nature and Space*

39 Susanne Katherina Knauth Langer, *Philosophy in a New Key: A Study in the Symbolism of Reason, Rite and Art* (Cambridge, MA: Harvard, c1993), 284

40 Menin, "Aalto and the Tutelary Goddesses", idem, "The Profound Logos: Creative Parallels in the Lives and Work of Aalto and Sibelius," *Journal of Architecture*, Spring 2003: 131-148

41 Aalto, "Instead of an Article," 1958, reprinted in Schildt (1978), 161

Talinn Grigor

Ladies Last! Perverse Spaces in a Time of Orthodoxy

My research had taken me to Tehran on more than one occasion. In my effort to access archives, people, and institutions—each with its own politics of openness, sociability, and gender—I soon realized that the most intense site of social narrative was positioned en route to these places: in the public bus. In a vast system of transportation that caters to a megalopolis of some fifteen million inhabitants, the politics of the Iranian public bus oscillates between extremes of compromise and stiffness, generosity and selfishness, and above all, severe orthodoxy and subtle pornography. This mobile and transient space allows various enactments of transgression, excess, and access. While by its very definition and function, the bus is open and accessible to every Iranian and non-Iranian alike, it seems to maintain some kind of political autonomy by the virtue of its mobility and temporary nature. Thus, for millions of people daily, the bus creates a space that is inaccessible and uncontrollable by officials; it disables the policing and enforcement of the harsh edicts of the Islamic Republic of Iran (IRI). As a result, this transitional site often encourages sexual transgression by some of the younger members of Tehran's population.

Public transportation in general and the bus service in particular remain top priorities on the agenda of Iranian state welfare. Arguably, Tehran "works" because the government has done an exceptional job of maintaining public transportation, despite a long list of other social and urban concerns. Serving the entire metropolis, Tehran's bus system is operated by the *Sherkate Otobusrani Vahed* (United Bus Company), which was created by Mohammad Reza Shah after the 1953 countercoup d'état. It unified various small private and public buses into one single transport system—hence *vahed*—owned by the state and managed by the Tehran Municipality. These units move the vast majority of the urban population. To remain true to the rhetoric of "the downtrodden" (*mo'stazafin*) of the 1977-79 Iranian Revolution, post-revolutionary governments have insisted on making these services affordable for everyone.[1] Every month, well-designed vouchers of ten *toman*, equivalent to 1.5 US cents, are printed and sold (see image). Each ride costs two vouchers, making the service the cheapest possible means of transport in the country. For those who cannot afford to pay, the service is free by an unspoken agreement.[2] The subsidization of public transportation, along with bread, sugar, kerosene and natural gas, is a part of a much larger post-revolutionary commitment to social welfare programs. It also aims to prevent another urban revolution. "In order to alleviate the increasing

problems of urban transport and associated air pollution," reported the UN in 1995, "the Municipality of Tehran has initiated a number of efforts, namely a trolley bus system, the implementation of separate bus lanes to increase efficiency, trucking restrictions, multi-story parking structures, the opening of the metro system, and an electronic traffic control system."[3] These efforts are attempts to control the urban chaos and alleviate the problems of one of the largest cities in the world.

For the most part, individual buses are clean, orderly, well organized, and efficiently regulated. The internal floor plan is quite simple: eight rows of two double-seats constitute the area reserved for male passengers, with six rows of similar seats in the back for female passengers. A central open zone for standing passengers, flanked by the middle double-door, divides these two spaces. Unlike buses in most places in the world, however, the middle opening has an intensely loaded meaning in Iran. This zone is divided by a bar that cuts the bus in half, creating two separate entrances to the men's and women's sections, respectively. Strangely enough, the bus is also an iconoclastic space. In a country where the state legitimizes itself based on a popular revolution, and unlike most of its other public sites, in the bus there are no commercial advertisements, no state propaganda, no "no smoking" signs, nor even the "please observe the *hejab* (Islamic veil)" signs so popular on the entrance doors of most stores and restaurants. The iconoclastic, segregated, and seemingly chaotic but well-functioning bus is a signifier of the society that it serves.

Ambivalence of Social Welfare

The bar separates the space of women, at the back of the bus, and that of men, in the front of the bus. A simple, inch-thick horizontal pole cuts the interior space in two, but it functions as an impenetrable wall that negates the male gaze and confines it to the front of the bus—at least theoretically. In practice, the two sides of this bar accumulate all kinds of sexual tension. In my observations, from the women's section, the male bus-driver seemed to be the only person who was gender-neutral: the eunuch of the Oriental seraglio. He had free access to the space, either collecting the tickets or repairing a part of the bus. His presence was neither threatening nor comforting. While the bus-driver existed in a gender-neutral bubble, this was not so for the rest of us.

One afternoon during the 5 p.m. rush hour, as I was being pushed and shoved in the women's section at the back of the bus, I began to watch two young men, perhaps in their late teens or early twenties. They were gazing from their side of the bar at three young women of the same age, seated in the second row behind the bar. This was strange, since ordinarily most men turned their back to the women's section and faced the front of the bus. In contrast, these two boys were directly facing the rear of the bus. As I watched each side of the bar and concluded that these rather good-looking girls either did not see the piercing male gaze or chose not to see it, one of them shouted, "Don't look, you stupid!" One of the boys immediately shied away, while the other began cursing the girls, based on the logic that "watching is not a crime." This spoke directly to a range of perceptions about laws and their violation, about masculine civil liberties and feminine lack of legal rights. While men seemed to remain completely indifferent to the commotion, female voices got louder and more numerous. A young woman behind me said, "If they had any religious dignity (*mo'men*), they would be turning their backs to us." Another, "She is right; he has been staring at them since *Tajrish*," south of central Tehran.

A casually veiled woman, who appeared to be in her mid-sixties and of somewhat unexpected courage, screamed, "Let him watch, let him watch," adding without any hesitation, "*tamasha majani-ye*: spectacle is free." Some laughed, others scorned. But she did not stop. "Let them watch; these boys are hungry (*gorosneh*)." Letting her veil fall on her shoulders, she rhetorically asked, "Don't you know that these kids have been brought up on women's laps?" This comment contained an undeniable Oedipal reference, the real meaning of which was lost on me as well as on most of the passengers. As the bus approached the terminal, she ended up shouting at the top of her lungs as she walked off the bus, "*Javid shah, javid shah*: Long Live the King, Long Live the King." These words had almost certainly not been uttered in the Iranian public space since 1977.

Two things became clear to me. On the one hand, I realized that for the boys to show sexual interest on the bus rendered the secretive thoroughly public, hence perhaps more gratifying. Around the sexualized bar, these boys seemed to have no qualms about accessing the bodies of those around them—physical and fantasy alike. I explained this at the time by the fact that they may not have access to the sexualized female body, except in the public domain and only through a gaze of longing, which itself is sustained by the presence of young women, who (have to) wear the veil. Not being a *mo'men* was a mode of domination through the gluttony of the heterosexual male gaze. On the other hand, I realized that the three girls—and most women in the IRI—had mastered the

cult of evasion, of dismissal, of endlessly pretending not to see the masculine gaze. In effect, to evade and dismiss that gaze has become a form of feminist insolence and boldness for the law clearly privileges the masculine prerogative to gaze. The obligatory veil, and the many ingenious ways that it is re-appropriated, provide young women their constitutional right not only to be in public, but also to defy that gaze. The presence of the semi-veiled seductive body of the moderate woman in public is her feminist speech, while loyalty to the Islamic dress code is a feminist act of the thoroughly veiled adherer to the IRI. Both pursue the same political agenda—feminism—under different guises, in this case literally. For these teenagers, male and female alike, the gender barriers (bars, walls, partitions, labeled entrances, and opaque windows) all serve to mediate social interaction. The social domain in the IRI is a public space of inaccessibility, more often than not delineated by architecture rather than the law.

Praxis of Political Defiance

The childish quarrels of young men gazing at young women or old women making Freudian pronouncements were never mere acts of anti-sociability. Rather, they were silent political discourses on power and domination. The (non)conformity on/of the bus, while highly nuanced, penetrated much deeper. Here, the space of the sexual had mutated into the space of the political. Or rather, in the IRI, the space of the political was once more revealed as *a priori* sexual, gendered. Therefore, the bus provided a rather large, clean, and safe window not only into the urban mess of the city outside, but also into the inner social fabric of that city. From the height of my position inside the bus, I observed the urban and social chaos as a spectator: cars that drive either too fast or too slow, too close or not close enough; men that stand too close, women not close enough. Sometimes, conditioned by the overpopulation of the city, two worlds meet on the bus.

During my daily rides from Haft-e Tir Square in central Tehran to Valiasr, as the bus moved northward, the cityscape changed considerably. This, I know, was the legacy of the Pahlavi urbanism of the 1960s and 70s.[4] The towers stood taller and were better designed. The landscape turned greener and denser; the air cleaner and brighter. Midway through the ride, the type of passenger changed too: veils got smaller, thinner and more colorful; Islamic overcoats (*rupush*) got shorter, tighter, and more transparent. Cell phones started to ring and the spoken language to anglicize. The tags of handbags and schoolbags altered from "*Sakht-e Iran*" (Iran's Production) to "Made in US."[5] The public behavior of these two groups differed too. A woman of the north, who opposed the regime, defied its rules by bringing her ten-year-old son to the back of the bus. Along with the barely covering veil, the tight overcoat and the heavy make-up, this was her daily and enduring protest. Meanwhile, a woman of the south, who adhered to the IRI, sent her five-year-old son to the men's section to stand there on his own.

The perception of what the bus represents for different socioeconomic groups in Iranian society was polarized along the lines of politics, culture, and aesthetics. Most of those who were once accused of cultural "Westoxication" and political rightism abhor the very idea of riding a bus—precisely because, for them, it is dangerously gendered and is perceived as a site of perversion. The economically challenged, moderate, or pro-IRI population, regard it as the redeemer of their livelihood.[6] The former group, blinded by its hatred of the regime, is unable to appreciate the Republic's effort to accommodate the fast-growing population of Tehran, while the latter is unable to imagine a life of individual commodity and excessive consumption without it. In these minor signifiers of deference—gazes, veils, overcoats, handbags and cell-phones—there was far more in the meaning of the everyday that met the eye. These minor, but pervasive signifying practices, were intentional political acts.

As I sat there, week after week, I came to perceive my bus ride as a microcosm of a far more complex and convoluted Iranian society. The bus experience was diverse, charitable, seemingly chaotic but highly orderly, always negotiable, and above all divisive; it was simultaneously accessible to every citizen, yet delineated by acute gender and spatial politics. All these thoughts were endorsed on my final ride when a motorcyclist approached the waiting bus at the station and stopped under the central window. Looking up, he exposed himself. After realizing that the women in the first row did not notice him, he covered himself and left. Seven minutes later, he returned to the same spot for a second round. The two women, who finally detected him, were shocked. In the women's section, the 45-minute ride that followed turned into a buzz of female murmurs, gossip, and trepidation. That evening, I recognized that the bus was in fact a crucial site of compromise, insolence, and affirmation for the majority of those who rode it; while for bored teenagers, it was a site of perversion, where everything and anything went as long as they could get away with it. In effect, in the Gramscian tradition, alternatives were embedded in the dominant—in this case, both the hegemony of the IRI as well as that of the unrelenting teenage gaze.

This last incident not only corroborated my impressions about the bus as a site of sexo-political transgression, but also convinced me that neither the bar nor the veils seem to fulfill their intended functions, except perhaps to create a semblance of order and obedience. In fact, both render the very act of transgression more desirable. What is more, the bus's tectonics—strictly segregated but openly accessible—renders these lapses doubly alluring and overtly perverse. For some Iranian young men, perversion has become a mode of authority; for their female counterparts, aversion is both a genre of resistance and a paradigm of defiance. In Iran, this is distinct by the fact that while women are given free access to the public domain and are protected by some laws to do so, they are simultaneously subordinate and inferior to men by a different set of laws. This renders the position of a woman in the public space particularly vicarious. Outside the IRI's norms of sexuality and sociability, both are political critiques of hegemonic culture. Therefore, the bar around which gender segregation is reinforced, has become the place were edges meet, opposites touch, gazes actualize, and illicit tensions oscillate. This is where the most anxious but invisible social contact occurs. It also remains the ultimate embodiment of the public space and its (dis)functionality in the Islamic Republic of Iran. At this threshold, in this transient liminal space, between the outside and the inside, all hell has broken loose.

Notes

1. Urban historians have argued that the Iranian Revolution of 1977-79 was a result of an urban crisis as much as a sociopolitical struggle for power, and that the stage for this crisis was the capital city, Tehran. See Bernard Hourcade, "Teheran 1978-1989: la crise dans l'Etat, la capitale de la ville," *Espaces et Societes* 64, no. 64 (1991): 19-38.

2. A one minute ride in the collective taxi costs seventy-five *toman*, while a closed-door taxi (*dar bast*) two thousand *toman*. Those who cannot afford to do not hand over their tickets while they are being collected. The conductor takes note, but as an act of charity, he moves to the next person without a word or a gesture. This occurred consistently during my daily rides. Nor do passengers object to such exceptions. There exists, it seemed, an unwritten "you can, you pay, you can't, you don't" policy that everyone feels is fair.

3. "Tehran, Iran," *The Challenge of Urbanization: The World's Largest Cities* (United Nations Publications: April 1995).

4. The demarcation of the north-south axis was initiated under the Qajars in the 19th century, but was promoted by the Pahlavis as both an urban and a social axis of promotion.

5. These speak to another kind of accessibility—a global Diasporic one. The owners of Western designed handbags swing—culturally and physically—between the Iranian society of the IRI and the growing Iranian communities of California and Ontario, which have become one of the more powerful forces behind the Diasporic anti-IRI movement.

6. The Pahlavi dynasty—especially Mohammad Reza Shah—was accused of "Westoxication" or "indiscriminate borrowing from the West" by well-known ideologues like Jalal al-Ahmad and Ali Shariati in the 1960s. Jalal al-Ahmad's pamphlet, entitled *Gharbzadegi*, also translated as "The Plague of the West," advocated a return to Islamic roots and was widely circulated in Iran. See E. Abrahamian, *Iran Between Two Revolutions* (New Jersey: Princeton University Press, 1982), 425. Historically, the more westernized secular segment of Tehran has occupied the northern neighborhoods, while the central and southern areas have been inhabited by the less privileged, religious population.

Figure 10 "Shoulder rest" for façade (embedded within surface)

Figure 7 "Shoulder rest" for façade (attached to surface)

Nicole Vlado

(Re)collection: Surfaces, Bodies, and the Dispersed Home

In search of a personal architecture that is not located within the domestic interior, (re)collection describes a method for occupying and marking familiar spaces within the city.

Resident/Residue

The city's surfaces contain attributes of the home. In neighborhoods such as Manhattan's East and West Villages, home is often found on stoops and sidewalks in passing moments. The scale of streets and buildings in these parts of the city, the preservation and degradation of its surfaces, and the continuous density of bodies/objects/architecture provide a unique backdrop for this project. These (historically) dense neighborhoods provide a map of small, tenement-lined streets, evidence of the flux of bodies into/out of the city. With limited interior space, one can imagine the physical saturation of bodies and objects from inside these small apartments out towards the street. It is outside where private space is claimed. This claiming of the city's surfaces is a continued and repeated pattern of city dwellers. Through this act of release from the interior, home is dispersed throughout the city. It is upon the city's surfaces that this dispersion is read.

The (re)collective practices referred to throughout this work are techniques for the observation of physical memories with relation to the city. These practices attempt to shift the act of remembering away from the traditional photograph to a new spatial and tactile construct of memory. As physical objects, spatial memories are not only recalled, they are collectible. They act as remnants of past occupations.

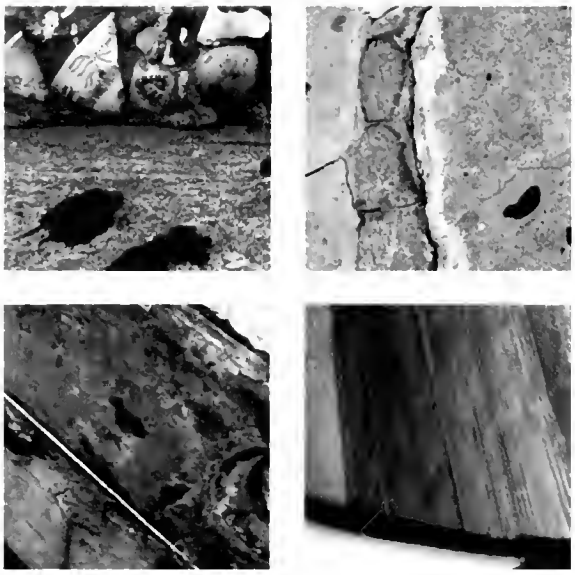


Figure 1. Evidence of occupation on the city's surfaces

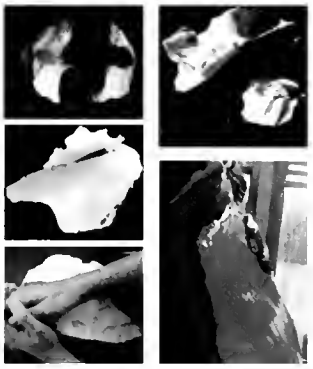


Figure 2. Devices for Remember

Figure 3. "Pillow" for stoop

As the body seeks to create comfort within the city, it engages the surfaces of the city and attempts to transform them into spaces of the home. The city's inhabitants seek refuge along the surfaces of the city, leaning and resting their bodies on its exterior architecture. Through the continued use of these surfaces: stoops, sidewalks, facades, their infrastructure and decoration become the sites/containers of domestic occupation. Surfaces within the city display evidence of prior use. At times, something quite tangible is left behind: an empty bottle, cigarette butts; at other times, this evidence is nearly invisible and lies mainly within the memory of the occupant—within their (re)collection of those places. Although the occupation of these surfaces is temporary, the body begins to leave its impression[1] throughout the city. While appearing quite durable, these concrete, stone, and metal surfaces undergo transformations through constant use: cracks in the sidewalk, peeling paint, rust, dried chewing gum, stains, the smoothing of stone steps; each expresses a pattern of surface habitation. (Fig. 1)

In place of the study of maps or architectural plans, this investigation is based on the exploration of surfaces. Techniques, borrowed from casting and printmaking, provide methods for mapping the textures of the surfaces of both the city and its inhabitant. In search of the evidence of the dispersed home, (re)collective practices are employed. They record the interactions made between the surfaces of body and city, making permanent the fleeting domestic exchange between a city dweller and her surrounding urban landscape.

(Re)collection and Remembering

(Re)collections replace the photographic snapshot as devices for remembering. By mapping the dispersed home, casts were produced to construct the space between the body and the city. To produce these casts, poses of domestic comfort (sitting, leaning, reclining) were performed in relation to a surface (the stoop, façade, and sidewalk). These casts were produced in the studio, of plaster which took shape in the negative space between the posed body and the recalled surface. Various poses and sites were cast, producing a range of objects. The intention of each cast was to create an architectural object that

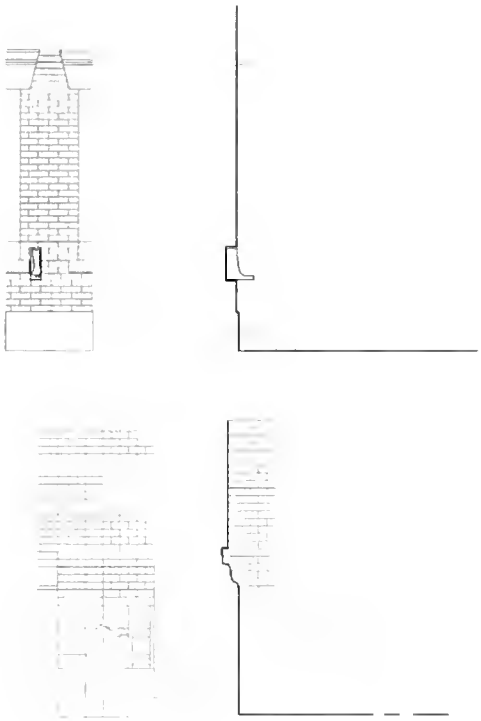


Figure 4 "Arm rest" for window ledge
Figure 5 "Pillow" for stoop
Figure 6. "Arm rest" for window ledge

captured the domestic habitation of exterior space.

Once produced, the objects contain attributes of both the site and the body. By containing information of both the city and the body, the casts can have an independent relation to either surface. If the casts remain with the body they can be worn, repositioning the body into a specific posture related to a domestic activity. It is in this role that the casts function as devices of physical memory (Fig. 4). The casts are keepsake objects or mementos produced for one body/one pose/one site. They represent architecture for the individual, worn for the assurance of the comfort of home by allowing for a continued relation to a domestically-occupied site in the city.

When returned to their sites, these casts transcend their innocence as personal memory devices, posing as territorial markings of public space while mimicking existing urban infrastructure and street furniture. Attached to the surfaces of the city, the casts resemble the existing decorations of the site's architecture. They extend the architectural surfaces of the city, making it more inviting to the human form. The exposed surface of the cast relates to the body, allowing the city's surfaces to behave as objects of furniture by cushioning the body. Growing off existing buildings and sidewalks, the casts serve a function specific to the pose that created them. Therefore, these objects take on the role of "arm-rest," "shoulder-rest," and "pillow" once they have been re-sited within the city. (Figs. 3-11)

Impressions, Markings and Territory

While the casts began as memory devices for use apart from the sites that produced them, when placed back into the city they transformed into types of street furniture. A term used to describe public amenities such as benches and lampposts, "street furniture" in this context includes objects inspired by the domestic interior moved into the realm of the public. Located along the public surfaces of the city, the casts challenge the accepted codes of behavior in these spaces while placing the personal within the space of the collective.
Urban designs often consider the occupant of public space as part of a collective identity rather than as a corporeal

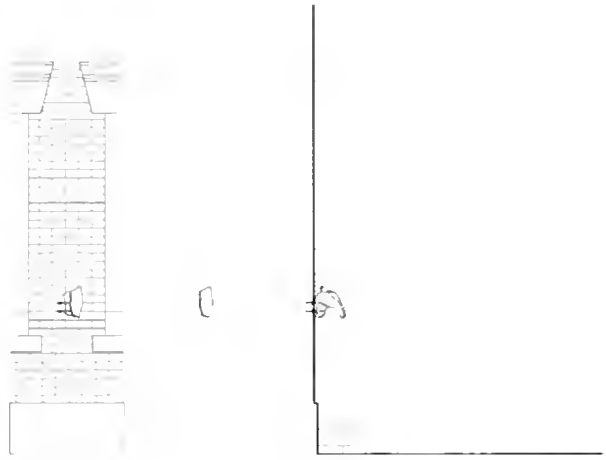


Figure 8 & 9 "Shoulder rest" for facade (attached to surface)

individual. These casts are the product of a persistent insertion of my own body into public space. Using my body as the subject of the work, the casts record my relation to the city, and when located within the city, they invite my return. In my absence, the casts are decorative extensions of various facades, stoops, and sidewalks.

The casts made from my body recall the sensuality of human form, but they are not as recognizable as functional objects; they do not suggest a method of how, when, or why they are to be used. With no signage accompanying them, and no reference for understanding them in the city, the isolated casts are anomalous, foreign objects.

Through their location in the public realm, they may be tested for use by bodies other than my own. They invite investigation rather than reject it, allowing for programmatic ambiguity. Still, the design of the casts is intended for my return to them, constructing a ritual between my body and the city.
The placement of these casts into the city represents a desire to personalize a place other than that of the domestic interior. They identify a comfortable positioning of my body outside of the "home." The body of the woman is historically bound to the domestic interior, and it is inside the home where she engages in physical encounters with furniture and materials sensitive to the human form. The casts extend this intimate relation between body and furniture into public space. In contrast to the hard surfaces of the city's streets, which represent the space of the male (*flâneur*), the casts provide a sensual reconstruction of the city through their reference to the female body.[2]

Both comfort and security are achieved through the location of the familiar cast forms. The articulated façade in combination with the cast provides an opportunity for the female body to become part of the surface of the city. Collapsing the distinction between the "organism and its surroundings," the urban dweller enacts a form of mimicry while occupying the facade's surface.[4] The female body becomes part of the surface reading of the city. Rather than being foreign to the city, she is embedded within.

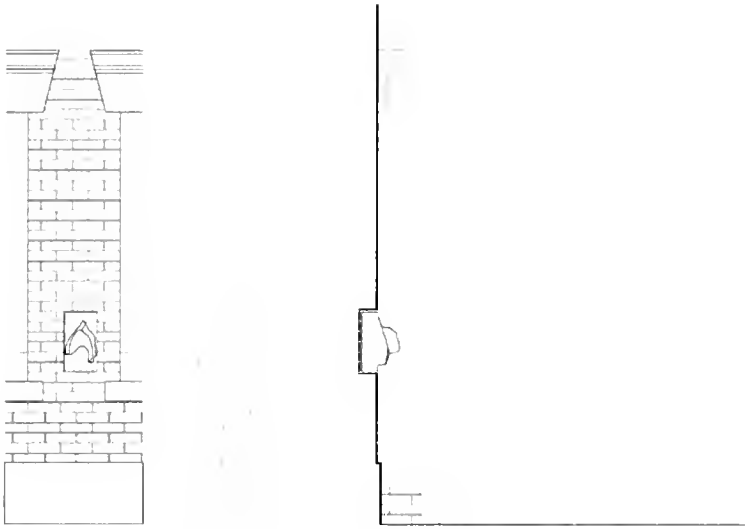


Figure 11. "Shoulder rest" for facade (embedded within surface)

Combining the desire for collecting the domestic habitation of city with a need to claim individual space for the (female) body, this project concludes its research through customized representations of a body situated in the corners, cracks, and surface decorations of the city. As an architectural speculation, this work invites questions surrounding the individual within the city, while challenging existing practices of ownership and disrupting codes of behavior. Recognizing such challenges, this work positions itself as an exploration for the author, claiming space for itself within the discourse of architecture just as it suggests the claiming of public space within the city.

Notes

1 In his book *Oblivion*, Marc Auge describes remembrance as "impression." Extending this concept to describe (re)collection, we can imagine it as the manipulation of a medium, as the transfer of physical information from object to surface. Thus, we can view the analogy of casting as a method that (re)collects information and practices it in various forms to gather proof of the dispersed home. Methods of (re)collection further express the physical attributes of the surface, both of the body and the city. Casting and printmaking techniques register specific textures of each surface.

2 Giuliana Bruno discusses the location of the female body inside the home in relation to the male body outside: "Confined in the private, made to feel at home in the home, woman's sexual field is restricted while her field of motion is sexualized. A male loiterer is a *flâneur*; a female is a 'streetwalker.'" See Giuliana Bruno, "Bodily Architectures," *Assemblage* 19 (December 1992): 108.

3 Roger Caillois, "Mimicry and Legendary Psychasthenia," trans. John Shlepley, *October* 31, no. 17 (winter 1984): 58-74.

Figure 1. Charles Sheeler (1883-1965), *Doylestown House: Stairway* c.1917, gelatin silver print mounted on paperboard, image: 245 x .169 (9 5/8 x 6 5/8), sheet: 253 x .196 (9 15/16 x 7 11/16). National Gallery of Art, Washington, New Century Fund

Figure 2. Charles Sheeler, *Doylestown House: Stairway* with Chair, 1917, gelatin silver print on paper. National Gallery of Art, Washington, Gift of the Brown Foundation, Inc., Houston, 1998 19 1

Mark Rawlinson

Charles Sheeler: Musing on Primitiveness

Alfred Stieglitz condescendingly referred to the interior arrangement of Charles Sheeler's Doylestown house as his "Pennsylvania Hut aesthetitque."[1] In *The Poetics of Space*, Gaston Bachelard makes a similar claim: "[a] dreamer of refuges," he says, "dreams of a hut, a nest, or of nooks and corners into which he would like to hide away like an animal in its hole."[2] For Walter Benjamin, "[t]he original form of all dwelling is existence not in the house but in the shell. The shell bears the impression of its occupant."[3] Unable to return to the shell, we make of the house a refuge, a space in which to burrow, where each room wears the traces of occupancy. As a man who once referred to himself as "the hermit of Doylestown," for all the world Sheeler seems in tune with Benjamin and Bachelard.[4]

The dreamer of refuges lives, according to Bachelard, "in a region that is beyond human images" and it is through the medium of the image—in this instance, the photograph—that Sheeler "dreams."[5] It is poetry and not the image which is Bachelard's privileged mode of representation, but I will argue throughout this essay that Sheeler's images of the Doylestown house, besides their obvious engagement with a photo-cubist aesthetic, reflect another of Bachelard's claims, namely that "*we must start musing on primitiveness.*"[6] To muse on primitiveness is to access the very beginnings of our "becoming," it is to trace most poignantly the relationship between the individual and the home. Contrary to Stieglitz's disdain of Sheeler's primitive retreat, it is precisely the inclusion of the primitive in these images, which marks them out for attention. And whilst these works explicitly reveal the primitive function of the hut, they generate a region "beyond human images" in the dialectical interplay between the realism of photography and the abstraction of formal experimentation.

In each of Sheeler's Doylestown photographs, entry and exit, the flow between boundaries and over thresholds, is

restricted; access to those spaces beyond the frame (or plane) of the image is barred, limited to the point of self-imprisonment. In the end, however, I want to argue that Sheeler's series of Doylestown photographs—repeated images of darkened windows, silhouetted stoves, shady stairwells and half-open doorways—allow us to access something fundamental, something ancient. These rooms are monadic, literally windowless because the windows are no longer transparent, where the truth of the monad lies in its self-containment. Taken from Leibniz, the notion of the monad recurs in the work of both Benjamin and Theodor Adorno. For Adorno, "[t]he interpretation of an artwork as an immanent, crystallised process at a standstill approximates the concept of the monad;" the importance of this is that the "monadological constitution of artworks in themselves points beyond itself."[7] These images of restrained access, of barred thresholds, are themselves thresholds which allow access to the world in miniature.

Between 1910 and 1926 Charles Sheeler rented the Doylestown House, a colonial cottage in Bucks County, Pennsylvania, built by Jonathan Worthington in 1768. The house, shared with fellow artist, Morton Schamberg until his death during the influenza epidemic in 1917, was a place to escape to, a retreat where both men could produce art. The house was isolated and the isolation of the place was felt doubly because of the distance of Bucks County from the developing art scene in Manhattan, but also because of the attitude of those in the local area toward modern art. According to Sheeler, "Modern art was considered there on the same status as an illegitimate child born into the first families, something to live down rather than providing opportunity to introduce new blood."[8] The hostility Sheeler obviously felt towards his growing modernist influences did not discourage him from exploring them explicitly in relation to the house itself, a risky venture one might presume.

As Karen Lucic notes, the choice of subject is not the usual fodder for the determined modern artist because Sheeler could quite easily have been accused of nostalgia and of betraying his avant-gardist principles. And yet Sheeler's Doylestown images avoid both with some skill. For Lucic this is because "Sheeler aimed to synthesize past and present in a new way;" a formula that he was to repeat over and again throughout his career.[9] This neat equation should not foreclose the analysis of the Doylestown images. According to Theodore Stebbins, Sheeler saw in these photographs "something personal," but evades the issue of what this might have been in favour of questions and not answers, provisional or not.[10] I would like to ask the question again: Sheeler saw in these photographs "something personal," but what might that be?

In *Doylestown House: Stairwell* (c.1917) (Fig. 1) we see the twisting risers of the staircase caught between a whitewashed wall and the edge of the frame of the door, both brightly lit. The lighting catches the underside of the rising stairway; the stairwell illuminated enough to allow us to distinguish the space beneath and the pattern of the stairs themselves. But two vertical stripes of murky darkness frame these thin interjections of light, pressing in on the scene. On one level, the photograph abandons content in favour of formal composition, a photo-cubist rendering of the space in terms of geometric line and tonal pattern. On another, one literally can identify a doorway, a stairwell, and the underside of the stairs rising up and into an unseen space above. In *Doylestown House: Stairway with Chair* (c.1917) (Fig. 2), a similar arrangement of forms presents itself to us: strong verticals, this time in white, frame a black/grey oblong which contains the stairs coiling diagonally to the right, continuing upwards into darkness. The door at the bottom of the stairs is open, extending out toward the viewer, concealing a window to the left. Next to the window, nearest the viewer is a small mirror, which is countered bottom right by a slither of a chair and its shadow. The door is open, so one can ascend the stairs but the darkness is forbidding; the window and mirror are redundant, as is, because of the little we see of it, the chair.

Together this reordering of the visible and the imagined space exposes Bachelard's dreamer of nooks and crannies to a degree of critique. What lurks in those dark spaces under stairs, or behind the door? What has happened to the world beyond the windowpane? For whatever reason, Bachelard does not find anything sinister in nooks and crannies, only adventure, anticipation, discovery. The home is seen as the source of happy memories; it exists as a place that returns to us in dreams as we sleep or in daydreams when our minds wander. But, as Rachel Bowlby argues, there is something troubling about Bachelard's untroubled home.[11] For Bowlby, Bachelard's view of the home is overly optimistic, reminding us of Freud's notion of the *unheimlich*. The fact that the house can also be the opposite of the home: a place of darkness, fear and hostility. Freud's nightmarish vision of the familiar made unfamiliar is all about fear, peril, and the loss of the sense of security in the place where it matters most, the place where one must always feel at home: in one's own home.

Bachelard's eulogy on nooks and crannies and Freud's willingness to find horror in them, however, does not fully account for the feeling Sheeler's photographs generate.

One can argue that the Doylestown house is not a homely place at all, there is nothing subtle about the place, hard whitewashed walls, harshly lighted with excessive bright spots and deep, deep shadows, all add up to an uncomfortable place to be. One cannot help but note the staged-ness of each image. These photographs are full of dark spaces, looming silhouettes; there are thresholds that cannot be crossed, stairs that cannot be climbed and windows that cannot be seen through. The interior thus becomes site of containment, a claustrophobic space with harsh, unpredictable lighting and deep, dark shadowy area which one dare not venture into.

Lucic argues with justification that these images are a series, or with Adorno in mind, a constellation. As such, one can piece together the house, as it were. In spite of the house's residual closedness, the viewer begins to recognise latches, doorways, fireplaces, windows and other objects, which act as visual clues and in turn form a mental map of the space. But what a flattened space it remains even with this acquired knowledge. The fragmentary forms of the individual images themselves, though, make for an unstable constellation. Rare are the images which offer more than a doorway or a corner for us to peer into, the most Sheeler gives us is *Doylestown House: Interior with Stove* (c.1932) (Fig. 3).[12] Here is a wider perspective on a room with a door to the right—which is cropped—the white beads of the window bright against the blackened window panes, to the left another closed door, and in the middle a glowering silhouette of the stove, light bursting from its belly through an open door. But this image is hardly panoramic.

Interior with Stove is illuminating for a number of reasons. As part of a series or constellation, *Interior with Stove* appears like a sun, providing light and the forcefield, which binds the constellation together. The importance of Interior with Stove is underscored by its reappearance in Sheeler's self-portrait, *The Artist Looks at Nature (1943).* Here Sheeler sits at an easel working on a re-rendering of *Interior with Stove*, perhaps in conté crayon, but the artist is not in the studio, he is working *au plein air* and the scene before him a montage of an older home, Ridgefield, Connecticut and the Boulder Dam.[13] The "something personal" is again invoked and I want to suggest here that it is the work of light in this image that makes it such an important image. It seems possible to imagine that in the other photographs in the constellation, the light source is not a strategically placed photographic lamp but the light from this stove emanating through the house. Granted the light in the stove is a lamp and not a fire but Sheeler's imagery seeks to make the analogy.

Sheeler says "Light is the great designer" and in these photographs light works to outline or abstract form, it is used to both illuminate surface texture and to obliterate texture also.[14] Constance Rourke writes:

> With Sheeler light becomes a palpable medium through which form is apprehended to the full, through variations in its quality, through contrasting shadow, through modulations of tone within shadow....A full perception of the use of shadow in his art may lead to an understanding of its most fundamental qualities, bringing the spectator back finally to the constant use of light itself as a dimensional force.[15]

I would argue that in the case of the Doylestown photographs and subsequent related images, Rourke is only half right. Locked as we are in the monadic house, imprisoned amongst its nooks and crannies, pushed into its corners, thresholds barred and our sense of space impeded, we see only the interior. Light blackens the windows, denying them their transparency, making this house a windowless place: from *inside* we cannot see *outside*. What we forget in this confusion is that we can be seen from outside of the house, from the other side of the blackened glass.

Figure 3 Charles Sheeler *Interior with Stove*, 1932 Conté crayon on wove paper National Gallery of Art,Washington, Gift (Partial and Promised) of Aaron I Fleischman, 2000.181.1

This is the illuminated hut in which Bachelard finds poetry. Referring to Henri Bachelin's novel, *Le Serviteur*, Bachelard claims:

> [The author] finds the root of the hut dream in the house itself. He has only to give a few touches to the spectacle of the family-sitting room, only to listen to the stove roaring in the evening stillness, while an icy wind blows against the house, to know that at the house's centre, in the circle of light shed by the lamp, he is living in the round house, the primitive hut, of prehistoric man.[16]

Bachelard makes much of the image of the lamp in the window as a vigilant and safeguarding eye of the house, and in turn relates an anecdote about Rilke. One dark night, Rilke and his friends were about to cross a field when they saw "the lighted casement of a distant hut, the hut that stands quite alone on the horizon before one comes to fields and marshlands." They felt like "isolated individuals seeing night for the first time."[17] For the dark background of our lives is assumed as inevitable until a flash of insightful light is seen. As Bachelard puts it:

> One might even say that light emanating from a lone watcher, who is also a determined watcher, attains to the power of hypnosis. We are hypnotized by solitude, hypnotized by the gaze of the solitary house; and the tie that binds us to it is so strong that we begin to dream of nothing but a solitary house in the night.[18]

This is what Bachelard's means when he says "*we must start musing on primitiveness.*"[19] The Doylestown House was a retreat from the world. The isolation of the place is evident in every photograph of every room. To picture the landscape in which the house sits would make this no more obvious but to imagine the lighted house as a beacon in the darkened landscape or as a place into which we can peer and watch unseen provides an altogether different perspective. The house as a monad is:

> An object blasted free of time for the purposes of analysis—it is concentrated time, pre-history, the present, and post-history are crushed together there... It is an important moment of the past that can explain the present and the possibilities of the future. An image of a greater totality—the experience of an historical era—can be found there. It is a threshold.[20]

As a threshold the viewer can imagine looking into the Doylestown House from outside, rather than from inside out, and by doing so gain access to this pre-history, present and future time. The blackened windows and non-reflective mirrors, the closed or half-open doors, the lack of furniture, all evoke an uncomfortable sense of a place and yet from the other side of the window this place and space become timeless, evocative, and dream-like. The Doylestown House is a burrow, a place to hide, a bolthole, a place we search out for in the darkest dreams, a miniature world that lies beyond the unhomely.

Notes

1 Alfred Stieglitz quoted in Wanda Corn, *The Great American Thing: Modern Art and National Identity, 1915-1935* (California: University of California Press), 299
2 Gaston Bachelard, *The Poetics of Space* (Boston: Beacon Press, 1986), 30
3 Walter Benjamin, *The Arcades Project* (London: Harvard University Press, 1999), 221
4 Sheeler quoted in Karen Lucic, *Charles Sheeler in Doylestown: American Modernism and the Pennsylvania Tradition* (Allentown: Allentown Art Museum, 1997), 19
5 Bachelard, 30
6 Emphasis as in the original text. Ibid., 33
7 Theodor Adorno, *Aesthetic Theory* (Minneapolis: University of Minnesota Press, 1997), 180
8 Sheeler quoted in Constance Rourke, *Charles Sheeler: Artist in the American Tradition* (New York: Harcourt, Brace, 1938), 59
9 Lucic, 26
10 Theodore Stebbins, *Charles Sheeler: The Photographs* (Boston: Museum of Fine Arts, 1987), 9
11 See Rachel Bowlby, "Domestication" in *Feminism Beside Itself*, eds. Diane Elam and Robyn Wiegman (New York: Routledge, 1995), 76-7
12 Deliberately reproduced here is Sheeler's conte crayon drawing of the photograph, which appears in *The Artist Looks at Nature* (1943)—a drawing, which is a copy of the photograph of the same name and is reproduced here to impress the importance of the series, or constellation, in Sheeler's practice
13 See Lucic, 110; Carol Troyen and Erica Hirshler, *Sheeler: Paintings and Drawings* (Boston: Museum of Fine Arts, 1987), 183-5
14 Sheeler quoted in Rourke, 109
15 Ibid
16 Bachelard, 31
17 Rilke quoted in Bachelard, 35-6
18 Bachelard, 36
19 Emphasis as in the original text. Ibid., 33
20 Esther Leslie, "Walter Benjamin's *Arcades Project*" [article online], available from Http://www.mhtantesthetix.co.uk/varcades.html; Internet, accessed 28 February 2006

Figure 1. Buckminster Fuller and students in the classroom during the World Game workshop at the New York School of Painting and Sculpture, 1969

Figure 2. Photograph of starving Bangladesh people from *Gabel's Ho-ping: Food for Everyone*

Jennifer Ferng

Designing Conclusions for a Cold War Humanity

Buckminster Fuller described architecture as "comprehensive anticipatory design science," while Cedric Price referred to his own creative approach as "continuous anticipatory design."[1] Architecture, in both cases, was redefined as a combination of disciplines, including physics, engineering, and statistics, which together could produce solutions to universal problems such as population overcrowding, hunger, and weapons of mass destruction. Known as the eccentric designer of the 1967 Exposition Dome for Montreal and the Dymaxion map, Fuller was an architect and physicist whose work bridged between architecture and the sciences. He often delivered lengthy lectures that encompassed diverse academic and popular topics, developed tensegrity structures using minimal amounts of material, and corresponded with forward-thinking individuals such as Price, C.A. Dioxiadis, and Marshall McLuhan.

This essay will situate the "world systems" of Fuller and Fuller's student Medard Gabel into the lineage of simulations within the history of technology.[2] It touches upon three historical periods: the Rand Corporation's simulation models of the Cold War during the mid-1950s, architectural propositions of the 1960s, and the beginning of sustainable development in the 1970s. In conceiving these examples of architecture as hybrid simulations, my aim is to specifically demonstrate how Cold War influences were translated and interpreted in Fuller's *World Game*. In turn, Fuller's student Medard Gabel employed the same practices of the *World Game* for his own project later entitled the *World Game Laboratory*, which concentrated on strategies for sustainable development. Gabel's rhetoric and visual media masked the objectivity of "science" with the veneer of a moral obligation to responsibly assess the Earth's diminishing resources. While Gabel seemed openly critical of war-inducing technologies, his visual and numeric techniques in the *World Game Laboratory* ironically drew upon and reinforced this same Cold War legacy of game-based scenarios and interdisciplinary research, initially interpreted by his mentor Buckminster Fuller.

Cold War Games

The persona of the architect used charisma, unconventional taste, and vivid imagination to bring an idea into existence, both in the public realm and in the private mind of the designer. The architect who played scientist was allowed conscientious yet unconventional applications of Cold War trends, which would be artistically employed to manipulate public perception of what constituted sustainable development. Fuller and Price developed themselves as prodigal experts who knew what was best for the world and were willing to teach anyone how to manage it. Part empirical fact and part subjective behavioralism, architecture was configured as a visual practice that would translate global data into an aestheticized model of political commentary. What commenced as an initial political means for military

research remained a politicized vehicle for architectural expression. These highly personalized interpretations of "science" became a legitimate foundation for furthering subjective suggestions of moral activism that went far beyond the traditional realm of architectural design.

From the early 1950s, global strategies inspired by systems theory were aimed at enlisting the everyday individual to actively participate in the planet's future. While models of operations research developed by Jay Forrester and the military technologies used in urban planning as examined by Jennifer Light are useful points of comparison, I am more interested in the distinctions between simulations and scenarios.[3] For example, Sharon Ghamari-Tabrizi has noted that the war games of the Rand Corporation were a combination of "synthetic history" and "laboratory experiment" used to generate operational data. She wrote, "In the absence of empirical sources, the phenomena taking place in the course of play, as well as game outcomes, acquired the aura of well-founded fact."[4] Simulations were often referred to as "task environments" and were played in large-size conference rooms.

Role-playing was also used to provoke political inventiveness and to prioritize research for policy decision makers. In the Social Science Division of the Rand Corporation, four political games, organized by Herbert Goldhammer, were played between 1955 and 1956. The fourth game occupied twenty participants for three weeks in April 1956 and would be the most elaborate war game of the decade. In the final round of the fourth game, the United States team was encouraged to exercise all possible options while other teams were constrained to make moves based on the current doctrines of their respective governments. Most of the multiple trials were too exhausting for the parties involved, and game scenarios as a whole were often too comprehensive and time-consuming to be effective as strategic tools.

Organizational theory was incorporated into man-machine simulations, where an organization was likened to an organism, measured by its responsibilities and by how successfully its internal behavior accounted for success and failure. While the controversial uncertainty of scientific realism plagued the verification of simulations, there were certainly concrete differences for researchers between mathematical games and operational exercises. Scenarios presented whole world pictures that were inherently attached to cultural and historical situations. They could not be quantified or rationalized but could also depict several streams of interactions simultaneously. For Fuller, the *World Game* would never achieve a level of realistic application, but its gaming framework served as compound iterations of role-playing and man-machine simulations. Human actors identified themselves as agents of change, and the technologies employed in wartime would be alternatively used to ensure peace and suitable resources for the preservation of humanity. While the *World Game* was certainly an organized reaction to the counterculture phenomena of the 1960s, its methods of scenario-making utilized many different techniques in order to multiply solutions for an idealized balance between man and his environment.

In disseminating their views through university workshops, public lectures, and appearances before government committees, these two generations of architects sought to remodel Cold War research in a softer light, projecting a positive future based on real numbers. Large-scale technological systems such as the *World Game* put forth questionable claims of fair "equilibrium" that perpetually attempted to juggle the interests of politicians, design professionals, educators, and the general public. James Webb, administrator of NASA from 1961 to 1968, forewarned of the dangers of trying to achieve a perfect equilibrium for society as a whole. He said, "...if dynamic equilibrium is achieved for the whole mass at any one time, it becomes increasingly difficult to maintain...These methods must include...the intellectual response time of humans, the inertia of human systems, and the interaction of human endeavors with their supporting physical and social environment."[5] Fuller's *World Game* thus privileged individual decisions in the delicate balancing act between natural resources and human needs.

The dynamic language of Fuller, Price, and Dioxiadis advocated for a unified world where the ecology of the earth and Cold War science would integrate comfortably in utopic harmony. For example, in Price's *Atom: New Town* from 1967, funded in part by a federal atomic research facility and executed as a studio workshop at Rice University in Houston, Texas, a large nuclear reactor was centered in a satellite city thirty miles southwest of Chicago. The town was conceived as a social experiment to examine the impact of new educational models on urban planning. Various education centers such as the Home Study Station could be loaded into an existing house and customized to persons of different age groups to provide a source of continuous learning. Unlike Fuller, Price viewed nuclear power as a useful source of energy to design a better educational model for the condition of the city.

World Game

The use of scientific research in architecture was meant to provide a foundation of legitimate research and to provoke the American public into action. In conflating statistics and scientific methodologies with architectural invention, Fuller, as well as Gabel, modeled his version of Earth as a flexible "closed world" where numbers represented real resources that could be easily manipulated into feasible solutions but where participant feedback could essentially change any outcome of the simulation.[6] Fuller and Gabel both believed that large-scale social action would only result from the cumulative actions of individuals. An individual's rational attainment of "expected utility" could help restore the earth back to its natural equilibrium.

Originally conceived by Fuller in 1927, the *World Game* was an unusual hybrid between a simulation and a scenario. In reaction to the 1798 Malthusian doctrine of limited resources, Fuller created drawn diagrams, statistical graphs, charts, and physical models to solve the world's hunger and energy demands. Known as Fuller's triad of "a single world, a single house, a single family," man represented not only himself as an individual but also as the universal agent of Spaceship Earth, who would either deliver redemption or annihilation to his environment.[7] One of the many goals of the *World Game* was to involve as many people as possible in the research, design, and development of strategies for solving worldwide problems in the most peaceful and effective manner. Based on Ludwig von Bertalanffy's systems theory from molecular biology and Fuller's own sense of regenerative structural and service systems, Fuller conceptualized the philosophy behind the *World Game* as being "objective." For each version of the *World Game*, a pre-scenario began with examining the amount of energy and resources needed by one human being. Guided by the principle of the basic unit of one individual, the participants would calculate the "bare maximum" for subsistence levels. For example, for working men, approximately 3,500 calories a day were needed to survive, for women, 3,300 calories a day were considered necessary. Once this basis was established, Fuller and his students began experimenting with plausible methods of procuring energy sources in various scenarios. Scenarios, for Fuller, were perceived as stages of development that would possibly lead to better results or better efficiency.

The fundamental logic underlying the first stage of the *World Game* assumed that electrical energy was necessary to transport, store food, and dispose of waste. A universal electrical grid was placed across the entire globe, and then participants worked together to figure out how this grid would affect world resources. By keeping efficiency and technological competence at present levels, Fuller wanted to demonstrate that the first stage would be plausible using only existing technologies. The final stage analyzed processes on how to increase food production as the ultimate goal (Fig.3). The first group of players to bring humanity closer to success in the shortest amount of time possible won the game. The *World Game* could be played in different timed rounds, always with perpetual equilibrium in mind for continuing generations of all nations. While teaching at Southern Illinois University, Fuller designed an unbuilt gaming facility for the solution of world problems, published in the February 1967 issue of *Architectural Record*, which would possess a live display surface capable of showing a comprehensive inventory of the planet's resources.

The prolific results of many workshops, classes, and research seminars were collected under the heading of the World Resources Inventory. The first phase of the project manifested itself as the *World Design Decade 1965-1975* series, which included global statistics, maps, directions on how to play the *World Game*, as well as congressional documents and popular source articles. Fuller proposed a unique type of interdisciplinary pedagogy that ambiguously connected three components – graduate students, large-scale government organizations and universities, and "design science" as a humanist philosophy to alter the external environment. From the special collections at the Loeb Library in the Harvard Graduate School of Design, the *World Game Report*, a brochure published in 1969 during a simulation workshop at the New York Studio School of Painting and Sculpture, depicted images of eager graduate students and other intelligent amateurs among which included artists, housewives, and a bread baker (Figs. 4 & 1). Against the backdrop of the Vietnam War and the shrinking assets of Big Science, Fuller himself never stated explicit political goals for the *World Game*. Any industrial method of mass production and standardization was allowed to generate as many solutions as possible. World leaders and nations were able to devise any type of conclusion they wanted as long as they avoided the accumulation of mass weapons and the destructive outcome of war. Fuller himself admitted that the finalized version of the *World Game* would never be played until the simulations themselves could be calculated on a computer.

World Game Laboratory

Medard Gabel and his *World Game Laboratory* practice in the mid-1970s took over where Fuller's work had

Figure 3 Hand-drawn maps measuring calorie intake and disease from the World Game workshop at the New York School of Painting and Sculpture, 1969

Figure 4 Buckminster Fuller and students in the classroom during the World Game workshop at the New York School of Painting and Sculpture, 1969

ended. Gabel emphasized a humanitarian message of moral activism, while reinterpreting Rand Corporation simulation models whose original purposes lay in planning Cold War political scenarios. As a former Fuller student who participated in the 1969 New York Studio School workshop, Gabel was interested in utilizing his mentor's designs to expose the general public to issues of sustainable development. As the current CEO of BigPictureSmallWorld, Gabel had worked with Fuller over twelve years, was the former executive director of the World Game Institute, and had authored six books on global problems and strategies. He has been a consultant on global policy issues for the United Nations Environmental Program and the U.S. Departments of Agriculture and Energy and to large corporations, such as General Motors, IBM, and Novartis. During the 1970s, simulations were still viewed as valuable educational tools. In an article from *The Elementary School Journal* from April 1973, Harvard McLean also pressed for the use of simulation games such as "Make Your Own World" to help children understand man's relationship to the environment. He stringently forewarned of "blithe optimists" or "prophets of doom" who would develop attitudes that would work at counter purposes to effective environmental education.[8]

Despite these misgivings, Gabel still applied the same techniques that Fuller had developed to global food problems in order to illustrate how everyone on earth could be fed. As he sermonized in *Ho-ping: Food for Everyone from* 1979, "Without food you die. ...Food for life should be a birthright, not an earned right. Billions of humans should not have to work their lives away for food and suffer the consequences if they are not successful"[9] (Fig. 2). His manifesto against world famine was strikingly thorough in its use of research. The same visual aesthetic remained true for his earlier work *Energy, Earth, and Everyone*, first published in 1975. For instance, copies of Fuller's Dymaxion maps illustrated various distributions of products from wheat, rice, bananas, tobacco, to food priority areas and agricultural tractors. In using the Dymaxion map and scenario chart as his primary templates, Gabel also modeled the long-term effects of animal husbandry, hydroponics, and fishing in the most general terms. He projected trends such as whey products as protein supplements and new preservation methods for milk, beginning in 1980 until 2010.

Most of this unrealized research culminated in the design of Gabel's *Global Food Service*, a non-profit, non-political world food organization that would buy surplus grain from world reserves, assist local self-sufficiency programs, and fund money for research into unconventional food sources. What distinguished Fuller's *World Game* from Gabel's *World Game Laboratory* was their strikingly different use of rhetoric and visual media. While Fuller aligned his writing with the visual and social merits of using combined scientific strategies, Gabel exploited the advantages of visual research to promote moral activism. He proclaimed, "There is no energy shortage. There is no energy crisis. There is a crisis of ignorance."[10] Gabel tried to position the more optimistic scenario-making of the *World Game Laboratory* against the war games of the generals and admirals who, with their "counter-counter

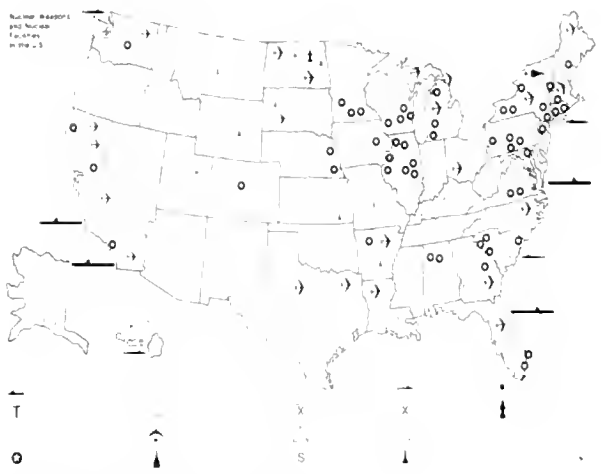


Figure 5 Nuclear Weapons and Nuclear Facilities in the United States, 1977-78 from Gabel's *Energy, Earth, and Everyone*

moves" want the other side to lose in these "hot and cold war situations" [11] (Fig. 5). However, the *World Game Laboratory* never introduced a new mode of representing global statistics. It retained the original framework of the *World Game*, yet de-emphasized science's potential to enhance the influence of the architectural project. Fuller's original call to convert "weaponry into livingry" transformed from an open exercise in free thought into a guilt-ridden moral lesson for Gabel.

Energy. Earth. Everyone. 4.3 x 10 to the 9th power of capable individuals could be possibly drafted as experts on how to make the world work.[12] They no longer needed to be guided by a visionary but now only needed a kit of parts to manage the world. Founded in 1972, the World Game Institute, an UN-affiliated NGO led by Fuller's daughter Allegra, Howard Brown, and Medard Gabel, has continued this legacy of world simulations. For the World Game Institute spinoff called *Global Simulation Workshop* created by Brown's private company O.S. Earth, the cost of today's planetary salvation is a mere $3,500, a comprehensive fee that includes a multi-media presentation, travel, shipping, hotel, equipment, and a three-hour workshop.[13] Participating schools and organizations in states such as Connecticut, New Jersey, and Rhode Island receive regional discounts. Planning the Earth no longer required the able bodies of willing believers or the polemical language of utopia. It could now be designed with cash, check, or credit card.

Notes

1 The term "comprehensive anticipatory design science" stems from Fuller's *World Resource Inventory* or World Science Design Decade series, which consists of six documents including "The Design Initiative" (1964) and "The Ecological Context" (1967). Fuller liked to divide the world into basic physical design principles that reaffirmed the systematic logic found in nature and condensed profound meaning into simply described concepts.

2 This essay is adapted from a longer research paper written for a class entitled "Cold War Science" taught by David Kaiser in the History, Anthropology, and Science, Technology, and Society program at MIT. I would like to especially thank Professor Kaiser for his generous comments and suggestions during the course of this ongoing project. In 2005, this paper was presented at MIT's Science, Technology, and Society graduate student workshop as well as the annual conference of the Society for the History of Technology that took place in Minneapolis. Special thanks to Deborah Fitzgerald, Susan Silbey, Etienne Benson, Sara Wylie, and those who offered useful remarks and revisions.

3 For additional information on models of operations research, see Jay Forrester, *Urban Dynamics* (Cambridge: MIT Press, 1969), idem, *World Dynamics* (Cambridge: Wright-Allen Press, Inc., 1971). On how military technologies were translated into the civilian sphere, see Jennifer Light, *From Welfare to Warfare: Defense Intellectuals and Urban Problems in Cold War America* (Baltimore: Johns Hopkins University Press, 2003).

4 Sharon Ghamari-Tabrizi, "Simulating the Unthinkable: Gaming Future War in the 1950s and 1960s" in *Social Studies of Science*, 30, no. 2 (April 2000): 163-223, 201. For her more recent work, see *The Worlds of Herman Kahn: The Intuitive Science of Thermonuclear War* (Cambridge: Harvard University, 2005). For one of the first historical studies which utilized the Rand Corporation archives, see David Hounshell, "The Cold War, RAND, and the Generation of Knowledge, 1946-1962" *Historical Studies of the Physical and Biological Sciences* 27, no. 2 (1997): 237-267.

5 James Webb, *Space Age Management: The Large Scale Approach* (New York: McGraw-Hill Book Company, 1969): 110. For other examples of systems theory applied to urban planning, see the brochure by administrator Volta Torrey, *Science and the City* (Washington DC: U.S. Department of Housing and Urban Development, 1967).

6 I use "closed world" in the spirit of its original context from Paul N. Edwards' *The Closed World: Computers and the Politics of Discourse in Cold War America* (Cambridge: MIT Press, 1996). As Edwards defines it, closed world discourse describes "the language, technologies, and practices that together supported the visions of centrally-controlled, automated global power at the heart of American Cold War politics." Ibid.,7. More specifically, a closed world is a "radically bounded scene of conflict, an inescapably self-referential space where every thought, word, and action is ultimately directed back toward a central struggle." Ibid., 12.

7 Mark Wigley, "Planetary Homeboy" in "Forget Fuller: Everything You Always Wanted to Know About Fuller But Were Afraid to Ask," *ANY Magazine* 17(1997): 16.

8 Harvard W. McLean, *The Elementary School Journal* 73, no. 7 (April 1973): 374-80, 376. Other simulation games for third to sixth grade school children include *Ecopolis, Land use, No Time to Waste, Pollution: Negotiating a Clean Environment, Black Gold, and Science Bingo*.

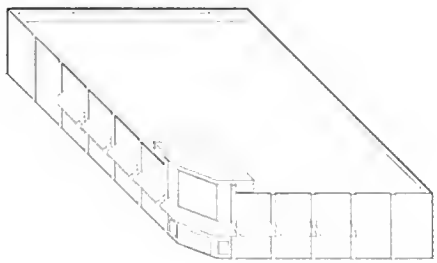
9 Medard Gabel, *Hoping: Food For Everyone* (New York: Anchor Press, 1979), 4.

10 Ibid.

11 Ibid., 9.

12 For Gabel, this is the total number of known conscious energy measuring and manipulating entities in the universe. See further, idem, *Energy, Earth, and Everyone*, foreword by R. Buckminster Fuller and afterword by Stewart Brand (Garden City: Anchor Press, 1980).

13 For information on the *Global Simulation Workshop* see http://www.oscarth.com. Internet. Refer also to Rick Poynor's "Desktop Diplomacy" *Metropolis* (December 2000): 54-56. Poynor discusses *Net World Game*, an online version created for ten players and also released by the World Game Institute.



Sara Stevens

The Small Box Format of the Retail Pharmacy Chains

Convenience is the management goal of today's retail pharmacy chains. The expansion strategy that retail pharmacies employ—more stores, more frequent, more visible—illustrates their prioritization of time over all else. The consumer's perception of speed and ease of retail pharmacy shopping is of utmost importance, and thus, these companies' real estate departments greedily increase the frequency of their stores along commercial corridors. Today's national retail pharmacy chains are operating under new rules, especially in the area of real estate planning. A few simple guidelines begin to define a new building format: a freestanding building, a large site at a busy intersection, near other retail, and surrounded by plenty of parking. Seeming to borrow cues from big box stores, the "small box" format employed in the retail pharmacy industry is a spatial product which grew out of a specific set of market conditions. This article will explore the appearance of the physical and contextual characteristics, how they reflect other organizational policies and tendencies, and how they are a reaction to a changing political climate. The discussion of the architectural products against the changing market landscape will aim to present a unique analysis of this contemporary retail condition, adding to a larger discussion of the consequences of expansive urban growth.

The hardware of the industry, its stores and building sites, has changed dramatically in the recent past. Twenty years ago, a new pharmacy would rent a modest space in a shopping center, likely near a supermarket, or within a shopping mall, and share parking with other businesses. The average store size for a major chain grew by 79 percent from 1985 to 2004.[1] In recent years retail pharmacies have entered a growth spurt in the form of an expanded building program that insists on stand-alone stores. To put the newness of this growth in perspective, consider Walgreens: despite being the oldest major company in this market, Walgreens boasts that fully half of their stores today are less than five years old.[2] These changes raise important questions. What forces drive these companies to insist on the model of the large, freestanding store? What industry practices affect urban, labor, and environmental conditions, both generally and specifically as a result of this building type?

The struggle of the retail pharmacy industry becomes clear against the context of new competitors, which entered their market sector in the early eighties. Previously, supermarkets and discount stores did not contain pharmacies within their bounds, but this began to change. By 1994, supermarkets and discount stores accounted for 20 percent of prescription sales, taking a huge market share away from pharmacy chains.[3] Up to this point, the industry's success relied on its "monopoly" of prescription drugs, with convenience items comfortably padding sales figures.

The rapid takeover of prescription sales by the supermarkets and discounters instigated panic in the retail pharmacy chains. Companies initially reacted to this threat by increasing their focus on front-end sales (non-prescription sales) to diversify and make their

organizations less reliant on prescription sales, which were too vulnerable to health care regulations. This fear of reform caused the increase in square footage for general front-end merchandise that began the drastic increase in store size. But over time, as prescription sales continued to increase despite the loss to these new entries to the field, a new focus returned to the forefront: perception of convenience. Growth markets were in outlying metropolitan areas, which had few independently-owned pharmacies, so the main competition was from large stores—discounters and supermarkets. By being more visible (closer to the street) and smaller (fast in-and-out) than these competitors, and therefore cornering the market on the quick trip, they could compete better. So, while retaining the flexibility of a large space for front-end merchandise and at the same time being smaller and more accessible than the big box, the new "small box" typology quickly became the norm for retail pharmacy companies and by the early nineties was the accepted industry standard.[4]

The componentry was simple: new buildings sited close to a corner with a generous single or double row of parking between store and street. Visibility from the road and access by car were necessary. In order to be recognizable from a distance, these new formats could not be similarly sized to a fast food restaurant, a gas station, or a convenience store, but needed to appear as their own genre, despite similar site requirements. Differentiation between breeds was important, but not between brands. Massing achieved this best, simultaneously increasing shelf space for front-end merchandise. Increasing building height gave the store added street presence and simplified building design and construction. After some adjusting, the 11,000-14,500 square foot size became a nationwide industry standard. Site planning improved visibility and accessibility—closer to the street, with ample parking surrounding the building and multiple curb cut entrances increased the appearance of accessibility. Presenting an appearance of easy access was increasingly important to retail pharmacy companies. More curb cuts and automobile entrances, more parking spots—these design decisions contribute to an image that promotes convenience in shopping.

Legally, this format also provided autonomy from an independent building owner and from dependence on other tenants' success. Attached to a shopping center, pharmacy sales would plummet when an anchor store closed. CVS's vice president of real estate describes it this way: "No more do we have Mr. Landlord coming to us to say, "I'm building a Shaw's supermarket and I have eight thousand square feet. Do you want to be beside it? Our biggest decision then was looking at the demographics and the incomes, ... and then making a decision as to what color we wanted to paint the back of the store."[5] By developing stores themselves, as part of the push to build freestanding stores, these retail pharmacies have increased their control over their physical space and envelope.

Depending on the company, ownership and lease structures changed too. Leases have been shrinking in term length from a typical 30-year lease to 20-year leases within the traditional leasing format. Walgreens, the most well-capitalized company, always owns their new stores, hiring a developer for a turnkey operation. The developer is paid a fee based on a percentage of the project cost. CVS, younger and less-capitalized, has been migrating to a creative new arrangement.[6] Now, rather than follow the turnkey standard, CVS buys the site, then works with a pre-selected developer that it has picked for that region. These developers sign on to do groups of stores rather than individual stores in an area and are given a set fee, not a percentage. CVS then sells bundles of stores to investor groups, leveraging the success of the company behind this small group of stores. The sale of stores is done in a sale-leaseback arrangement with the investors, where CVS has control of the terms and lease, and opens up more capital for further building projects. This arrangement gives CVS more control over the developer and less liability with each specific building. CVS also claims the arrangement has lowered operating costs by $4-5/square foot per project. This increased autonomy, especially in investing groups of stores, pulls the stores deeper into the national market and makes them less dependent on local conditions.[7] The new development strategies of these companies reflects a policy change in size, location strategy and tightness of variability. Not only has the architectural model changed, but the management style and corporate operation itself has transformed.

Despite these new, large stores, the greatest sales growth is still in prescriptions. The companies attribute the growth of prescription sales to an aging population, increased life expectancy, and better (and more) prescription drugs. Baby boomers require an ever-expanding battery of drugs, and drug companies and pharmacies are happy to provide. The cycle has created a positive feedback loop—more drugs are produced because more drugs are needed, more drugs are taken because more drugs are available. Most major chains reported a small sales drop in their front-end merchandise in the last two to three years, while prescription sales have continually increased.[8] This slight tipping of the scales indicates that they are no longer trying to fill the space

left by the convenience stores, but further supports the idea that their fate is tied to the health care industry, and therefore, to politics.[9] The result is that they are operating in a different, more political way. Where these companies did not have strong lobbies twenty years ago, they now are quite politically active.

A further retreat from the emphasis on front-end sales can be seen in the increased implementation of drive-through pharmacy windows. By the mid-nineties, it was a standard feature for all major companies' new stores. Prescription sales almost tripled in America just between 1991 and 1999, and this spending on prescriptions is where these companies reap profits.[10] Front-end sales are not about to be forsaken, as they still represent a large portion of sales and square footage, but for today, front-end merchandise seems to be in a holding pattern as the prescription end grows rapidly. Adding drive-through windows changed site layouts, requiring more space and more entrances from the street, without reducing parking requirements.

Site selection in this industry is seemingly quite easy, as the bare minimum of requirements for this autonomous format are not difficult to acquire. A priority has been to relocate old stores into freestanding locations, but little concern is given to proximity to other pharmacies. A new location built only a few blocks away from a competitor might catch a different pattern of traffic and therefore interfere only slightly in attracting customers. Walgreens' single-minded focus on convenience is best described by their new buildings and at-the-ready stock. The retail pharmacy prefers to be evenly distributed, in their words, to *densify* the market with an even dispersion.[11]

The latest adjustment to the store design of the retail pharmacy is aimed to counteract the growing business in mail order pharmacies, and involves the visibility of the pharmacist at the counter. Companies are attempting to give the pharmacist more visibility to consumers, while keeping them at the far corner of the store, by lowering the counter, adding signage and waiting areas, and visually "clearing a path."[12] The drive-through strategy provides a level of privacy to compete with the mail orders, while the inside arrangement of the pharmacist's position tries to strengthen the personal connection that the mail orders lack. As an industry in danger, retail pharmacy companies strive to improve their business to thwart mail order, supermarket and big box competition. By improving distribution systems and procedures, their business can be more responsive and efficient. Information systems and technology improvements offer the same benefits. Walgreens and Rite Aid, among others, are also trying to improve and increase the use of technology by investing in it now, with the future hope of decreasing the required labor costs. Hampered in the past by slow distribution networks, retail pharmacies require quick access to new stock in order to remain at the top of the convenience scale to consumers.

The retail pharmacy industry in America has recently transformed itself as the issue of healthcare and prescription drugs has continued to be a hot topic in politics and the media. No longer renting out space from larger commercial developments, these companies prefer an autonomous situation that reflects other organizational policies and tendencies. Their immense store size is trivialized by their reliance on prescription drugs for the growing bulk of their profits. Now facing greater threats, the retail pharmacy industry, through its building program and involvement in benefit management, strategizes to stabilize its tenuous position.

The small box is multiplying across the landscape, using the same network organization of the big box but with a smaller footprint and at a higher frequency. This familiar spatial product exists in a changed political situation—a more fearful, more defensive, more striated society—and grew directly out of such conditions. Industry insecurity led to a push for front-end sales, which led to larger stores. As the profit projections lean away from front-end sales, the industry continues to build large stores, holding onto the extra shelf space should the trend return to an emphasis on front-end sales. The super-sized pharmacy is the result of this profit-predicting game, providing a safety net against market volatilities. The even larger sites that these stores sit on result from fierce competition with larger stores, discounters and supermarkets, by giving the retail pharmacies greater street presence and visibility from the road. By grossly exceeding parking needs these stores can better compete by always seeming accessible. Even at the busiest hours, empty parking spots signal to potential customers that a quick stop is still possible. A tall façade and a busy street corner serve double duty as signage and marketing tool—clean, new, big, and easy. Behind this, legalese protects company interests and provides maximum flexibility for these self-developed buildings through contracts and leasing deals. Finally, the advanced, precise nature of this system is best seen in the new locations which retail pharmacies are willing to build in. Now commonplace in small towns and poorer inner city neighborhoods, the stores are entering new territories but not without calculated understanding of the risks; their site requirements and market area studies are so precise and defined as to all but eliminate major risk.

Looking to the small box to understand its political and

economic position and to search for how those factors might have influenced its physical attributes brings us to a clearer understanding of the larger systems which retail is embedded in. Such a study can highlight opportunities within such schemes and reveal abuses, adjacencies, and resistances, which explain design decisions as well as social conditions. The typology of the small box bears the load of market forces, political treaties, consumer science, and technological innovation—each providing the opportunistic thinker with a diverse set of possibilities for change.

Notes

1 In 1985, the average store size was seven thousand square feet. By 2004, that had grown to twelve thousand square feet. See further, "Controls, Same-Store Gains Boost CVS Profits," *Drug Store News* 11, no. 9 (1989): 167, "Turn Around Leaves Rite Aid Confident of 'Bright Future,'" *Chain Drug Review* 26, no. 8 (2004): 130, Walgreens Corporation, "Walgreens Financial and Other Numbers," Rite Aid, Annual Report 2004, 2004, 66, available from http://www walgreens com/about/press/facts/fact1 jhtml, Internet, accessed 17 December 2004

2 Ibid , James Frederick, "Strategy Reflects a Confident Course," *Drug Store News* 25, no 4 (2003): 52-54

3. "Wall Street Eyes Drug Chains as They Face Structural Changes," *Chain Drug Review* 16, no. 9 (1994): 34

4 To the author's knowledge, the term "small box" is not used elsewhere.

5 Jennifer Kulpa, "Cultivating a Strategic Store Development Process," *Drug Store News* 21, no 16 (1999) 63

6 In 1997, 25% of projects were structured this way By 1999, 52% used this system Ibid , 64

7 Ibid , 63-65. Rob Eder, "Controlled Growth Heart of Development's Master Plan," *Drug Store News* 12, no 16 (1999), 50-52.

8 "Longs Pharmacy Sales Roll Ahead, Front-End Lagging," Ibid., 24, no 13 (2002) 8

9 This was called out as a trend in the late eighties as front-end sales sharply increased, concurrent to an increase in store size "Convenience Drives Chains' Grocery Sales," *Drug Store News* 12, no. 1 (1989) 12 See also Diane West, "Survey Says Rx Spending Slowing Down," *Drug Store News* 24, no 8 (2002) 1

10 In 1991, retail prescription sales were at $42 7 billion, in 1999 the sales reached $111.3 billion Andrew Sullivan, "The Way We Live Now," *The New York Times Magazine* 29 (October 2000) 21

11 Walgreens Corporation, "Walgreens Financial and Other Numbers "

12 James Frederick, "New Concepts Encourage Interaction with Pharmacists " *Drug Store News* 26, no 10 (2004) 80 Pharmaceutical Care Management Association (PMCA), "Consumers Relying on Mail-Service Pharmacies Report Overwhelming Satisfaction, New Survey Research Finds," 18 November 2004, available from http // www pcmanet.org; Internet, accessed 12 November 2004

Douglas and Mitchell Joachim

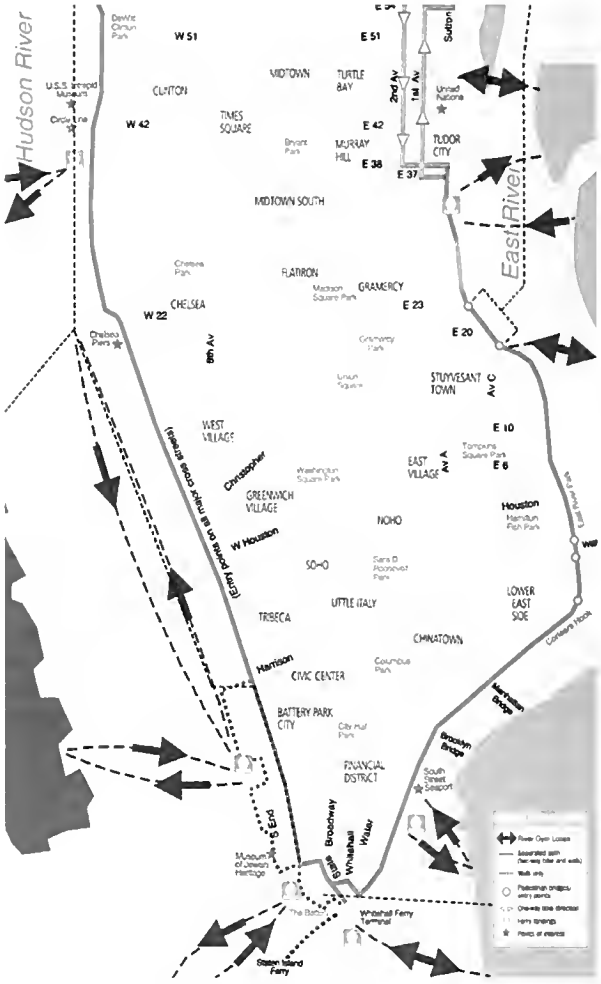
Human-Powered River Gymnasiums for New York

Locomotion is perhaps the most primal of all human functions, and the motion-starved environment we live in can be considered the antithesis of our being. An urbanite exercising at a traditional gym often performs controlled, repetitive, single plane movements using industrial fitness equipment. All of this energy is summarily dissipated and ultimately exhausted for the sake of an individual's well being. Why should gym members be forced to stare restlessly at a mirror, television, or static streetscape when their entire bodies are active? We envision the gym as a machine of human propulsion that purifies water and transports less-motivated citizens to their destinations. This new fitness center would take form as a series of soft, floating, micro-islands revolving on a fifteen-minute river loop with an exquisite, ever-changing panoramic view.

The River Gym will fulfill one of the major contemporary fitness goals of "functional training" by exploiting the inherent disequilibrium of floatation devices. Our design encapsulates a new typology for the contemporary urban gym. It challenges our innate proprioceptive and multi-planar locomotive abilities while concurrently altering the surroundings.

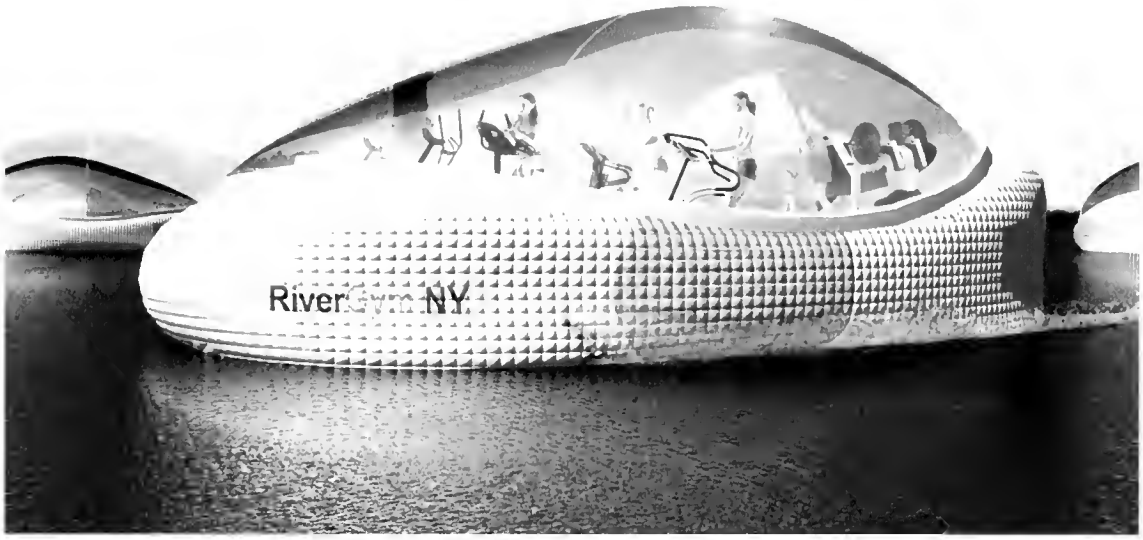
We have developed a way to harness the vast human expenditure of caloric energy. The River Gym channels this self-produced energy to supply New York City with needed supplemental transport and amenities. Our design leaves the realm of the standard "glass box" and thus becomes a useful multi-planar kinetic space. Each River Gym vessel varies in size and critical mass population. Therefore, some vessels will need only a few members to boost the craft on its predetermined, computer-navigated loop. Other larger floating units would require a higher sustaining population of club members, and would only be used during peak hours.

These River Gyms would travel through the Hudson and East Rivers at a leisurely pace. Along the edges of each river body, modest docking facilities such as a reception desk, lockers, and health food kiosks would serve members, who could easily access their River Gym vessels to travel to and from multiple points throughout the city. The gym can also ease the transportation burdens on various ferry lines and carry volunteering commuters in tow. The benefit of extra passengers increases the vessels' mass and amplifies the intensity of the exercise. Finally, fitted with onboard purification devices, the gym would help mitigate water pollution.

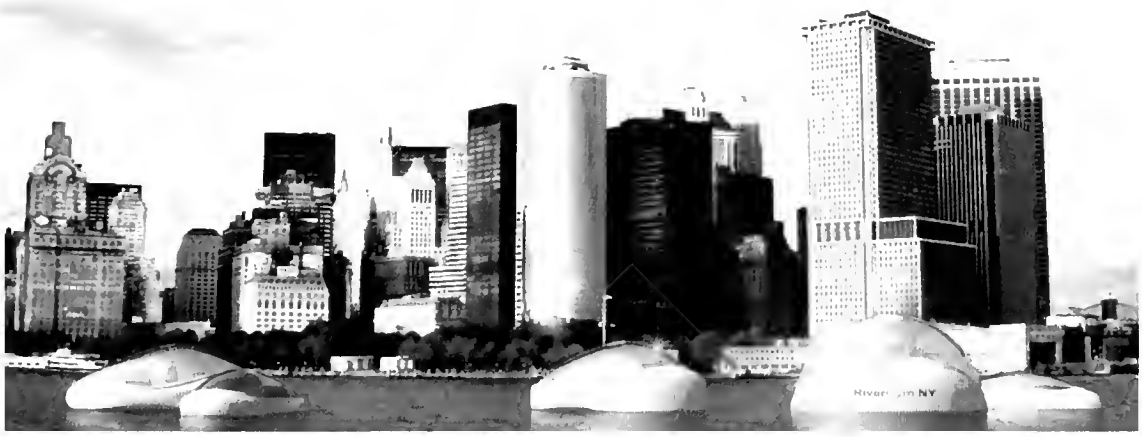


Map showing various fitness loops and water routs

The notion of transforming unused human mechanical energy into a useful kinetic gymnasium is unique. The gym provides multiple benefits: increased transportation, water purification, caloric energy expenditure, and superior, changing views. Our design thus redefines the urban gym in a cost-effective and environmentally friendly manner. This is the kind of munificent vision for which the great city of New York is renowned.



Energy is derived from human motion and is converted to usable electric energy stored in on-board batteries



Soft floating micro-island gyms on waterway paths

Figure 1. Arrival of refugees from Asia Minor in Salonica, following the Lausanne treaty

Figure 2. Photograph from the workshop Osservatorio Nomade organized in Saoul Modiano, Old People's Home of the Jewish Community of Thessaloniki. As part of the "Egnatia" project, stones like this one, upon which the participants left their own traces, have been dispersed along the route of Via Egnatia. The stones originated from Salento—the starting point of Egnatia road across the Adriatic Sea

Garyfallia Katsavounidou

Unfamiliar (Hi)stories: The "Egnatia" Project in Thessaloniki

"Via Egnatia," or the Egnatia Way, connected Rome to Constantinople and was one of the most important roads of antiquity. Built by the Romans in the 2nd and 3rd centuries AD, the road started in Durach, on the shores of Albania, across the point where Via Appia (the Appian Way) met the Adriatic Sea in Southern Italy. From Durach, the Egnatia Way traversed the lands of Albania, Macedonia (passing through the major port-city of Salonica), and Thrace. Finally, after 739 miles, Via Egnatia ended in Constantinople. It was on these ancient paths that millions of people—Greeks, Turks, Jews, Albanians, Armenians, Kurds, Rom, and many other ethnic groups—were displaced during the last century, mainly during the compulsory exchange of populations between Greece and Turkey,[1] but also unofficially and in smaller numbers (Fig. 1). As the locus of memories of migration, but also of displaced memories, this famous road inspired the "Egnatia" project, which was funded by the European Union and launched in October 2004. The cross-categorical project, which could be described as a laboratory of memory along Via Egnatia, aims to "collect stories of people who have been displaced along the Egnatia way, to leave traces of collective memories now forgotten and obliterated,"[2] but also to listen and interact with contemporary immigrants who travel on the same roads.

The methodology of the "Egnatia" project is based on an experiential approach. According to art historian Flaminia Gennari, the researcher acts as a catalyst in the pursued transfer of memory, "not only because memory is ephemeral and sentimental, but also because the one who listens always adds something of himself."[3] Such an approach has its origins in the artistic group Stalker, which has been working in Rome since 1995, combining interventions and research on the territory. Members of Stalker have formed a new collective subject called Osservatorio Nomade ("Nomad Observatory"), with the participation of visual artists, theoreticians, architects, and historians. As the main agent of the "Egnatia" project, Osservatorio Nomade has been collaborating with the groups Architecture Autogerée (based in Paris) and Oxymoron (based in Athens), organizing workshops in five cities (Rome, Berlin, Paris, Athens, and Thessaloniki). The participation of artists and scientists from various ethnic backgrounds is quintessential to the project: the "Egnatia" project is above all "a common ground where to encounter and share values and cultural experiences."[4]

In February 2005, Osservatorio Nomade organized a workshop with the telling title "Ghostbustering in Thessaloniki." With the exception of local (Greek) participants, most members of the group, including visual artists and architects from Italy, France, and Spain were making their first visit to Thessaloniki. As art critic Francesca Recchia writes, "the complex dynamics of persistence and absence were clear and tangible right from the first contacts and walks. The city seems to be without a past; it experiences the visible traces of its centuries-old history with the indifference of a chance encounter."[5] During the five days of the workshop, the members of Osservatorio Nomade worked in small, flexible teams, exploring the city instinctively and non-hierarchically. The participants combined field research with improvised public performances that related to the particular place and time (Fig. 2). These experimental actions aimed to engage the locals, create new intercultural collective memories, or, in other cases, expose traces of the past in city areas where history seems to have been obliterated—as in the case of the campus of Aristotelian University, occupying the grounds of the Jewish cemetery. On the final night of the workshop, all participants created another public performance as they toured the city by bus. Revisiting the places encountered during the walks, they organized video projections of the groups' actions and performances at the places where these performances took place, thus engaging public attention and sharing the feelings and experiences these places invoked.

After the workshop in Thessaloniki, the members of Osservatorio Nomade realized that the city was central to the general premise of the "Egnatia" project. By accessing stories and memories from an unfamiliar past, the "Egnatia" project creates the possibility for a unifying culture. The idea of ethnic difference is a cornerstone in each country's respective history, despite the fact that the areas now separated by national borders were for centuries a cultural entity encompassing many peoples, languages, and religions. In Salonica, itself traversed by the Egnatia Way, Christians, Spanish Jews, and Muslims coexisted for five centuries in peace and compassion. Until the beginning of the last century, Salonica represented a real "utopian" multicultural hub. It existed as a paradigm for the "Egnatia" project's goal for the future: an inclusive, transnational culture.

Thus, the city became the subject matter for a project on the theme of "migration," in the context of the exhibition "M city/European Cityscapes"[6], organized in Graz (Austria) in October 2005. The installation presented by Osservatorio Nomade, entitled "The un-familiar city," was quite different from most of the projects on view at the show, which took place in the famous Kunsthaus of the Austrian city (designed by Peter Cook and Colin Fournier). Fully conscious of the hyper-domination of imagery as means of representation, the artists chose not to show any visual representation of the city of Thessaloniki. Instead, the installation consists of 21 double-faced slabs of Salento stone (called "chianca" in the local Southern Italian dialect), suspended from wires from the ceiling (Fig. 3). The first stone has the name "Thessaloniki" on one side (the ancient name of the city, which was reattributed to it in 1912 when it became part of the Greek state), and on the other side it bears the different versions of its name, as used by the various peoples that shared its space: Selanik, Salonika, Salonica, Salonique, Salonicco, Saloniki, Solun, Saruna. The rest of the stones make reference to twenty areas/ buildings/personages of the city with double identity. For example, the stone dedicated to the area of the Hirsch Ghetto (last stop in the city for 48,000 Salonican Jews before their transfer to the Nazi camps) makes reference to the fact that nowadays the history of the area has been forgotten—the neighborhood is known as the city's Chinatown. Another stone is dedicated to the district of Galini: there, in the middle of a residential suburb, stands a Russian church that replicates a church in Novorosijsk, the Russian city-port and origin of many recent immigrants to Thessaloniki. In order to make the story behind each double-faced stone available to the viewer, the installation also consists of 21 printed postcards with brief explanatory texts (Fig. 4). "Each stone is both a story and a device, indispensable to deeply understand the contemporary face of Thessaloniki where erasures, reinterpretations and "emergencies" coexist in an unprecedented way."[7]

Undoubtedly, few cities have changed so dramatically in such a short period of time. After 1912 and its annexation to Greece, Salonica became Thessaloniki, and along with its new (old) name, came a systematic rewriting of its past—a common practice in all national states of the region. The Hellenization of the city, hastened by the Muslim exodus in 1923 and the Holocaust in 1943, was complete by the end of World War II. At the same time, Thessaloniki underwent an economic and cultural decline. The thriving cosmopolitan port became within a few decades a ghost of its old self, a provincial Greek town. Until very recently, the official history of the city treated its Ottoman period as a "sad parenthesis"; the Spanish Jewish presence, so dominant in the city for five centuries, was extremely understated.[8] Nonetheless, since the early 1990s, mass migration from the Balkans and former Soviet countries has been changing the city, making it once again a metropolis of strangers.[9] In a reversal of the dominant ideology in the historiography of the city, the

Figure 3. View of the installation "The Un-familiar City" in Kunsthaus, Graz

Figure 4. The cards that accompany the rotating stones

"sad parenthesis" of introversion, which opened in 1912 with the city's annexation by Greece, finally seems to be ending.

Notes

1. The exchange of populations between Greece and Turkey was decided in the treaty of Lausanne in 1923, following Greece's defeat during an expedition in Asia Minor. In a historically unprecedented move, the leaders of the two countries agreed upon a compulsory exchange of minority populations between the two countries. All Muslim inhabitants in Greek territory had to evacuate their homes and go to Turkey, and all Christian Orthodox residents of Turkey, to find refuge in Greece. An enormous number of people were affected: more than two million people on both sides of the Aegean had to migrate within a few months up to 800 miles away, in this terrible journey, more than 300,000 people died. This obligatory displacement of millions of people was the watershed event that dissolved societies of mixed identities and intercultural exchange.
2. *Egnatia News* 1 (September-December 2004): 1, available from http://www.osservatorionomade.net; Internet.
3. Flaminia Gennari, "L'imprevedibilità di azione e pensiero", in *Voyages Croisees*, ed. Gabi Scardi (Milano: 5 Continents, 2005), 54-59.
4. *Egnatia News*, ibid.
5. Francesca Recchia and Lorenzo Romito, "Towards 'Thessaloniki: The Unfamiliar City: A Work in Progress," in *M city / European Cityscapes*, eds. Marco de Michelis and Peter Pakesch (Graz: Kunsthaus, 2005), 109.
6. Curated by Marco de Michelis (dean of the faculty of arts and design at Università IUAV di Venezia), Katrin Boucher and Peter Pakesch, the exhibition presented works by artists who dealt with the current transformations in Europe's urban centers. The exhibition was organized in six thematic fields: "Earthscapes", "Eurosprawl", "Shopping", "Migration", "No Vision?" and "Mapping". See further, www.kunsthausgraz.net; Internet.
7. Excerpt from the text accompanying the installation "The Unfamiliar City" in *M city* exhibition. See also Osservatorio Nomade (Fylho Katsavounidou, Mihalis Kyriazis, Laurent Malone, Francesca Recchia, Lorenzo Romito), "The Un-familiar City", in ibid., 268-271.
8. An astonishing 96 percent of the community was annihilated in the camps of Auschwitz and Birkenau. See further, Garyfallia Katsavounidou, "Invisible Parentheses: Mapping (out) the city and its histories" (SMArchS thesis, Massachusetts Institute of Technology, 2000).
9. Foreign immigrants, mainly from Albania and the former Soviet countries (most notably Georgia, Russia, Kazakhstan, Armenia), constitute an estimated 10 percent of the city's population of 1,000,000. A quintessential difference of this contemporary cohabitation from its historical precedent, however, is the fact that it takes place within the sociopolitical conditions of a national state and not in a multinational empire.

Subway library (view of interior of subway car, retrofitted with book storage.)

Elliot Felix

The Subway Libraries

Do we need an avant-garde architect? Well, perhaps. We need avant-garde users. You need social networks. You need to design processes, not just the thing. So rather than barricading the space with forms that express "displacement" and "movement" and "openness" while in fact often disrupting the possibility of movement and change—they are substitutes, replacements for actual changes in society and in human minds and lives—the architect could create certain conditions or instruments, points, elements that can inspire people to make good use of them toward a change in their lives.[1]

Cities are places of density, potential, and movement. In them, "[t]he crowd sets the pace. The individual must hurry with it or be pushed aside" [2] as pace surmounts place.[3] However, it is not that simple. We define ourselves both by acceding to and seceding from the crowd. And so in urban environments, though their character and extent may change, one thing is constant: the struggle between anonymity and community[4] as each of us seeks to find a personal balance of associations and interactions. Everyone in the city negotiates between self and other—each of us is in some way, a stranger.

Cities are full of strangers.[5] They are places of negotiated access where people may be both near and remote, nomadic and fixed, objective and distanced, involved and intimate.[6] Whether regarding what we read, with whom we associate, or where we go, this access always has two dimensions: rights and abilities. The two are inextricably linked; they are simultaneously implied, immaterial, explicit, and physical. The barriers to our rights and abilities may be geographical, cultural, or financial, and when institutions grant access to many rather than consolidating it in a few, we call them democratizing. Such institutions then empower through distribution rather than repress through concentration.

Subways democratize mobility. They embody access and opportunity.[7] Since anyone can affordably travel anywhere within the city, this access provides the potential for interaction, growth, and increased quality of life. It also fundamentally changes the way we view each other, our environment, and ourselves. On a subway map, each stop is a point, a point around which activity, people, and memory pivot. From underground, we actively construct the city in our minds, piecing together a mapped network from points or nodes whose connections we interpret and infer. We are passive observers when the conditions are clear—at a plaza's center or at water's

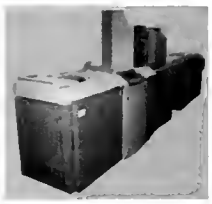
edge—but in the subway we move the way we think and vice versa.

Subways exist as exaggerated zones of cities, hyper-urban environments marked by artificiality, movement, and disorientation. Within such places, boundaries of personal space collapse, an anxiety of standing still sets in, conversation diminishes, and seating patterns tend to minimize visual confrontation[8] —the facing of "the other." And so the subway is a space of strangers. It epitomizes the personal navigation between anonymity and community. As underground environments, subway spaces are also prophetic, foreshadowing what is to come above the ground. Just as Lewis Mumford used mines to examine cities and their future,[9] subway spaces offer glimpses of emerging environments, interactions, and sensibilities. And while ascendancy and light have long symbolized knowledge and understanding, the underground now serves as an equally powerful metaphor in which learning and inquiry are inseparably tied to going underground, to digging and uncovering.[10]

The public library democratizes knowledge just as the subway democratizes mobility. The former grants intellectual access; the latter grants physical access. Both entail similar cultures and customs: cards, turnstiles, and regulated public spaces. In fact, there is a pervasive culture of reading on the subway that bridges racial, geographic, class, and age divisions. Like airplanes, subway cars are our contemporary reading rooms. Further, reading has always been a form of travel itself, and the library its most championed vehicle. These alignments suggest that combining subway and library would be symbiotic, a coupling whose physical and cultural positioning beget a new kind of institution.

As an institution, the "subway library," has the potential both to bring information to users and users to information. It can also extend the historical opening of the library, which is marked by innovations such as Antonio Panizzi's catalog for the British Library, which was designed in the 1830s for public use as well as for the librarian.[11] Since then, libraries have become increasingly open and user-centered. Today, this opening calls for responding to and reinforcing cultural trends in the democratization of content production. Through such activities as blogging, podcasting, wikis, and open-source software development (to name a few), more and more people are creating their own content and products[12] as part of a participatory culture. The effects of these trends are startling, producing what can only be called revolutions in accepted ways of thinking and making.

Libraries respond to physical contexts as well, and so



Print on Demand (POD)

A subway turnstile or a security/access device

A library turnstile or a security/access device

in order to envision how and where such an institution might function within the New York City subway, it is necessary to understand the character and history of that infrastructure. One of the oldest systems in existence, the New York City subway opened in 1904.[13] It has three defining characteristics: innovative local and express track routing, a combination of somewhat antiquated tunnels with relatively modern cars, and lastly, an idiosyncratic nature, the result of its construction by three different organizations, each with differing specifications, standards, and interests. Growing out of the urgent need to deal with congestion and population densities yet unequalled in any city,[14] the subway began as the result of innovative public and private partnerships, namely the Interborough Rapid Transit Corporation (IRT), and the Brooklyn-Manhattan Transit Company (BMT).[15] Over time, other lines were added by these two entities, and later, what are known as the Independent (IND) lines were built by the city itself. This history, and the variety of geological, topographical, and political conditions in New York, resulted in a system that is an amalgamation of difference: repetitive, irregular, and indigenous all at once.

Within the New York City subway, there are platform spaces that have been abandoned, left unused within currently operating stations despite millions of passers-by.[16] These vestigial spaces (which occur in twelve locations throughout New York City) are the result of changes in routing and car technology, population shifts, and rider behavior. Each location varies in character and accessibility. Some spaces are merely beyond a set of active tracks, open for all to see and accessible but for a chain or a gate, while others are sealed off like time capsules behind the ubiquitous white-tiled walls of the subway.

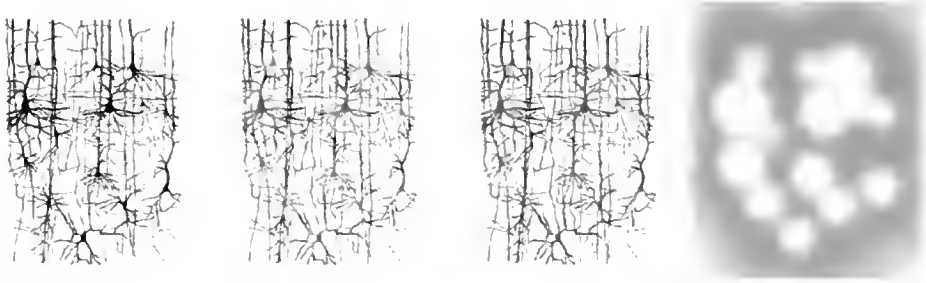
These unused spaces are ripe with potential. They exist within, yet outside of the system, in much the same way that reading serves as an escape for subway riders, rendering them mentally elsewhere while still in a car or on a platform. Thus they are ideal sites for subway libraries, libraries that couple physical and intellectual access. Though these institutions might be sited at any such platform space, three sites in particular provide the opportunity not only to illustrate the system's differences in platform configuration and station typology, but also to recall its tripartite history by hearkening back to an earlier era when the New York subway fused physical and social mobility. First, the side platforms at the IRT Brooklyn Bridge 4/5/6 Station have lain fallow since around 1910 when they were sealed off when the trains (and therefore platforms) doubled in length, and only their island platform counterparts were deemed worthy of extension. Second, the center island platform of the IND Columbus Circle A/C Station was used until 1981 as a supplementary exit for express trains at rush hour when both sides of subway cars would open, but it has since been unoccupied, plainly visible and eerily identical to adjacent platforms but for lack of passengers and benches. Third, the eastern (Northbound) island platform of the BMT Canal Street J/M/Z Station was closed in 2004 with the cancellation of express service to North Brooklyn, rendering this platform unnecessary yet still illuminated and visible through openings in the platforms' demising wall.[17] Taken together, these three stations are sites of potential to be realized in subway libraries.

In responding to both physical and cultural contexts, the design of the subway library as an institution adopts an open, distributed paradigm which grants users increased agency and access. To open the library and do so within a subway environment that is mapped, connected, and constructed in the mind of each rider, the subway libraries are designed using a nodal understanding of program. That is to say, functions are distributed in a loose but precise manner akin to stones within a Zen Garden like Ryoan-Ji, so that readers are left to forge connections through use rather than according to an imposed sequence or hierarchy. These "nodes" include entrances and exits, physical book storage, digital book download and upload stations, auditoria for readings and lectures, projection rooms, writers' residency spaces, and garden spaces which bring planted form and natural light below grade. Common to all these activities is the idea that the library has value as a place; even if users can access the same information at home, there is value in coming to the library to be part of a learning environment and to interact with other patrons.

The program most central to this open paradigm is the library's print-on-demand (POD) collection. With significant advances in printing technology, and since the average book only sells about 2000 copies in its lifetime,[18] more and more publishers are beginning to print their titles on-demand, eliminating storage and organizational costs in the process. The subway library uses this technology so that any book can be available and accessed by users as needed. Because the subway library reinforces the democratization of content production, the on-demand catalog also enables users to add titles to the catalog and have them printed in the same manner as any other. These titles, anything from an elder's memoir to a teen's

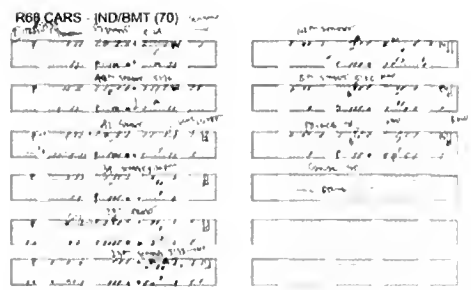
Subway library entrances and gardens

Users

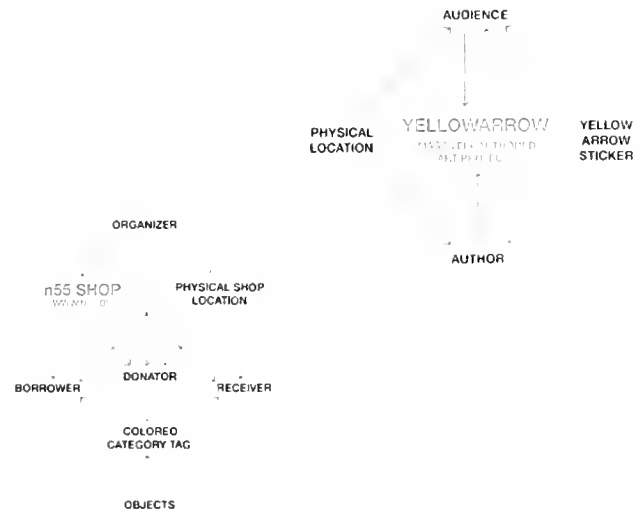


Neurons and nodes, which inspired the "nodal" organization of the project

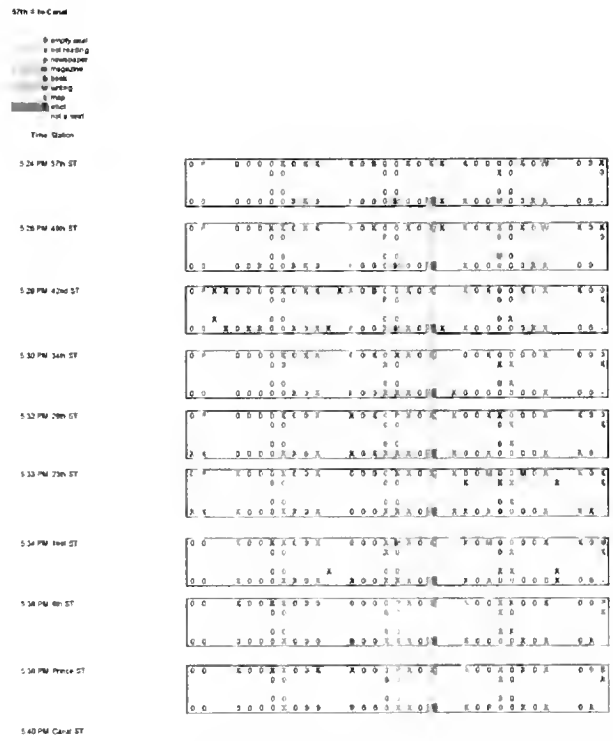
Sites. Abandoned platforms in operating subway stations. Left, Brooklyn Bridge, local side platforms (abandoned circa 1910). Center, Canal Street, east island platform (abandoned 2004). right, Columbus Circle, Center island platform (abandoned 1981)



Readership/ridership study: subway car seating chart showing which riders are reading and which media they are reading



System design studies (these diagrams depict other systems that involved electronically mediated exchange of physical objects and information. These systems served as precedents for designing the library as a system, particularly its circulation)



Readership/ridership study: color-coded subway car seating chart showing which riders are reading and which media they are reading

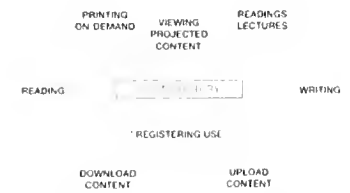
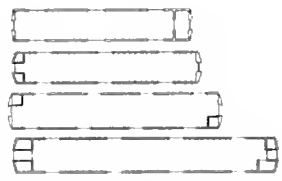


Diagram of the open library as an institution



Subway cars as reading rooms (these depict the 4 cars that are served by the 3 stations in question. Their names – as designated by the NYC MTA – are, from top to bottom: R142, R62, R38, R68)

A Japanese Zen garden called Ryoan-Ji near Kyoto The "loose but precise" arrangement of the stones inspired the nodal project organization

Node Study: A conceptual model, which studies "nodes" as a condition in an abstract sense

fiction, would then be visually announced/registered at all the locations in the city, and made available for downloading and/or printing.

Once in place, the library's circulation system tracks users rather than books; instead of loaning a book for a limited time, it is given to the reader indefinitely. A combination of limits and incentives are utilized in order to maintain a two-way flow of media. One such mechanism would be the requirement to bring back a certain number of books in order to print additional books, and these could be any POD books—those found on the subway, loans from a friend, or from a previous visit. Though this circulation system is a paradigm shift which claims new territory for the library, it does not replace the bookstore, since users can only print so often and each title can only be printed so many times.[19] This technology and circulation system produce not only a new kind of library, but a new kind of book[20] whose content is valued over its form, one less precious as an artifact and thus more appropriate to a subway environment. In the process, perhaps a new kind of reader is created as well. Just as Panizzi's catalog sought to create a more independent and knowledgeable reader,[21] the subway library and its on-demand collection could create empowered users who author titles and interact with others through shared use, authorship, social bookmarking, and commentary.

The space of the subway library acts as the diagram of the institution itself. The linear space of the platform is envisioned as the space between walls which function as reinvented "stacks." Rather than static containers designed solely to house books, these stacks pair a glass wall toward the subway with a wood wall facing the library to house each of the library's numerous programs in between. Sometimes pairs are only wide enough for books and acoustic absorption, while at other times they bulge to accommodate an entire room or a sky-lit planter. Along their length, the variable thickness and character of these stack walls is established by responding to nodes of program which are inserted according to a spatial catalog that loosely organizes access and activity. As these stack walls systematically change opacity, configuration, angle, and size, they create not only channels for movement but also places for pausing, gathering, and interaction.

The tectonics of the wall system consists of vertical wood members that respond to the 5' module of the subway and serve as mullions behind the glass facing the trains. A second set of verticals is in-filled with horizontal wood slats facing the library. The angle and position of these slats vary according to whether the wall needs to be a visual screen, an enclosure for a sunken garden, or an opaque wall creating an interstitial room. Throughout, wood—the most "unsubway" of materials—is used for physical and psychological warmth, for acoustic absorption, and to further the notion of reading as escape.

Subway stations are designed as prototypes according to various specifications derived from cars, clearances, turning radii, and human scale. Such designs are then

Library Stacks. Image of traditional library stacks, stacks whose reinvention functions as the basis for the subway library demising walls which are in-filled with nodes of program

installed in the various locations along each line and adapted to them—pushed and pulled, skewed and curved, sunken or elevated according to the idiosyncrasies of the site and other requirements. Accordingly, the subway library is designed as a prototype to be instantiated within the city, producing variations on a theme. Each library has whatever collection its readers determine, rather than stipulating that Columbus Circle be the "history library" and Brooklyn Bridge be the "science library" (leaving the history of science to be found who knows where). [22] As a series of related, sited prototypes, the subway libraries function as seed projects that critique whole systems at specific points to offer clues about how to effect the physical and intellectual renovation of both subway and library.

The subway libraries use the latent potential of vestigial spaces in the New York subway in order to capitalize on the resonance created through the coupling of physical and intellectual access. Because access itself is not enough, these spaces are also positioned to promote interaction by reinforcing trends toward the democratization of production, whether it involves novels, ringtones,[23] or software. And so, just as the true innovation of eBay was to get strangers to trust each other online,[24] the social innovation of the subway libraries is to help instigate a democratized and participatory culture that is enabled through access—access to technology, to information, and, most importantly, to others. Instead of a "What iPod are you?" [25] scenario, people can then be defined more by what they are thinking and making rather than what they are consuming. A culture with an expanded pool of creators and a loose framework for their interaction helps to build our cities of difference, at once anonymous and communal.

* This content was originally presented as my Master's of Architecture Thesis (MIT Feb. 2006) with advisor Meejin Yoon and readers Mark Jarzombek, John Ochsendorf.

Notes

1 Krzysztof Wodiczko, "Disruptive Agency: A Conversation with Krzysztof Wodiczko" interview by Ginger Nolan, *Thresholds 29: Inversions* (Winter 2005): 83. Parentheses removed, emphasis unchanged.

2 Howard Woolston, "The Urban Habit of Mind," *American Journal of Sociology*, 17 (March 1912): 602.

3 Julie Meyer, "The Stranger and the City," *American Journal of Sociology* 56 (March 1951): 476-483.

4. Georg Simmel, "The Metropolis and Urban Life" in *Classic Essays on the Culture of Cities*, ed. Richard Sennett (New York: Appleton-Century-Crofts, 1969), 47.

5 Jane Jacobs writes: "Great cities are not like towns only larger. They are not like suburbs only denser. They differ from towns and suburbs in basic ways, and one of these ways is that cities are, by definition, full of strangers. To any one person, strangers are by far more common in big cities than acquaintances. More common not just in places of public assembly, but more common at man's own doorstep. Even residents who live near each other are strangers, and must be, because of the sheer number of people in small geographical compass." Jane Jacobs, *The Death and Life of Great American Cities* (New York: Vintage Books, 1961), 30.

6 Georg Simmel, "The Stranger" in *The Sociology of Georg Simmel*, trans. Kurt Wolff (New York: Free Press, 1950), 402-405.

7. This observation grew out of discussions within a design studio on the Boston Subway at Harvard Graduate School of Design. The conclusion is thus a collective one of the studio rather than my own.

8. These aspects come from extensive personal observations done prior to this project, during which I also developed a series of reading and seating charts to survey subway readership. The seating aspect has also been studied by Oliver Lutz in his "Agonistic Subway" project; available from http://web.mit.edu/olutz/www/subway.htm, Internet. In this survey people are reported to be more prone to sit across from each other when two seats were color-coded in a certain way, thus confirming some of my anecdotal observations.

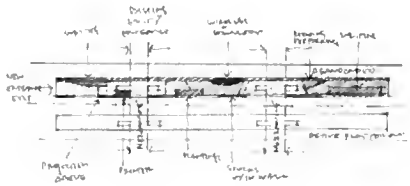
9. Rosalind Williams, *Notes on the Underground: an Essay on Technology, Society, and the Imagination* (Cambridge, MA: MIT Press, 2002), 4-17.

10 Ibid.

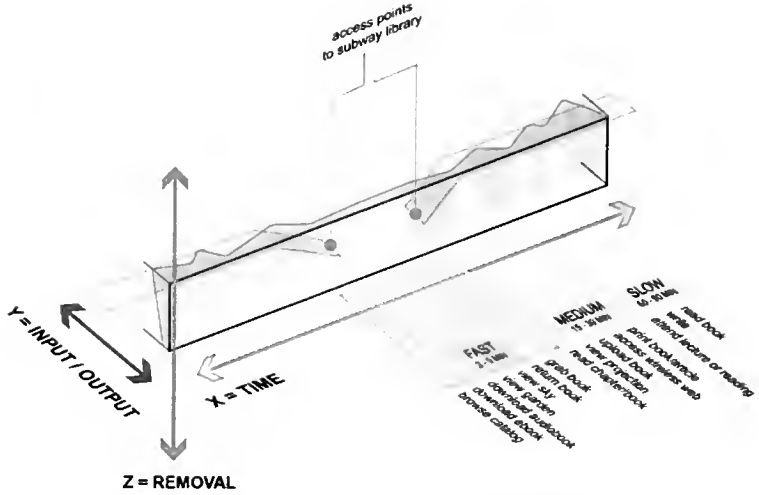
11 Matthew Bartles, *Library: An Unquiet History* (New York: Norton, 2003), 130.

12. This phenomenon is also visible in the research on Democratizing Innovation by Eric von Hippel as well as in the online mass-customization of products ranging from sneakers (Nike) to houses (KB Homes). For the former, see Eric von Hippel *Democratizing Innovation* (Cambridge: MIT Press, 2005).

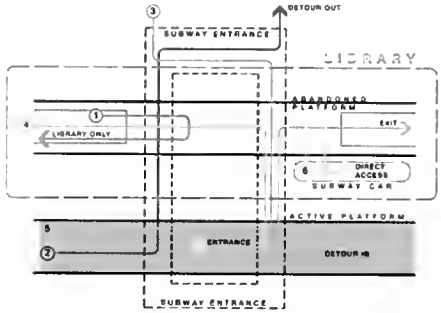
13. The New York subway was opened four years after the Paris metro, seven years after that of Boston, and forty-one years after the London metro. See further, Brian J. Cudahy, *Under the Sidewalks of New York: The Story of the Greatest Subway System in the World* (New York: Fordam University Press, 1995), 11; Paris RATP (*régie autonome des transports parisiens*), "Histoire;" available from http://metro.ratp.fr/; Internet.



A diagram, which shows basic nodal organization of "reinvented stacks" along linear space of platform



Subway library spatial catalog. The image shows programmatic organization of the library



Library access and circulation diagram. (This image shows the different ways in which the prototypical subway library becomes accessible and how it relates to the adjacent, active platform

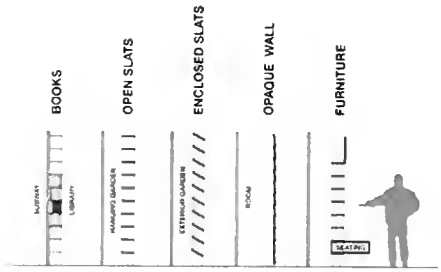
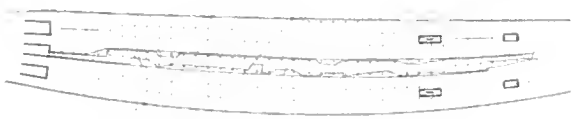


Diagram of stack tectonics, which shows the different conditions of the reinvented stack walls that are variable according to program or use

Upload Station Left to right auditorium for readings and lectures; projection room; interior of elevated writers' residency space in subway library; printing station and sunken garden

Left to right: Media wall (viewed from adjacent, active platform); interior of media wall at entry; media wall (at mezzanine level of Columbus Circle)

Aerial View of Columbus Circle



Columbus Circle: Plan at Platform Level

Columbus Circle: Plan at Grade

14 The crowding was the result of intense immigration to the city. 1.3 million immigrants flowed through Ellis Island in 1907. This would render New York's Lower East Side the most densely-settled area on record anywhere, with an estimated 9000 people per acre. See further, Lorraine Diehl, *Subways: The Tracks that Built New York* (New York: Clarkson Potter, 2004), 61; Brian J. Cudahy, *Under the Sidewalks of New York: The Story of the Greatest Subway System in the World.* (New York: Fordam UP, 1995), 3

15. Originally the BRT or Brooklyn Rapid Transit Corporation, Brooklyn having begun service to rival that of Manhattan's almost immediately—and quite fittingly, since Brooklyn at that time was the nation's second most populous city.

16 NYC Transit reports ridership on an average weekday of 4.5million New York City Transit, "Subway Facts;"available from http://www.mta.info/nyct/facts/ffsubway.htm, Internet

17 Joseph Brennan "Abandoned Stations" [article online]; available from http://www.columbia.edu/~brennan/abandoned, Internet. These abandoned stations include Brooklyn Bridge, Canal Street, and Columbus Circle

18. Morris Rosenthal, "Print-on-demand Book Publishing: Self-Publishing and Printing Book" [article online] (2006); available from http://www.fonerbooks.com/paper.html, Internet

19. This system would be implemented once the libraries were open for a short period of time. In this way, enough books had been printed and thus in circulation. Though the limits and incentives alone could control the public-domain titles and could simply be adjusted in response to an observed net inward or outward flow of books, copyrighted titles would be licensed much the way e-books are now. A certain number could be printed within a given period of time—just as now a library might only have copies of a title available as a .pdf file (with DRM software), a POD title might be limited to a certain number of prints per month.

20 This also raises the possibility that users could assemble their own "readers" of a sort. Readers may print out the first chapter of five books they want to read simultaneously and then return two months later for the second chapters, and so on.

21. Matthew Bartles. *Library: An Unquiet History* (New York: Norton, 2003), 132.

22. For an extended discussion of how classifications can just as easily obscure as clarify, see Geoffrey Bowker and Susan Starr, *Sorting things Out: Classification and Its Consequences* (Cambridge: MIT Press, 2000)

23. An interesting example of this is the recent Ringtone Competition at MIT: students were invited to use free software called HyperScore (developed at the MIT Media Lab), to compose their own tones rather than have them dictated by the phone's manufacturer

24 Michelle Conlin, "The eBay Way," *Businessweek* 29 (November 2004). This article is also available online: Idem, "Special Report: Philanthropy" [online article], available from http://www.businessweek.com/magazine/content/04_48/b3910407.htm, Internet.

25. Text from an Ipod advertisement in Apple Store. Another instance of the "you are what you buy" phenomenon was noted by Darrel Rhea of Cheskin in a *Businessweek* Podcast in which Rhea notes that Starbucks successfully offered "not only coffee but community—the chance to see and be seen," and that within such environments people are able to choose products that "say who you really are." See further, "Making Meaning" [online article] (January 9 2006); available from http://www.businessweek.com/innovate/index.html, Internet com/innovate/index.html, Internet.

Banksy's graffiti art on Israel's West Bank wall

Nigel Parry

British Graffiti Artist, Banksy, Hacks the Wall

In the Summer of 2005, celebrated British graffiti artist, Banksy, traveled to put his mark on Israel's wall in the West Bank, described on his website as "the ultimate activity holiday destination for graffiti writers."

"How illegal is it to vandalize a wall," asked Banksy in the website introduction to his summer 2005 project, "if the wall itself has been deemed unlawful by the International Court of Justice? The Israeli government is building a wall...[which] stands three times the height of the Berlin wall and will eventually run for over 700km—the distance from London to Zurich." [1]

In Banksy's work, location is a major component of the resulting metaphor. Whether he's hanging a fake rock pictogram of early man pushing a shopping cart in the British Museum, or installing an amalgam of the Statue of Liberty and Statue of Justice clad as a prostitute at the site of his last arrest in London, the environment and location are usually key parts of the message.

The Holocaust Lipstick motif in Banksy's art, inspired by the diaries of Lieutenant Colonel Mervin Willett Gonin, DSO, has also appeared on the streets of the UK and aptly distills the deliberate incongruity of his large body of public work. Gonin's diary entry about the liberation of the Bergen-Belsen concentration camp in 1945 unwraps the concept:

It was shortly after the British Red Cross arrived, though it may have no connection, that a very large quantity of lipstick arrived. This was not at all what we men wanted, we were screaming for hundreds and thousands of other things and I don't know who asked for lipstick. I wish so much that I could discover who did it; it was the action of genius, sheer unadulterated brilliance. I believe nothing did more for these internees than the lipstick.... At last someone had done something to make them individuals again, they were someone, no longer merely the number tattooed on the arm. At last they could take an interest in their appearance. That lipstick started to give them back their humanity.[2]

Gonin's diary entry captures an absurdity in which a seemingly gratuitous commodity nonetheless "gives back humanity." In his work, Bansky uses similar juxtapositions to highlight the relentless, and therefore chaotic and distracting, pace of modern society.

Familiar images—the Queen, smiling children, policemen—are given a dark twist, designed to wake observers up from the nine-to-five rat race. The rat race is a common Banksy theme, typically delivered by talking rats—a rat race that literally streams, mirror-like,

through Banksy's borderless gallery of streets to challenge us to reassess the structures and symbols that form the backdrops to our lives.

Much of the art Banksy produced on Israel's West Bank barrier visually subverts and draws attention to its nature as a barrier—preventing Palestinians from access to Israel and, increasingly each other, as it snakes deep into the West Bank and blocks movement to neighboring towns and agricultural land—by incorporating images of escape: a girl being carried away by a bunch of balloons, a little boy painting a rope ladder.

Other pieces invoke a virtual reality that underlines the negation of humanity that the barrier represents—children in areas cut off from any access to the sea playing with sand buckets and shovels on piles of rubble that look like sand, below a painted break in the wall that reveals a tropical beach landscape.

Banksy's website offers two snippets of conversations with an Israeli soldier and a Palestinian who happened upon him while he was in the process of creating the series of nine pieces on the wall, in Bethlehem, Abu Dis, and Ramallah.

Soldier: What the fuck are you doing?

Me: You'll have to wait till it's finished

Soldier (to colleagues): Safety's off

Banksy reclaims public spaces as places for public imagination and enlightenment, breaking through propagandistic barriers to thought and awareness, as is reflected in the very terminology for Israel's West Bank barrier, officially described as a "separation fence" or "security fence." His summer project on Israel's wall stands out as one of the most pertinent and visible artistic and political commentaries in recent memory.

Perhaps the clearest answer to people of this world who wish to whitewash all that is ugly rather than challenge its basic nature, comes from another conversation Banksy reported having with an old Palestinian man:

Old man: You paint the wall, you make it look beautiful.

Me: Thanks

Old man: We don't want it to be beautiful, we hate this wall, go home.

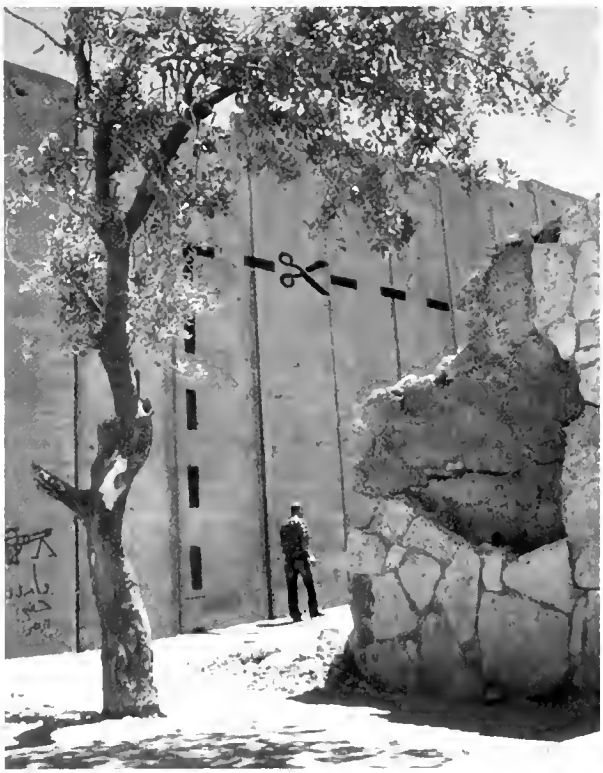
Notes

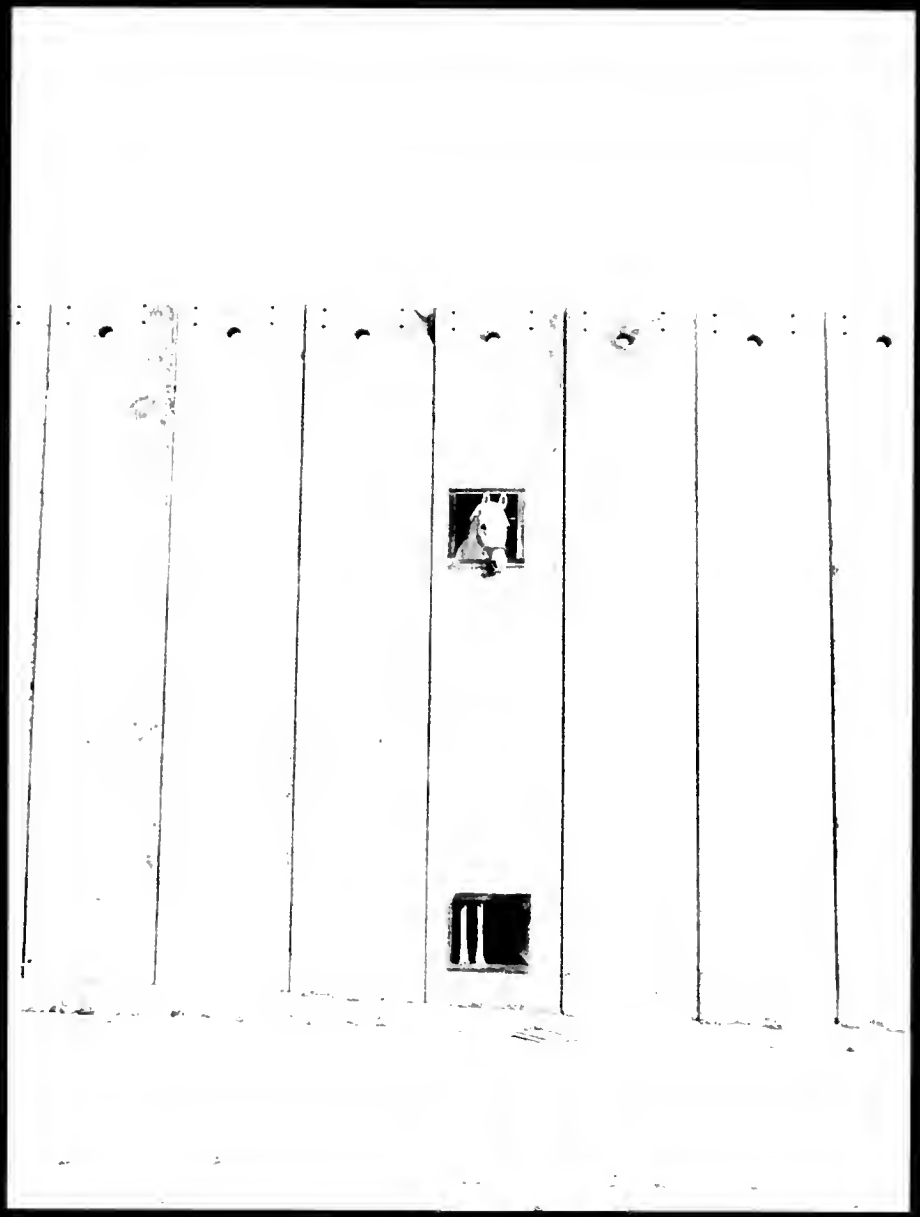
1 http://www banksy co.uk/outdoors/palestine/index html, Internet, accessed 23 May 2006

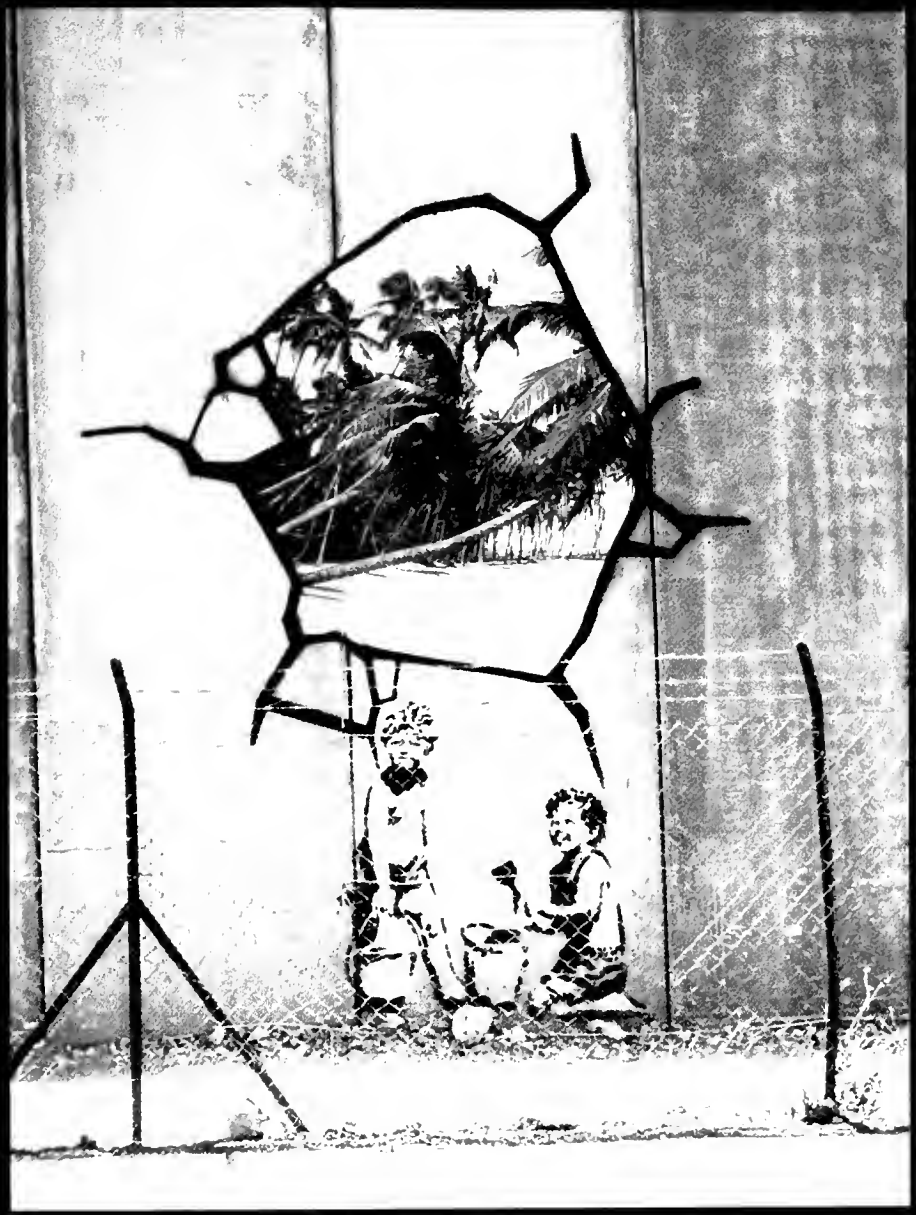
2 http //www banksy co.uk/manifesto/index html, Internet, accessed 23 May 2006.

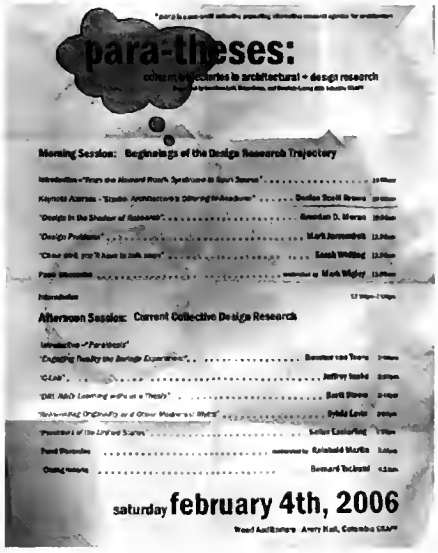
The Holocaust Lipstick Motif

Banksy's graffiti art on Israel's West Bank wall









Tijana Vujosevic

Collectivization!
Para-thesis Symposium: Columbia Graduate School of Architecture, Planning and Preservation, February 4th, 2006

Is contemporary architecture a parasitic digital enterprise, no longer with a body of knowledge to claim its own? Will the coming wave of imaging and communication technologies wash off subjective bias and the antiquated myths of genius and originality that taint architectural expertise? Can we deliver architectural pedagogy from the realm of thesis-oriented curricula and singular authorship, so that architects, entwined in rhizomatic networks, inhabit the luminous pastures of collective existence promised by the advent of the digital age?

Yes, yes, yes, say the organizers of the Para-thesis Symposium, who, on February 4th this year, assembled a think-tank of leading pedagogues from both shores of the Atlantic to brainstorm publicly about architecture's destiny.

Faithful to the original ecclesiastic meaning of "parathesis," the colloquium was performed as a prayer over a dying body—that of old architecture, now commended for an afterlife in the realm of collective digital mirth. The lure of "collective research," and the promise of "open source network systems" to transcend traditional academia, was elaborated in two sessions. The first delineated the tortuous trajectories of the old pedagogical era and the second examined the triumphant afterlife of architecture endowed by para-scientific objectivity and aided by digital prostheses.

The problem was, the thesis did not really pass away. The lofty goals set for the congregation in Wood Auditorium proved difficult to attain. The most radical emissaries of architecture's past and its future, Mark Jarzombek of MIT and Jeffrey Inabe of T-Lab, refused to merge their realms, thus thoroughly compromising the agenda of the symposium.

Professor Jarzombek, the terrestrial mastermind of "dirty non-applicable knowledge," called for widening the gap between the architectural school and the office on one hand, while voicing a protest against the intrusion of accreditation boards on the other. The school's relative autonomy serves its institutional agenda, which is to reflect and articulate the polyphonic body politic, now poorly represented in the profession, with only 0.4 percent African-American women in architecture, for example. Jarzombek was not convinced that the disciplinary identity crisis could be solved by liberating architecture from its institutions of political power and social continuity. He was not convinced that replacing the school with collectivized apprenticeship in digital labs solves problems of access and architecture's civic role.

Inabe, the celestial genie of architectural hyper-extensions, diagrammatic propaganda, and megalomaniac projection, also remained skeptical. In fear that institutional rigor would compromise his lesser, but freer domain of projective investigation, he insisted that the minor genre of paranoid criticality thrives in the extra-academic arena of urban speculation. Introducing his

"Moses Project," a campaign for altering the course of Charles River in order to gain more land for Harvard, he insisted that outlandish speculation is part of architecture's political discourse and should be indulged as such.

The first session of the symposium was, apart from Jarzombek's address, marked by ambivalence towards the possible merger of business and academia, and the fusion of individual practitioners into incorporated multitudes. Mark Wigley, who closed the session, engaged the essential irrationality of architecture as the element that might impede progress towards digital collectivization. Reminding the assembly of the enormous conspicuous expenditure of money, wisdom, and energy that the discipline entails, he claimed that the aesthetic core of architecture has always thwarted architecture's status as a rational professional enterprise.

According to Brendan Moran, the fast-speaking historian of collective research in academia, this core has also prevented the complete integration of architecture into the American research university. Instead, architecture engaged in parasitic exploitation of neighboring disciplines, most prominently sociology and spatial planning, and was sentenced to this role because of its irrelevance for policymaking and its semi-artistic status.

The keynote speaker, Denise Scott Brown, was among the pedagogues who most ardently exploited architecture's neighboring research disciplines. Nevertheless, she still defined architecture as an elusive visual expertise. The process of studio education, according to Scott Brown, produces architects, and also sociable and responsible citizens, but it is questionable whether this can be done by applying collective pedagogy only. Using numerous diagrams of group and pedagogical dynamics, she depicted how she alternated individual and collective instruction in order to produce a generation of environmentally aware architects, in the famous 1968 *Learning From Las Vegas Studio*.

Using the metaphor of a banquet to describe the profession and its codices, Sarah Whiting was also ambivalent about the collectivization, and described the profession as a coexistence of not one, but many discursive collectivities, which present the individual with complex choices of affiliation, individual contribution, collective belonging.

Yet, the dining architect in Whiting's metaphor is a member of a consuming pack. At the end of the day, however, collective consumption entails the production of new knowledge, and, according to Scott Brown's projection, of self-conscious citizens. The second session of the conference was dedicated to main trajectories in current production.

The most ambitious of the speakers proposing or promoting a current trajectory was Keller Easterling, who delivered a speech entitled "President of the United States." According to Keller, the citizens produced in architecture schools would not shy from openly claiming both disciplinary autonomy and political power. They would dare to take on complex political and cultural problems as part of the large field of environmental fabrication. They would be capable of making or becoming the President.

But what kinds of civic congregations, if judged by the results flaunted in the second session of the conference, does "current research" entail and produce? In reality, the "open source network systems" approach divided the discipline into competing camps, which, if judged by the reactions in the audience, frequently failed to delineate a more glamorous collective future for architecture's subjects.

Roemer van Toorn of the Berlage Institute was the only teacher of the future to adopt a political agenda for his architecture. Defining architecture's role as entirely polemical, and his Ph.D. program as an enterprise of "writing in opposition to others," Toorn further militarized his agenda by designing studios such as that in which the students parachute into Tirana and help the Mayor "put a rein on wild capitalism." In Toorn's program for radically interventionist architecture, the field of collective intervention is located not into celestial spheres, but rather in the poorer countries, and the author displayed the only context in which an agonistic vision of architecture can be executed—that of global imperial culture.

Whereas Berlage's emergency squads were envisioned as inspired self-organized groups of travellers, Bret Steele from the Architectural Association (AA) proposed to engineer collective formations of students out of "those strange creatures" that enter the school. Proud of "outlawing" the scholarly thesis at the newly collectivized AA in London, Steele pointed out that his institution replaced "the world of singularity and identity" with a model based on corporate mergers. New architectural corporations are collectivities inspired by Microsoft, "pure structures" without products, and Steele a

pedagogue inspired by Bill Gates. But how does he judge responsibility and quality? He proposes grading according to the worst student in a group. This scenario, according to him, regulates collective self-management, and, one might add, replaces subjective authorship with an entirely punitive model of authority, which curiously resembles legal regulation of architectural production in the West.

Building on the corporate model, Sylvia Lavin of UCLS pointed, after Rosalind Krauss, that the notion of originality is a modernist myth, and the inverse of mass reproduction. Lavin proposed eliminating the written thesis in a "closed group of a few experimental schools," eliminating tenure for easier management, enabling "intellectual," rather than "socioeconomic" mechanisms of affirmative action. The new boutique practice would reinvent originality as "novelty," fickle, decorative, entertaining, and exemplified by a "pet rock" in a box. Ultimately, collective research would be subsumed in the elitist and amusing post-critical enterprise of dressing the stale in the fresh.

If the Para-thesis Symposium did not manage to produce new clothes, and has left the emperor as naked as ever, it is no shame. "The poorest discipline," as Scott Brown dubbed the regal art, is still in this world. It can demand autonomy from the research university, as Easterling suggested, autonomy from Arnold Schwarzenegger, as Lavin wanted, autonomy from the professional world, as desired by Jarzombek, or absolute autonomy, as dreamed by Inabe. The challenge is to think of previously unimaginable potentials for creative and heterogeneous subjectivities, and to exploit the fact that architecture cannot seek autonomy from the politics of building, or from critical consciousness of its complex history.

A Message from Dean
Adele Naude Santos

In Memory of the Associate Head of MIT's Rotch Library: *Merrill Smith (1942-2006)*

Merrill Wadsworth Smith first joined MIT in 1978 as the Head of the Rotch Visual Collections. From 1983 to 1985 she was also the Videodisc Project Director for the Aga Khan Program for Islamic Architecture—one of the very earliest efforts to use digital technology for image management and delivery. In 1988 Merrill was promoted to the position of Associate Head of Rotch Library. Merrill was also active professionally beyond MIT, most notably in the Art Libraries Society of North America.

Besides the loss to the School of Architecture at MIT, Merrill's absence will be felt across the Institute. She could make things happen and, in that capacity, her dedication and professionalism greatly supported the work and studies of our community. Members of MIT's School of Architecture will always remember her optimism, strength of character, and sense of humor.

Contributors

William C. Brumfield is a Professor of Slavic Studies at Tulane University, where he also lectures at the School of Architecture. He has received Fellowships and grants from: the John Simon Guggenheim Memorial Foundation, the National Endowment for the Humanities (NEH), the National Humanities Center, the Kennan Institute for Advanced Russian Studies (at the Woodrow Wilson Center), the American Council of Teachers of Russian, the National Council for Eurasian and East European Research, the International Research and Exchanges Board, the Kress Foundation, the Woodrow Wilson Foundation, and the Trust for Mutual Understanding. He is the recipient of the 1997 Faculty Research Award from the Faculty of Liberal Arts and Sciences at Tulane University. In April 2002 Brumfield was elected to the State Russian Academy of Architecture. Recently NEH awarded him a major grant, via the University of Washington, for the electronic archiving of the Brumfield photographic collection. Professor Brumfield was a fellow at the National Humanities Center in 1992-93 and a Guggenheim Fellow in 2000-01. He is the author and photographer of numerous books on Russian architecture including: *The Origins of Modernism in Russian Architecture*, *Lost Russia: Photographing the Ruins of Russian Architecture*; and *A History of Russian Architecture*, which the *New York times Book Review* included in its "notable books of the year 1993." Brumfield's photographs of Russian architecture, which have been exhibited at numerous galleries and museums around the world, are part of the collection of the Photographic Archives at the National Gallery of Art, Washington, D.C. A collection is also held in the Prints and Photographs Division of the Library of Congress and displayed at the following LC site: http://frontiers.loc.gov/intldl/mtfhtml/mfdigcol/mfdcphot.html. Recently he was elected to the Russian Academy of Arts and will be inducted into the academy as an honorary (non-Russian) member.

Naomi Davidson is a graduate student in the Department of History at the University of Chicago. Her dissertation, which she is currently completing, is entitled "*Un espoir en devenir*: The Mosquée de Paris and the Creation of French Islams." Her research has been made possible by the generous support of the Georges Lurcy Charitable Trust, the German Marshall Fund, and the Social Science Research Council.

Elliot Felix is a recent graduate of the MIT's M Arch program where he pursued interdisciplinary design through architecture, industrial design, structural research, and conceptual art projects. His thesis, entitled "The Subway Libraries," served as the basis for the preceding article. Prior to MIT, he worked extensively at Rafael Viñoly Architects and completed his undergraduate studies at the University of Virginia

Ole W. Fischer studied architecture at the Bauhaus University Weimar and ETH Zurich and graduated in 2001. In 2002 he founded an office for architecture and urban design in Zurich. In the same year he started teaching theory of architecture at the Institute of Theory and History of Architecture (gta) of the ETH Zurich. In his dissertation thesis he is tracing the intentional transcription of philosophic thought into architecture and design in the work of Henry van de Velde dedicated to Friedrich Nietzsche. In 2005 he was chosen as fellow researcher at the GSD Harvard. He is founder and curator of the discussion platform *MittelBau* in Zurich, and he has published on the current issues of architecture in *Archplus*, *Werk, Bauen und Wohnen*, *Trans* and *JSAH*. Upcoming publications include an essay on immersive spaces in *Projective Landscape*, 010 Publishers Rotterdam, and an editorial introduction on disciplinarity in *Precisions: architecture between arts and sciences*, Birkhaeuser Publishers, Basel

Jennifer Ferng is a third year Ph.D. student in the History, Theory and Criticism of Architecture and Art program at MIT. She received a B. Arch from Rice University and a M.Arch. from Princeton University and has taught architectural history and design in New York.

Frank Forrest is a freelance writer and teacher who has taught at Boston University and lived and worked in Central Europe and the Central Pacific.

Talinn Grigor received her Ph.D. from MIT in 2005 and will become an Assistant Professor of non-western architecture at the Art History Department of Florida State University, starting in fall 2006. Entitled "Cultivat(ing) Modernities: the Society for National Heritage, Political Propaganda, and Public Architecture in Twentieth-Century Iran," her dissertation is in the process of revision for publication. Her works on modern Iranian architecture have appeared in *Third Text*, *Future Anterior*, *Thresholds*, *ARRIS*, and the *Journal of Iranian Studies*. Her forthcoming article in the Art Bulletin deals with her next project on the turn-of-the-century European art-historiography and its connections to the late 19th- and early 20th-century eclecticism of Qajar architecture.

Mark Jarzombek is the director of the program in History, Theory, and Criticism of Architecture and Art at MIT's Department of Architecture. He has worked on a range of historical topics from the Renaissance to the modern period and his textbook entitled *Global History of Architecture*, co-authored with Vikram Prakash and Frances Ching, will be published soon.

Mitchell Joachim is a Ph D candidate at the Department of Architecture's Computation Group at MIT. His dissertation is entitled: "Ecotransology: Integrated Designs for Urban Mobility." Prior to MIT, he completed two master's degrees from Harvard University (MAUD) and Columbia University (M.Arch). Currently he is a researcher at the Media Lab Smart Cities Group, collaborating with his advisor William J Mitchell on the General Motors/ Frank O Gehry Concept Car. In parallel with Gehry Partners in Los Angles, he actively worked as an architect on the Brooklyn Atlantic Yards Project. During his time in Cambridge, he has been a Moshe Safdie and Associates research fellow, award winner and a Martin Family Society Fellow for Sustainability. He has also worked as an architect at Pei, Cobb, Freed and Partners, and the Michael Sorkin Studio in New York City. Mitchell has served as visiting faculty in sculpture at the School of the Museum of Fine Arts, Boston. His work is published in "How Harvard would remake Atlanta," (Atlanta Journal-Constitution, 2001), *Michael Sorkin Studio: Wiggle* (Monacelli Press, 1998), and "The Guru of Impossible Engineering Creates a Car," (Popular Science, 2004). His winning design of living structures—Fab Tree Hab—with Habitat for Humanity and the Southeastern Center for Contemporary Art has been honored with a nomination for the INDEX Award and exhibited internationally.

Douglas Joachim is a Personal Trainer, and Lecturer. He is certified with the National Academy of Sports Medicine: CPT; PES; IFS, American Council of Exercise: CPT, and American Academy of Health Fitness Professionals: MES He earned a B S. with an emphasis in Exercise Science & Creative Studies. Doug has ten years of experience as a PT in functional anatomy, injury prevention, core training, and motivation.

Garyfallia Katsavounidou is an architect, practicing in Thessaloniki, Greece. She received her SMArchS degree in Architecture and Urbanism from MIT in 2000 Her book *Invisible Parentheses: 27 cities in Thessaloniki*, based on her MIT thesis, was published in Greek in 2004, with a grant from the Onassis Foundation. Since 2005, she has been collaborating with the Rome-based group Osservatorio Nomade.

Michael W. Meister holds the W. Norman Brown Professorship of South Asian Studies at the University of Pennsylvania, Philadelphia, in the History of Art Department His publications include: *Making Things in South Asia: The Role of Artist and Craftsman*, *Encyclopedia of Indian Temple Architecture*, *Discourses on Shiva*, *Coomaraswamy: Essays in Early Indian Architecture*, and *Ethnography and Personhood: Notes From the Field*.

Sarah Menin has taught architecture at the University of Newcastle for many years. Her doctoral research examined parallels between the work of Alvar Aalto and Jean Sibelius, and her research since has examined the interrelationship between architecture and the mind Dr. Menin is an authority of the life and work of Aalto, and her books include: *Nature and Space: Aalto and Le Corbusier* (co-written with Flora Samuel); *Constructing Place: Mind and Matter;* and *An Architecture of Invitation. Colin St John Wilson* (co-written with Stephen Kite) She continues to practice architectural design

Null Lab was launched by Arshia and his partners Reza Bagherzadeh and Afshin Rais Rohani (no longer part of the firm) in 2002. Null Lab is an architectural design, research, and implementation firm, currently involved in designs ranging from residential and commercial, multi-unit loft development, "smart home" design and integration, to production design for film and theater. Their projects include: the 15th Street Lofts, 99 artist-in-residence units; the Mateo Lofts, an adaptive reuse project; the Santa Fe Lofts, 36 artist-in-residence units, also adaptive reuse, that are under construction; the "Voxel" A new (soon to be landmark) on the sunset strip in West Hollywood, which was initiated to coincide with the 20th anniversary of the inauguration of the city, and several residential projects in Los Angeles. In late 2004, Null Lab Won AIA's Interiors Award Honor (highest category) for the Bobco Metals Headquarters design in Los Angeles.

Neri Oxman is a Design-Technology Research Consultant for KPF Kohn Pedersen Fox Associates (NY & London) and is currently working towards her Ph.D. in Design and Computation at MIT. Neri studied at the Architectural Association School of Architecture in London (with distinction), the Technion Israel Institute of Technology (with honors), and the Hebrew University Medical School. She has practiced Architecture with Ram Karmi, OCEAN NORTH and Kohn Pederson Fox. Recent exhibitions of OCEAN NORTH, in which Neri was a participant, include the Venice Architectural Biennale (2002, 2004) and the Beijing Biennale (2004). Neri has taught design and computation workshops at the Emergent Technologies and Design Master's Program at the AA, the IT-Master's Program at the Oslo School of Architecture, as well as at Rice and Columbia Universities. She has collaborated with Bentley Systems and the Smart Geometry Group and has given numerous workshops on Generative Components and other parametric software packages at various institutions including TU Delft, TU Vienna, Cambridge U.K, MIT and Columbia University. Her work has been published in journals, magazines and books including *AD, Icon, AA Files, Building Design (BD Magazine), Demonstrating Digital Architecture* (Birkhauser Publishers) and Archiprix International 2005 (010 Publishers). In 2005, she was the recipient of the FEIDAD Design Merit Award, Archiprix Award, and the America-Israel Cultural Foundation Award of Excellence.

Robert and Shana ParkeHarrison's collaboration has evolved organically over the past fifteen years. In 2000 the ParkeHarrisons began to publicly acknowledge Shana's involvement in the creation of the art. Their exhibition, *The Architect's Brother*, began at the George Eastman House in 2002. It has continued to travel to venues throughout the United States, Canada and Europe. Their work is in collections throughout the U.S including The Whitney Museum of American Art, The Los Angeles County Museum, The Hallmark Collection at the Nelson Atkins Museum of Art, The San Francisco Museum of Modern Art, The Art Institute of Chicago, The Museum of Fine Arts, Houston, and The Decordova Museum.

Nigel Parry lived and worked in the West Bank and at Birzeit University from 1994-1998. Today he lives in New York City, offering public relations services, and web and print design through his company nigelparry.net.

Mark Rawlinson teaches Art History at the University of Nottingham, UK. He has previously published work on Charles Sheeler and is soon to publish a monograph entitled, *Charles Sheeler, Early American Modernism and the Paradox of Precisionism*, with IB Tauris. His next research project will explore the constructions of place/non-place in the work of 20th American photographers such as Stephen Shore, Joel Sternfeld and William Eggleston.

Sara Stevens is a first year Ph.D. student in Architecture at Princeton. She is a graduate of the Masters of Environmental Design Program at the Yale School of Architecture, and holds a B. Arch from Rice University. Her work focuses on the contemporary built environment, particularly expansive urban growth and the business and economic history of large companies that shape development. Her Masters' thesis, "Systems of Retail: The Bigger Box," includes a set of box-like building formats that she investigates for their historical context and impending effect on urban form—retail pharmacies, the self-storage industry, home improvement stores, and megaplex movie theaters.

Nicole Vlado has an M. Arch from MIT. She lives and works in New York City where she continues to explore the theme of surface habitation through art and architecture.

Tijana Vujosevic is a second year Ph.D. student in the History, Theory and Criticism of Architecture and Art Program at MIT. She received her M.Arch From Yale University and studied architecture at Belgrade University.

Illustration Credits

William C. Brumfield

Figure 1: Photograph by author, 1975. © Brumfield Collection (M59 32)

Naomi Davidson

Photographs reprinted from *Institut Musulman de Paris*, a brochure distributed by the Institut. © Institut Musulman et la Mosquee de Paris.

Elliot Felix

Photograph of Ryoan-Ji by Sam Gerstein © http://www.ryoohki.net/

Photograph of Library Turnstile University of Liverpool

© http://www.liv.ac.uk/library/libtour/lawlibtour/secure.html

Photograph of print on demand by Digital Graphix ©http://www.dgxpod.com/equipment/index.html

Aerial view of Columbus Circle by David Pirmann © NYCsubway.org

All other images by author

Jennifer Ferng

Figure 1 & 3 & 4: Reprinted from *World Game Report: Summary of a Project* led by R. Buckminster Fuller, Edwin Schlossberg, and Daniel Gildesgame, edited by Mary Deren and Medard Gabel. Photographs by Daniel Gildesgame and Herbert Matter. © New York: The New York Studio School of Painting and Sculpture in association with Good News, 1969. Courtesy of Edwin Schlossberg and the Frances Loeb Library, Harvard University Graduate School of Design.

Figure 2: Reprinted from *Ho-ping: Food for Everyone*. © New York: Anchor Press, 1980. 24. Courtesy of Medard Gabel

Figure 5: Reprinted from *Energy, Earth, and Everyone*. © New York: Anchor Press, 1980. 92. Courtesy of Medard Gabel

Ole W. Fischer

All images courtesy of the Weimar Classic Foundation.

Mark Jarzombek

Figure 1: © The National Museum, Stockholm

Figure 2: C. Campbell's *Vitruvius Britannicus*, Vol. 1, 1725. Plate 64. © New York: B. Blom, 1967-72

Figure 3: Ibid., 31. © New York: B. Blom, 1967-72

Figure 4: *Robert Adam's Works in Architecture*, Vol. 1, 1775. © New York: Dover Publications, 1980

Figure 5: Architectural drawing in depot fortifications des colonies, Pondichery, © Bibliotheque de la section outre-mer des Archives Nationale, Paris

Figure 6: Claude Nicholas Ledoux's *Architecture*, Volume I. © Paris: Lenoir, 1847, plate 169

Figure 7: Malcome Seaborne's *The English School: Its Architecture and Organization*. © Toronto: University of Toronto Press, 1971, p. 176

Neri Oxman, Douglas and Mitchell Joachim

All images by authors

Garyfallia Katsavounidou

Figure 1: ©*The National Geographic Magazine*, November 1925

Figure 2 & 3: Photographs reprinted by permission from Lorenzo Romito, the coordinator of Osservatorio Nomade

Figure 4: Photograph by author

Michael W. Meister

Figures 1 & 3 & 4-8 & 13: Photographs by author

Figure 2: Based on J. Fergusson and J. Burgess's *Cave Temples of India*. © Delhi, Oriental Books, 1880

Figures 9 & 10: Reconstruction by author

Figure 11: © Osian, author, © Khajuraho, after D. Desai, *The Religious Imagery of Khajuraho*, Bombay, 1996, fig. 15, © Ranakpur, after P. Brown, *Indian Architecture: Buddhist & Hindu Period*, 3rd ed., Bombay, 1959, pl. 123; © Chidambaram, after *Encyclopaedia of Indian Temple Architecture*; © Madurai, after W. Francis, *Madras District Gazeteers, Madura*, 1906

Figure 12: Photograph courtesy of P. Ghosh

Sarah Menin

© Sarah Menin

Null Lab

Page 40: Photo on top left: Tara Wujcik and Barbra Runic. Photo on top right: Arshia

Page 41: Photos on top: Fotoworks-Benny Chan. Hand Diagrams: Reza Bagherzadeh. Text by Arshia

Robert and Shana ParkeHarrison

All photographs courtesy of Robert and Shana ParkeHarrison

Nigel Parry

© www.banksy.co.uk

Mark Rawlinson

All images courtesy of National Gallery of Art, Washington D.C.

Sara Stevens

All oblique facades courtesy of Rosewood Portfolio

All low-level aerials courtesy of Koman Properties Inc.

Axonometric drawing by author

Nicole Vlado

All photographs and drawings by author

Tijana Vujosevic

© Columbia Graduate School of Architecture, Planning, and Preservation

Future Anterior

HISTORIC PRESERVATION'S
NEW POINT OF REFERENCE

Essential reading for anyone interested in historic preservation and its role in current debates, *Future Anterior* approaches historic preservation from interdisciplinary positions of crucial inquiry. A comparatively recent field of professional study, historic preservation often escapes direct academic challenges of its motives, goals, forms of practice, and results. *Future Anterior* asks these difficult questions from philosophical, aesthetic, historiographical, theoretical, and practical perspectives. As the first and only refereed journal of its kind in American academia, *Future Anterior* engages the reader in new ways of reflecting and taking on the built past not as a constraint but as a provocation to intervene creatively in contemporary culture.

A Journal of Historic Preservation History, Theory and Criticism
Graduate School of Architecture, Planning, and Preservation
Columbia University

Founder and Director: Jorge Otero-Pailos
Editorial Board: Barry Bergdoll, Paul Spencer Byard, Jean-Louis Cohen, Andrew S. Dolkart, Mark Jarzombek, Hélène Lipstadt, Fernando Manas, Daniel B. Monk, Joan Ockman, Marc Treib, Gwendolyn Wright
Managed and produced by Columbia University Historic Preservation students

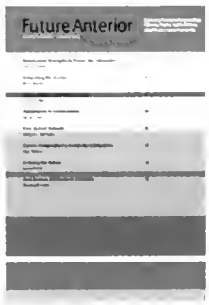
To subscribe or contact:

Write **Future Anterior**
Journal of Historic Preservation
GSAPP
400 Avery Hall
Columbia University
New York, NY 10027

Email futureanterior@columbia.edu

Visit www.arch.columbia.edu/futureanterior

Individuals: $24 in US, $34 international
Institutions: $60 in US, $70 international



Ra

REVISTA DE ARQUITECTURA

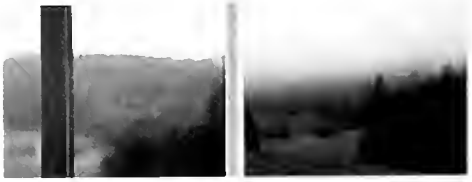
Ra, *Revista de Arquitectura*, is published yearly by the School of Architecture of the University of Navarra. **Ra** is a forum for results of the academic debate regarding the diverse dimensions of architecture and the city, considering both as cultural realities of unarguable importance and impact; and as objects of careful attention, study and investigation.

Ra aims to specifically assemblage the intellectual production of Theory and History, Urban Planning and Architectural Design Departments, although it is initially open to articles and collaborations from independent professionals and other academic institutions. **Ra** also seeks to feed the perception of architecture as a cultural discipline in the extensive sense of the word.

Articles are published in Spanish and English after a journal selection process conducted by the International Editorial Board.

FOR MORE INFORMATION CONTACT:
Jorge Tárrago Mingo
Coordinador *Ra*
ETS de Arquitectura.
Universidad de Navarra
31080 Pamplona. Spain
jtarmin@unav.es

Subscriptions: spetsa@unav.es
www.unav.es/arquitectura/documentos/publicaciones/publis/8den.htm



thresholds 33

form(alism)

call for submissions

thresholds, the bi-annual critical journal of architecture, art, and media culture of MIT's department of architecture, invites submissions for issue 33 **form(alism)**.

submissions due: **31 august 2006**

Architectural debate no longer waffles only between the blob and the box but is also caught today between debates regarding form and formlessness. Formalism is to art and architecture what the 80's is to recent fashion. It periodically threatens to make a comeback under the guise of not being its old self, ultimately peeking from underneath some singular design. From the form of cities, with the now normative megacity and the emergence of other novel urban typologies, to architecture's technological revolution, with the use of algorithms to generate form or the application of aeronautical software in its design, formal paradigms, boundaries, and processes are being reconsidered and reconfigured. All of these reorganizations of space, capital, material, and time beg for a critical analysis of form(alism), its definitions, realization, and deconstruction, as well as processes of form making, from within the object and without.

thresholds 33 asks what new concerns about form(alism) have emerged in art/architectural fields today. How can we evaluate theoretical issues of form and content/ form and autonomy/ form and ornament/ form and formlessness? What/how is the formal relationship with the subject challenged, enriched, or elided? What projects/ methodologies demonstrate emergent processes or redefine formal limits/boundaries? Where are the anti-formalists today? Where can we place form(alism) within cultural practice and aesthetic discourse today?

thresholds 33 invites contributions from a wide range of disciplines, including art, architecture, anthropology, animation, video, urbanism, history, theory and cross-pollinations. Submissions need not be limited to scholarly work and may include comedic and spoof submissions. **thresholds 33** will include a web component for time-based media.

thresholds attempts to publish only original material. Materials should be postmarked by 31 August 2006
TEXT: Manuscripts for review should be no more than 2,500 words. Text must be formatted in accordance with The Chicago Manual of Style. Spelling should follow American convention and quotations must be translated into English. All submissions must be submitted electronically, via e-mail or disk, and accompanied by hard copies of text and images. Text should be saved as Microsoft Word or RTF format, while any accompanying images should be sent as TIFF files with a resolution of at least 300 dpi at 8" x 9" print size. Figures should be numbered clearly in the text. Image captions and credits must be included with submissions. It is the responsibility of the author to secure permissions for image use and pay any reproduction fees. A brief author bio must accompany the text.

MEDIA: Media submissions below 8MB can be submitted via e-mail to: **sadia@mit.edu** and by disk. Submissions above 8MB must be sent on disk and or posted on a server for download. Most common file formats will be accepted. Thresholds reserves the right to request reformatting of works for final publication. It is the responsibility of the author to secure permissions for proprietary media use and pay any reproduction fees. A brief author bio must accompany the work.

submissions due **31 August 2006**

Please send all submissions to **thresh@mit.edu**
TEXT/IMAGE submissions: **thresh@mit.edu**
MEDIA submissions (below 8MB): **sadia@mit.edu**
INQUIRIES: **thresh@mit.edu**

ANALOG:

Sadia Shirazi, Editor
thresholds
MIT Department of Architecture
Room 7-337
77 Massachusetts Ave.
Cambridge, MA 02139 USA

Submission Policy

Thresholds attempts to print only original material. Manuscripts for review should be no more than 4000 words. Text must be formatted in accordance with The Chicago Manual of Style. Spelling should follow American convention and quotations must be translated into English. All submissions must be submitted electronically on a CD or disk, accompanied by hard copies of text and images. Text should be saved as Microsoft Word or RTF format, while any accompanying images should be sent as TIFF files with a resolution of at least 600 dpi at 8" by 9" print size. Figures should be numbered clearly in the text. Image captions and credits must be included with submissions. It is the responsibility of the author to secure permissions for image use and pay any reproduction fees. A brief author bio must accompany the text.

Non-profit
Organization
US Postage Paid
Cambridge MA
Permit No.: 54016

Cont

William C. Brumfield

Naomi Davidson

Elliot Felix

Jennifer Ferng

Ole W. Fischer

Frank Forrest

Talinn Grigor

Mark Jarzombek

Douglas Joachim

Mitchell Joachim

Garyfallia Katsavounidou

Michael W. Meister

Sarah Menin

Null Lab

Neri Oxman

Robert and Shana ParkeHarrison

Nigel Parry

Mark Rawlinson

Sara Stevens

Nicole Vlado

Tijana Vujosevic

Editors

Z. Pamela Karimi, Editor

Sadia Shirazi, Assistant Editor

Massachusetts Institute of Technology
Department of Architecture, room 7-337
77 Massachusetts Avenue
Cambridge MA 02139