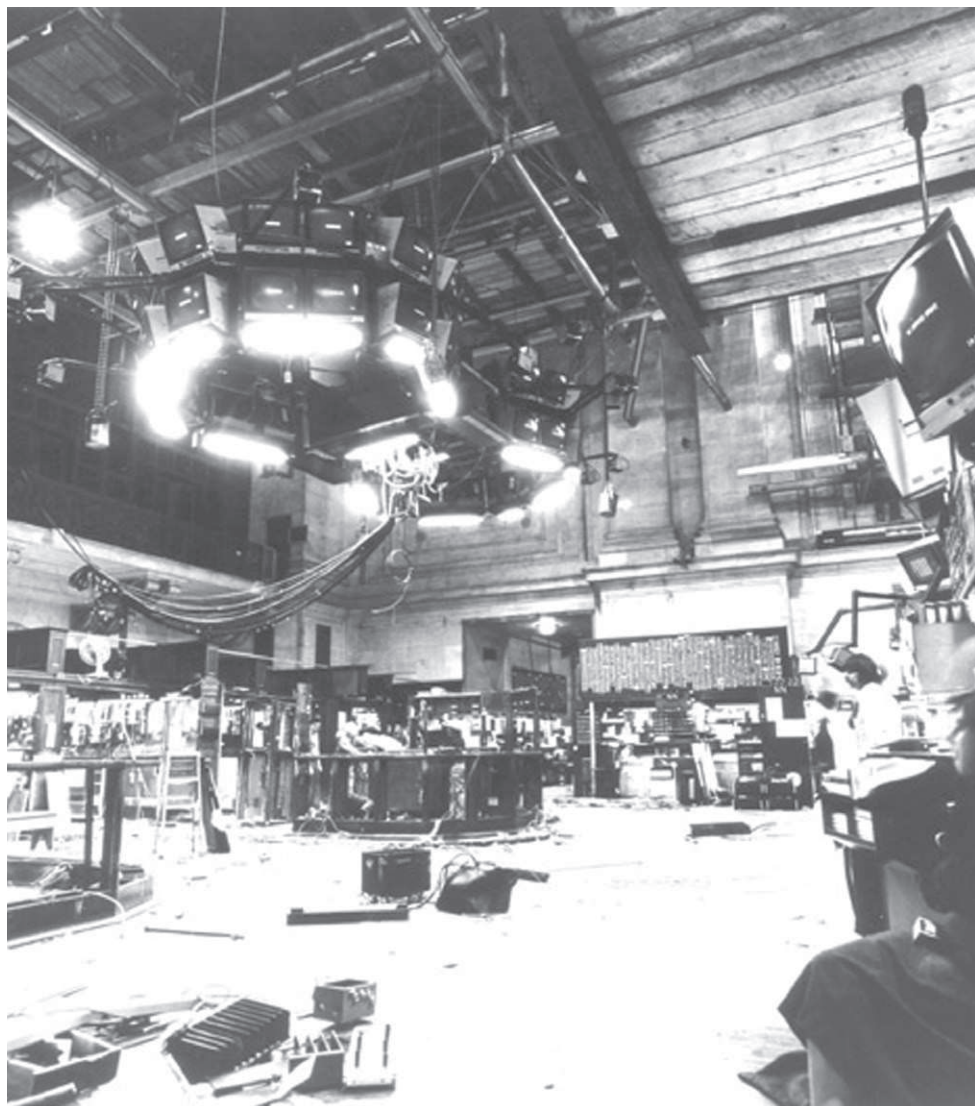


RECYCLING TERRITORIES



**Archival photograph of the trading floor of the
New York Stock Exchange, June 1981**
Courtesy of the archives of the NYSE.

RECYCLING NEW YORK CITY

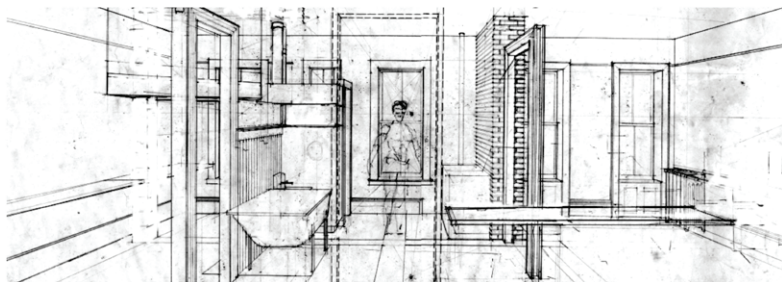
Brian McGrath*

New York's fiscal decline in the 1970's was radically reversed in the wake of financial deregulation and electronic trading in the 1980s. No architects and urbanists at that time anticipated the transformations the introduction of new digital technologies would unleash into the 21st century. The 1980s was followed by three decades of the irrational exuberance: the dot.com boom and bust, Rudolf Giuliani's Zero Tolerance policing, the attack on the World Trade Center, mounting evidence of the irreversibility of climate change, the financial meltdown of 2008, and the occupation of Wall Street last year. This chapter unfolds the process of the recycling of New York City's urban form in three stages of design research following of the introduction of electronic trading on Wall Street: *damage control*, where new forms of practice engaged with the "urban leftovers" in the wake of massive gentrification in the 1980s; *seizing the means of production* involved the beginnings of digital design practice in the 1990s, and finally the possibilities of the twittering social activism of today which began at the start of the 21st century creating new forms of inclusive urbanisms based on broad civic participation in design activism.

1980s: Design as Damage Control

The recent massive recycling of the New York City territory was triggered over a weekend in June 1981. Between Friday at 4:00 PM and Monday at 8:00 AM, old wooden desks, files and paper trading cubicles were removed from the trading floor of the New York Stock Exchange, and a spider's web of fiber optic cables, computer terminals and display screens was lowered from construction scaffolding above. That Monday morning, the course of the city and the world's future changed as workers arrived to work ready to unleash the future with the new tool of electronic financial trading.

Urban development in New York had plummeted during the fiscal crisis of the mid-70s. The city's infrastructure was collapsing, crime was rampant, and the



Recycling the New York City interior: From exhibition and catalogue Room in the City that brought the issue of new forms of inhabiting New York into public debate, April-May, 1987

City Gallery, Department of Cultural Affairs, catalogue published by Princeton Architectural Press, drawing by Brian McGrath.



Infill with a void: attached double duplex housing project with garage workshop for Brownsville, New York, from Vacant Lots, exhibit coordinated by the Architectural League of New York

catalogue published by Princeton Architectural Press, 1989, drawing by Brian McGrath.

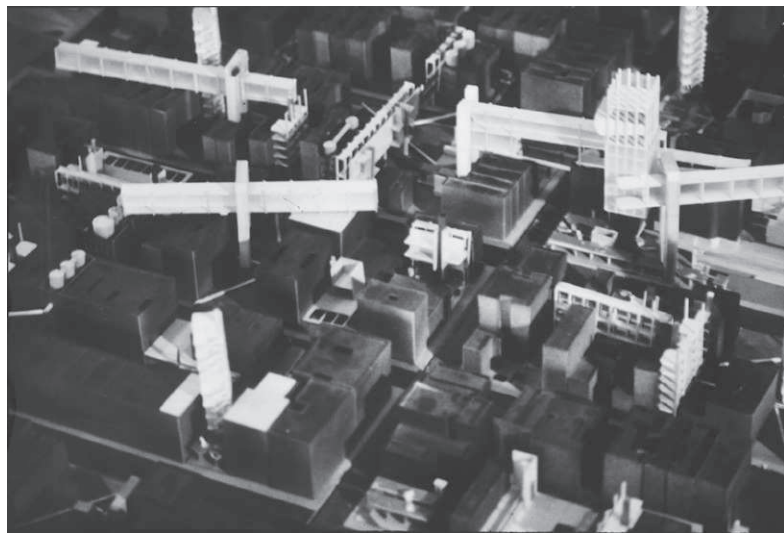
new metabolism of the air-conditioned, artificially lit office tower exhausted the regional power grid, resulting in a massive blackout in 1977. I have retroactively catalogued the first decade of my own design research in New York in the 1980s as a practice of *damage control* in the face of digital globalization of capital. Like in the New York Stock Exchange trading floor, urban transformation can begin in the interior. For a young architect practicing in the 1980s, old row houses, tenement apartments on the Lower East Side, prewar apartments on the Upper West Side subdivided during the Great Depression, and old industrial lofts were recycled for artists, performers, and young professionals producing a space to re-inhabit New York at the end of the 20th century.

The next scale of recycling New York in the 1980s involved research on ways to engage small-scale entrepreneurship and community based development on infill housing on the thousands of city-owned vacant lots. I joined a group at the Architectural League of New York and New York City Department of Housing Preservation and Development to organize a design research study project called *Vacant Lots*. We organized scores of young architects to work on prototypical solutions on ten city-owned vacant lots in poor neighborhoods throughout the five boroughs of New York City.

The Lower East Side was one of the first battlefields of gentrification in New York with community gardeners pitted against housing advocates as the city tried to capitalize on the new value of the vacant land so close to an expanding NYU and Wall Street. With Architects for Social Responsibility, several local universities organized student projects; exhibitions and publications to develop a discussion on How the Lower East Side could support both new housing and gardens.

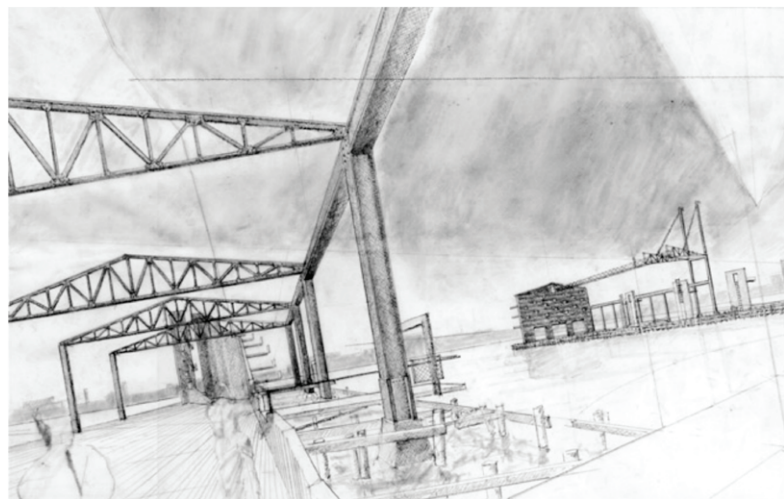
The area of most massive area for recycling in New York is its 520 miles of mostly industrial waterfront. The Municipal Art Society, in 1988, sponsored a competition to re-imagine the Hudson River Waterfront once the massive landfill project of Westway was defeated through appeal to the Clean Water Act. My own proposal advocated stabilizing fragments of industrial warehouses for cultural uses such as an open-air galleries, theaters, fish hatcheries and recreation spaces, that in some way anticipated both the contemporary Hudson River Park and the Highline, but also recognizing that many of these activities were already taking place illegally.

The project *Transparent Cities* is a boxed set of acetate maps each showing an elemental layer of New York from a particular historical period of time. The



Model detail of the proposed new housing typologies that preserve over thirty community gardens and informal light industrial workplaces in Alphabet City, Lower East Side of Manhattan.

Jim Agresta, Dan Cummings, Bill Harley, David Robinson, Santo Barraco, Patrick Lodbel, Lysel Villanueva, Robert Grimaldi, Wanda Munoz, Madeline Ruiz, Mark Duffy, Brian Gillen, Laura Pecora, and Joe Santos, supervised by Brian McGrath.





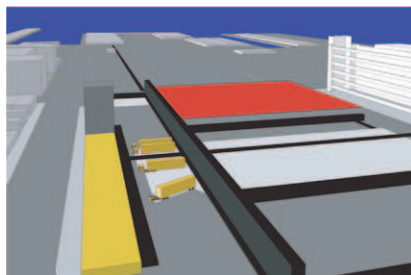
transparent Cities

(SITES Books) Drawings by Brian McGrath

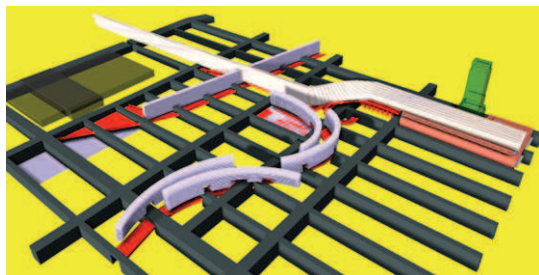
book illustrated the idea of that the new high-tech reoccupation of Manhattan, was in fact the superposition of a new layer of the city. The idea was to represent the city not as a fixed plan, but as a landscape in flux, changing slowly or abruptly according to technological change or social desire. The city of global financial trading was atop the industrial city, which in turn was built within a colonial landscape. The plates can be juxtaposed and superimposed in any order, producing new discoveries with each overlay, much like the experience of the recycling city.

August 1991: Seizing the Means of Production

By 1991, the personal computer was entering the drafting rooms of most architectural offices, and the classrooms of Parsons School of Design and Columbia University's Graduate School of Architecture, Planning and Preservation. GSAPP made the boldest move, introducing the paperless studio, while Parsons embraced a more integrated media approach combining hand and computer tools. At the same time, the New York student body suddenly became globalized, as students appeared in the New York classrooms from around the world, but linked to their friends back home through the Internet.



Small and medium size business distribution center, Sunset Park, Brooklyn,
Image by Brian McGrath, 1995.



Four curved housing slabs replace all the tenement units demolished by the Port Authority in constructing the Lincoln Tunnel, Port Authority Bus Terminal, and approach roads.
Brian McGrath, 2000

The computer was changing not just the trading floors and offices of Manhattan but reterritorializing the entire region, as new, just-in-time digitally monitored distribution centers changed retailing and consumption patterns, much manufacturing was outsourced to China, and vast areas of industrial New York became obsolete and neighborhoods isolated from affordable goods and services more easily provided at the edges of the city region.

Envisioning East New York with the Department of City Planning took on the whole territory between the end of the glacial moraine in southeast Queens, to the flat flood plain draining into Jamaica Bay that constitutes one of the most impoverished areas in New York City. With the Department of City Planning and the Van Allen Institute, I participated in a design research project to incorporate big-box retail into New York neighborhoods and waterfronts, this project for Sunset Park in Brooklyn. The new global distribution logistics constitutes a new ecosystem, and this project refocused the question away from contextualizing a big box, to providing a modern “smart” distribution space for small and medium scale local businesses.

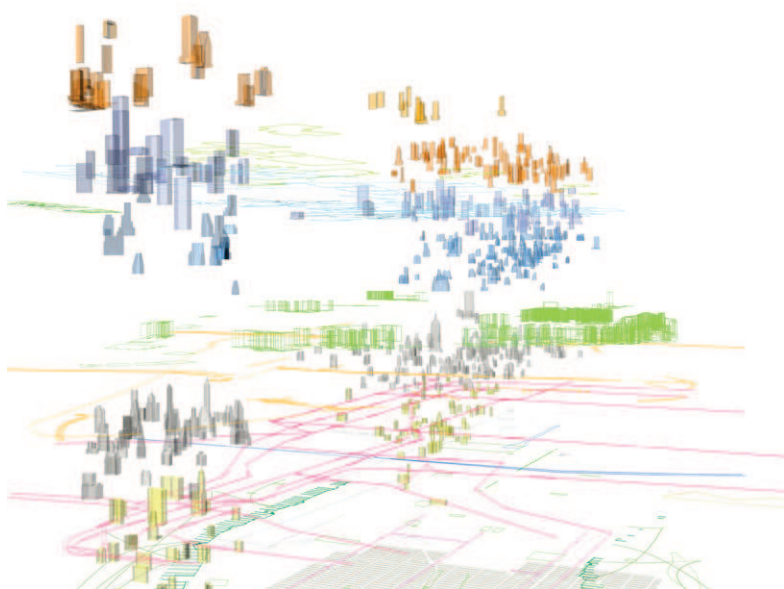
With Design Trust for Public Space, I developed a housing proposal for Hells Kitchen Neighborhood Association that began to apply those new tools in an analytical way. Combing through the annual reports of the Port Authority of New York and New Jersey since its founding, I counted the number of residential units demolished, and used a parametric design to rebuild the same number on Port Authority land on the right of way of the Lincoln Tunnel Approaches. The design also included vertical gardens and water collection devices to help mitigate the vehicular exhausts from the tunnel.

A pivotal project in transforming my design practice to take advantage of

both 3D modeling and the Internet, is *Manhattan Timeformations*, an interactive web site developed for the Skyscraper Museum and The New York State Council on the Arts in 1999. The project helped me to understand more clearly the historical context of the structural changes to the New York, American and global economy that followed in the wake of that weekend in June of 1981. The 3D model is a graph of high-rise office building construction in Lower and Midtown Manhattan between 1890 and 1990. Moving from bottom to top you see the increase in office building speculation in concert with the rise of the stock market in the roaring 1920s before the collapse of the Great Depression in the 30s and World War II. Moving up we see the emergence of Midtown Manhattan as the central business district of a new consumerist American economy. New glass towers housed the corporate headquarters, advertising firms and the TV Broadcast companies between Park and 6th Avenues. The second construction collapse can be seen in the steep decline during the 1970s. The decline is reversed in 1981, just at the moment of the introduction of electronic trading. Finally we see the trajectory of what Tom Wolfe called the Bonfire of Vanities, as the normal slope is reverse due to over speculation in the new technologies and de regulations, with another collapse, due to over speculation, by 1990.

What I discovered in this project was that it is during the economic busts when innovation happens. Air conditioning, glass curtain walls, automatic elevators and fluorescent lighting accompanied the world economy changed following World War II, and the inventing of the mediated consumer economy. And of course, I have already demonstrated the impact of the introduction of the computer into the workplace in the 1980s.

The reception to *Manhattan Timeformations* when it was posted on line was quite remarkable as first nascent digital art organizations, journalists, scientists and only later architects and urbanists responded to it in very different ways. It was through this project that I began to understand the role of digital design as social media; something Beatrice Colomina so clearly expresses when she demonstrates that architecture became modern only when it was mediated. Digital drawing enabled me to continue my interest in an art practice and I had opportunities to participate in exhibitions, residencies and media performances. *Timeformations* became a type of memorial itself after 9/11 as it still had the twin towers of the World Trade Center in its virtual skyline. Reaching a vast unseen audience via a web site alerted my to the global social impact possible in digital design.



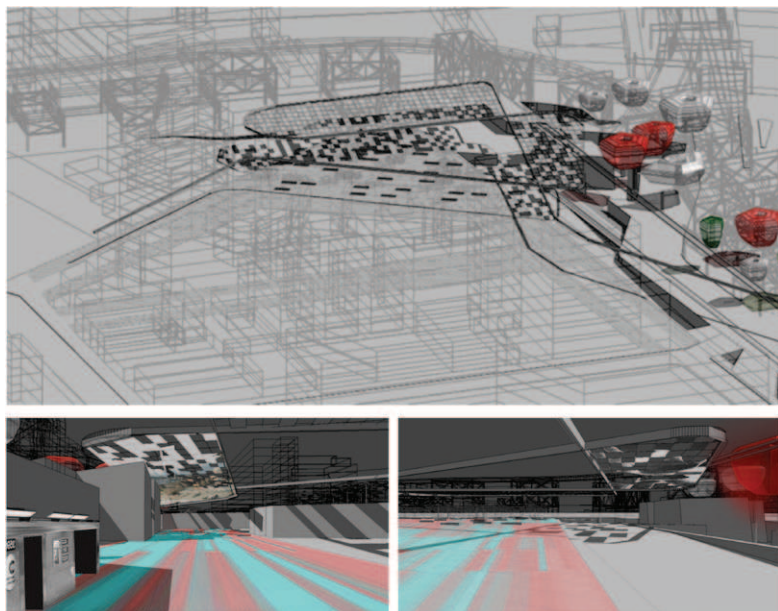
Manhattan Timeformations 3D model that gives time a dimension— one year in time is scaled at one hundred feet on the vertical z-axis of the model.

Model by Brian McGrath, interface by Mark Watkins, 1999.

September 2001: Networked Design Activism

In a design proposal for Queens Plaza in 2001, again for the Department of City Planning and the Van Allen Institute, I was able to explore the possibilities of embedded digital sensing in public urban space. In the wake of the 9/11 terrorist attacks, security and environmental monitoring were combined in the project with news and cultural event displays combining digital sensors with electronic display devices.

Today at Parsons and The New School we are committed to employing strategic transdisciplinary and transnational design thinking as a way forward to social and environmental change. Our students from Architecture, Lighting Design, Transdisciplinary Design and Design and Technology were able to participate in the *Recycling City* Intensive Programme due to the Urbanisms of Inclusion Transatlantic Exchange. This book and Intensive Programme *Recycling City* is emblematic of that mission. This short personal history of design futures in New York outlined a trajectory from the introduction of electronic trading on Wall Street in 1981 to the occupation of Wall Street via digitally fed social activism in 2011. The present passes into embodied memory before



Embedded sensors and interactive media displays at the transit hub of Queens Plaza.

Brian McGrath and José Echevarria, 2001

it becomes historical time. Digital design developed in New York in the three decades between these two events, but has yet to fully engage the implications of neither that first Monday on the trading floor of the New York Stock Exchange, nor in the realization of an equitable and environmentally sustainable urban design future. Although I've focused on a personal perspective of pro-bono design research in New York over the past three decades, the digital globalization of capital has affected all our ivies. In conclusion I would like to point to a few ways I hope we can work together with our students in the future. I have great hope in this generation but growing up with the complex social networking tools as a part of everyday life. The political demonstrations around the world in the last few years demonstrate the power of youth when given access to critical public platform. Perhaps this new power can create the inclusive urban design practices we need to recycle our cities.

Notes

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