

Steel Too Strong: Cultivating Place Through Territorial Legibility

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1.0 INTRODUCTION

1.1 Taking Root

Metallic soils and oil-soaked lots. Toxic materials and sick building syndrome. Glittery dirt. Murky water. Air that you can almost touch. These “made in the USA” urban problems, manufactured in the middle of the 19th century, are now the big projects in cities across America today.

At first sight, things appear to be looking up. The economic boom of the 1990’s coupled with a rising concern of the environment under the Clinton/Gore administration led to new commitments from local, state and federal government agencies. In addition, technical advances have opened the way to aggressive redevelopment of large sites, contaminated land in the inner city, long shunned as an enormous environmental mess and huge financial expense. The reclamation of contaminated sites, known as “brownfields,” is taking root across the Northeast, Midwest and almost everywhere else. [1]

1.2 Brownfield Redevelopment Sites

On an industrial strip in Buffalo, where just over a year ago the remains of steel mill sagged on an oil-soaked-lot, bumble bees now dance among the yellow blossoms of 170,000 tomato plants growing in artificial soil in a computer-controlled greenhouse. In Trenton, a supermarket, office complex and 70 new apartments for the elderly now occupy a jumble of long-dormant factory buildings where workers once wove cables for suspension bridges—and left traces of toxic metals and industrial chemicals. And on a series of decontaminated factory sites and empty lots near the waterfront in Bridgeport, Connecticut, fresh sod was laid last year on the infield of a \$14 million minor-league ball park. [2]

But what are the “real” issues at play in these *projects*? Who is gaining what? Is one metro-metaproblem being exchanged for

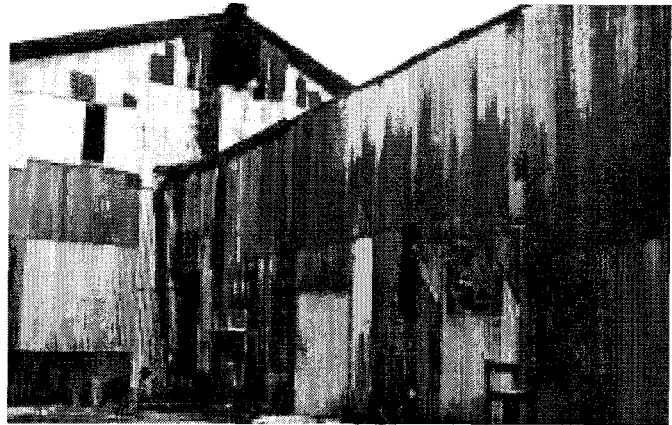


Fig. 1. Atlantic Steel, 1998 [photo by R. Dusseault].

another? What is the architect’s role in this mess? [3] What are the larger questions at work here, in terms of design? Will the problem of vast amounts of fertile space in the city lead to new theories of development?

This paper will address these issues and questions in the context of a presentation of *Atlantic Station*, a new, intown, 130-acre mixed-use brownfield redevelopment that suggest there’s more “in the air” than meets the eye. If urban sprawl was the ultimate consequence of the dominance of a develop(er)-oriented economy that transformed miles of greenfields into selfish unsparing settlements, a new era of isolating tabula rasa new urbanisms are at work today, colonizing our well-worn neighborhoods with expert-driven formulas founded upon supposed universal truths at the expense of local contingencies, indigenous stories, subjects, histories, differences, energies and ecologies that distinguishes and, ultimately, cultivates and gives meaning to one particular place from another.

2.0 STEEL PROJECT

2.1 Bigness

The executive architect of the so-called “smart growth” proposal on the 138-acre Atlantic Steel brownfield site in Atlanta, Georgia, was quoted saying, “This project is big enough to make a real difference.” The question here, of course, centers on the notion of bigness and raises several fundamental and potentially frightening questions. How big is big enough? Is bigness, in the end, the criteria that leads to real difference? And, what kind of real difference is he talking about anyway?

Brownfield sites, often referred to as “terrain vague” in theoretical circles, are the new uncharted terrain for consumption in cities, and it is worth revealing some of the activity that is taking place in the name of environmentalism. The following material describes the proposal and the correspondence between the developer and EPA.

2.2 Atlantic Station Project

The Atlantic Station Redevelopment Project is a mixed-use, to use Calthorpe’s term, “transit-oriented development” on a 138-acre brownfield, an historic steel mill site in midtown Atlanta. [see Fig. 1] Reportedly, this is the largest brownfield redevelopment project in the U.S. Combining 3,600 residential units, 6.25 million square feet of retail and entertainment space, and 1,000 hotel rooms, Jacoby Development is creating what they call a new “urban livable community.”

To provide adequate auto and transit access, the site plan requires construction of a multi-modal (cars, pedestrians, bicycles, transit linkage) bridge across Interstate 75/85 to connect the site to MARTA – Atlanta’s public subway system – and highway ramps to improve highway access. The construction of the bridge is a City of Atlanta zoning requirement for the project in the spirit of inter-neighborhood connectivity and mass transit access and usage.

Unfortunately, since the year 2000, Atlanta has been in non-compliance with federal air quality conformity requirements because it failed to demonstrate that its transportation activities will not exacerbate existing air quality problems. In a conformity lapse under the Clean Air Act, the bridge and ramps would be prohibited under standard interpretation of EPA regulations. However, projects that are approved as “transportation control measures” (TCMs) in a states air quality plan can proceed – even during a conformity lapse.

2.3 Developer’s Arguments

Jacoby Development regards Atlantic Steel to be a TCM, and proposes that EPA exercise its regulatory flexibility under Project XL and allow the project to go forward, arguing that the

redevelopment would provide numerous environmental benefits, including tailpipe reductions. The developer’s arguments are four-fold:

- 1) Atlanta is one of the fastest growing regions in the US.
- 2) Growth in Atlanta has historically located in outlying suburbs – converting farm and forest land to housing and office parks. In fact, Atlanta has the longest average commute than any other city in the country. This project would centralize growth intown, where jobs, housing and entertainment destinations are close together, and walking, biking and transit are viable transportation options. The design is tailored to keep trips short and create multiple transportation options. The development is projected to reduce travel by more than 50 million miles per year with significant reductions in associated tailpipe emissions.
- 3) Additional environmental benefits include clean-up and redevelopment of an underused former industrial site, reductions in polluted stormwater run-off, and decreased development of open space at the metropolitan edge.
- 4) Development of Atlantic Steel would provide a tax base for the city, amenities for the neighborhood, and housing opportunities for buyers and renters, and economic opportunity for city residents and private industry. According to the developer, Atlantic Steel’s multiple benefits are typical of Smart Growth.

If the project does not occur, greenfield sites would likely absorb much of the growth Atlantic Steel intends to serve. Continued industrial use of the site would likely contribute adversely to the overall environmental impact of the area. Should the bridge not be constructed, it is likely that the property would be developed as light industrial warehouse space with a “Big Box” retail tenant. If this project does not go forward, little if any remediation is expected to take place because sufficient resources do not exist to undertake the clean-up.

2.4 Local Smart Growth

Jacoby Development hired the town-planning firm, Duany Plater-Zyberk, to provide pedestrian friendly design suggestions after the initial site design by TVS raised objections from local community groups and citizens. These include: 1) construction of walkways and open areas to connect interior parts of the development; 2) extra-wide sidewalks; 3) realignment of streets to create direct connectivity between neighborhoods; 4) inclusion of a lake/park in the center of the development; 5) the distance from any edge of the development to transit services (e.g. shuttle) will be a reasonable walking distance: under 1100 feet, or walk of less than 5 minutes; 6) installation of sidewalk furniture, lighting and landscaping to encourage pedestrian use of the site.

According to the developer, the site design incorporates many “smart growth” site design principles. Two of them are described. 1) Features that promote pedestrian and transit access rather than exclusive reliance on the car. 2) Avoid creating areas that are abandoned and unsafe in the evening. hotels and offices will be located within walking distance of shops and restaurants, shops that serve local needs will be located within walking distance of both the Atlantic Steel site and the adjacent neighborhoods, and wide sidewalks will encourage walking and retail use.

In the name of “creativity and flexibility,” Jacoby and EPA intend to determine the overall superior environmental benefits that will result from the project. According to the developer, the project could serve as a model of infill land development – an alternative to what is often referred to as “sprawl.” As distinguished from sprawl, this “urban livable community” would result in moderate to high concentrations of residential and employment trip ends, a vertical and horizontal integration of land uses (residential above retail), and a highly interconnected vehicular, pedestrian and bicycle circulation system both within the development and to adjacent areas of midtown.

So things appear to be looking up, or do they? The larger argument here is that we need to think carefully about the implications of such BIG projects and the kinds of brownfield development that are being planned and built across the US today. For two reasons. First, there are large sums of federal money and political power structures available today for these projects – to develop property, which too often today means to order the land, build buildings, and lease space. The environmental cause and protest has opened monies to cities across the country to infill their in-town property. Funds are available and developers with architects, planners, engineers, and politicians are knocking on the door. One might ask, “Is building more the problem than the solution?” In any case, one needs to think carefully about the eco-social implications of such big development, due to the kind of massive rationalization, organization, and transformation at work.

3.0 CULTIVATING PLACE THROUGH TERRITORIAL LEGIBILITY

3.1 Terrain Vague

In his article “Terrain Vague,” the result of a conference presentation titled ANYPLACE, Ignasi de Sola-Morales describes the role of the architect in the situation of the terrain vague, the post-industrial polluted empty urban lot or brownfield as inevitably problematic – and one that reaches far beyond the concerns of toxicity. [4]

For Sola-Morales, the architect is a colonizer and “form” is his instrument. Master plans, calculated axes, grid-iron subdivi-

sions, boxed trees at 30’ feet on center, neo-traditional styles, and other popular parochial perspectives on architecture currently perpetuated in urban redevelopment are often detached from the very *forces* that induce life in our cities. He argues, “Architecture’s destiny has always been colonization, the imposing of limits, order and form, the introduction into strange space of the elements of identity necessary to make it recognizable, identical, universal.” “Architecture,” he follows, “is an instrument of organization, rationalization, and of productive efficiency, capable of transforming the uncivilized into the cultivated, the fallow into the productive, the void into the built.”

Sola-Morales argues that when architecture and urban design project their desire onto a vacant space, too often it seems capable of doing anything but introducing violent transformations to site, introducing the foreign into the familiar, changing estrangement into citizenship, and striving at all costs to dissolve the “uncontaminated magic” of the site into a realism of efficacy. This is precisely what is happening at Atlantic Station, and unfortunately, at too many other in-town big brownfield redevelopment projects across the U.S.

3.2 Forces not Forms

Rubio’s concern of the weight and significance of “form on place” echoes that of French philosopher Gilles Deleuze. For Deleuze, architecture is forever on the side of forms, of the distant, the optical and the figurative. This is indeed part of the larger problematic. Deleuze reminds us that, “individuals in the city look for *forces* not forms, for the *incorporated* instead of the distant, for the *haptic* instead of the optic, the rhizomatic instead of the figurative, the real versus the representative.” Yet, one is left asking, “where is the real, the bodily, the habitus in all of that planning at Atlantic Station? To what degree have the site energies been excavated and studied, harnessed and harvested? In what ways has the territory been rejuvenated ecologically and in so doing become legible, experiential, palpable?”

3.3 Fitting Placement

Philosopher and environmental advocate Robert Mugerauer addresses place theory in his essay, “Fitting Placement.” [5] In describing the relation between nature and artifice, Mugerauer says it is a question of placement – placement in the landscape. He offers a strategy of fitting placement, derived from natural forms and organisms, which he describes as operations of camouflage. The idea of camouflage is literally to “fit in.” This assumes a certain position in relation to the rest of the world and one’s surroundings. This strategy of fitting in suggests an attitude of restraint, of not pushing forward ourselves or the things we make [see Fig. 2]. Camouflage both aids to capture and escape, and involves the capacity to both attract and repel. This idea of fitting placement fosters a co-existence between

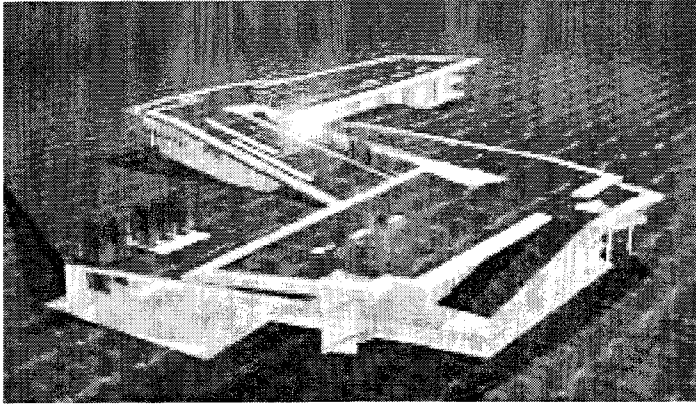


Fig. 2. *Ecological Grade School*. Kittiphun Sereeviriyakul.

ourselves and nature, with camouflage as a viable and compelling strategy of integration.

4.0 SITE ENERGIES

4.1 Interdisciplinary Projects

The emergence of recent writings on the city, from urbanists, artists, environmentalists alike, have begun to change the way we see things, and consequently, the way we think about making and inhabiting our cities. These writings are drawn from the concerns and projects of the minimalist and earthwork artists of the 1960's – who collectively inspired and motivated collective concern for the environment.

For example, in *Time Landscapes*, Alan Sonfist sought to create urban parks in New York, Dallas and Paris that map or restore areas to the landscape that existed in the past. In an eight thousand-foot square foot plot in downtown Manhattan, Sonfist studied biological literature that eventually resulted in the New York City Parks Department expanding their list of approved trees to include species he identified that once were indigenous to the region.

This is also true of *Flow City* by Mierle Ukeles who arranged an installation within the Department of Sanitation Marine Transfer Station in New York, where trucks dump garbage for sorting. Her installation invites viewers to consider the recycling process as transformation. In *Fragile Ecologies*, she notes that recycling plants will be the giant clocks and thermometers of our age that tell the time and the health of the air, the earth and the water.”

Thirty years later, we find a growing but different body of work at the intersection of the city, art and ecology. Architects working collaboratively in multi-disciplinary teams are designing scenarios for the near future in which artists, architects, urbanists and ecologists re-appropriate abandoned urban sites, transform parking lots into territorial indexes, illuminate the “uncontaminated magic” of site, turn brownfields into vital site

registers of energy flows and in the process spawn new, vibrant cores by conferring the urbanity of art, culture, and ecological design upon forgotten terrain vague's. Two projects that contribute to this movement are worth reviewing. While not directly related to the project of Atlantic Station, they do implicitly shed light on what is missing there.

4.2 Water Works

First, for studio NOX, the space between ecology and culture is not only becoming ever more vague but the distinction between direct physical action and remote control is similarly fading. The multi-disciplinary firm, who works with various media simultaneously, producing videos, essays, books, magazines, websites, and multi-media installations, is fascinated by these contemporary multi-disciplinary developments.

NOX refers to the H2O eXPO pavilion as a “rolled up urban square.” [see Fig. 3] The project is a permanent structure and exhibition facility erected on Neetjle Jans, an artificial island made to aid construction of a flood barrier. NOX designed the pavilion dedicated to “freshwater.” The form was generated on a computer using animation software and as such is a typical example of ‘liquid architecture.’

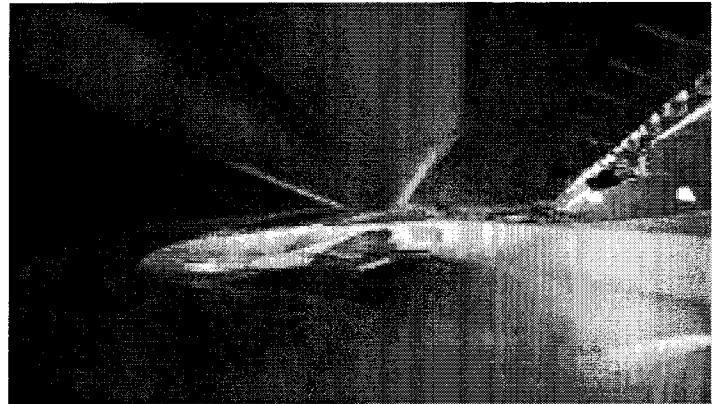


Fig. 3. *H2O Pavilion*. Studio NOX, Holland.

Unlike such designs though by other architects, it is not simply the form of the building that is fluid. Inside this urban space, the visitor is confronted with the liquidity of water in numerous ways: the water flows and boils, there is mist and condensation, and some parts of the walls are so cold that a layer of ice builds up. The interior also contains sound and light effects, including projections of the molecular structure of water and of wave patterns. The public activates these wave patterns by passing light-sensitive cells, touching sensors or operating handles. NOX's pavilion with its curvaceous silver exterior and media-filled interior is an event space based on the ecological theme of water, through which visitors must find their own way.

4.3 Force Forms

Second, for Francois Roche, a young French architect, “site energy” strategies gives rise to endless transformations of architecture in which the standard object/subject, object/territory polarities are abolished. Landscape artist and educator James Corner is equally troubled by a landscape that divides inside and out, liesure from labor. In writing about cities, Corner encourages one to look at the larger landscape as it is, with all its splendor and obscenity. An example of such is the [Un]Plug Building, a commission from the Research and Development division of the French national electricity supplier, EDF, for a block of 352 offices and 22 conference rooms [see Fig. 4]. Each floor needed to have 16 offices per floor and 23 floors totaling 9,839 square meters. The project operates as a kind of energy network along the lines of what the German automobile industry is currently doing with its concept cars that “react” on contact with renewable energies. Hairy with solar sensors and swollen with photovoltaic cells, the curtain wall façade, far from the banal, taught glass skins of the past, is an all energy-producing membrane that responds to the *forces* at work. [6] Thus the architecture simultaneously consumes and generates energy into the network. Moreover, the building sets out to introduce work-related domestic-style practices. In the world of de-localized work spawned by new technologies, two systems have intersected: one involves working at home and the other is sleeping at the office.

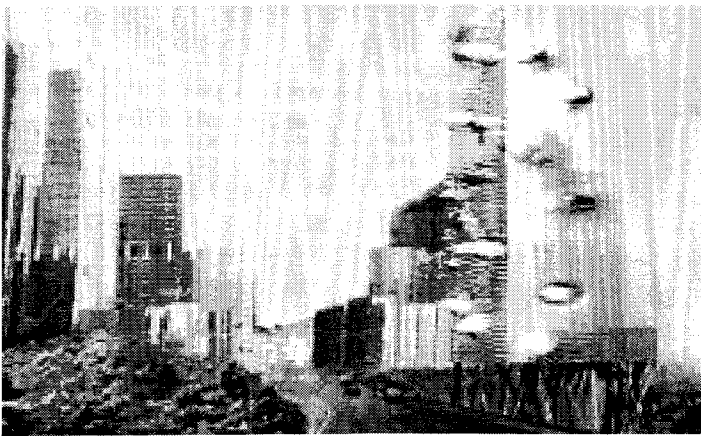


Fig. 4. [Un]Plug Project. Francois Roche.

The [Un]Plug Project is based on the transformation of an hermetically-sealed tall office building via contact with renewable energy, using vacuum-tube solar sensors and single-crystal photovoltaic panels. Thus, the healthy façade becomes “reactive” to the outside energy input. [7] Several processes are involved: 1) incorporation of excrescences with resultant swelling of the buildings skin. Programmatically these contain the conference rooms and include 400 square meters of photovoltaic panels for electricity supply; 2) creation of a sensory wall allowing for implantation of 4,500 linear meters of tubular solar sensors, for heating; 3) integration of plumbing

and electricity systems into the structure of the curtain wall allowing for exchanges within the building; 4) disconnecting the building from the ground, utilizing the plug or unplugged mode in relation to the urban electrical network.

These and other similar artistic projects reminds us that “critical attention needs to be paid to the energies and phenomena which surrounds us, where the categories of built and unbuilt, inside and outside begin to merge into new heterogeneous experiences.” [8] We need to consider what’s already there and look at those things as energies and “assets.” The notion of seeing what’s there is so basic but so often overlooked by urban designers and architects. Working from the table or monitor, with maps, grids and aerial photos, the specialist distances him/herself from the city. Experience is replaced by reading. Traversing the boundaries of contemporary urban theory, environmental philosophy, ecological design, landscape and art writings, new and fresh work in this area causes one to reflect upon the potentialities, value and vital need in forming thriving, dynamic relationships between city, art and ecology.

5.0 CONCLUSION

5.1 Steel Strong

The EPA found that the Atlantic Station Redevelopment Project will produce significantly less air pollution than an equivalent quantity of development at other sites in the region, and therefore can be considered a “Transportation Control Measure.” In 2001, EPA and Jacoby Development signed a Final Project XL Agreement that removed the barriers to begin construction of the Atlantic Station, a “smart growth project” in Midtown Atlanta.

At the time of writing this paper, a double-deck parking platform the size of six football fields holding over 7,000 cars stands beneath scaffolding of the first high-rise building with several more on the way that collectively will exceed 6 million square feet of office space and include 600 luxury convention hotel rooms, 350 boutique hotel rooms, 5,000 planned housing units, a picturesque lake and park, and 1.2 million square feet of retail... all in the name of creating a “live, work and play” environment [see Fig. 5].

On June 17, 2003, a federal appeals court has found that the EPA should not have extended to 2004 a deadline to clean-up Atlanta’s ozone pollution without reclassifying the city’s pollution rating as “severe.” The US Court of Appeals for the 11th Circuit District said the EPA policy on granting extensions exceeded the agency’s authority.

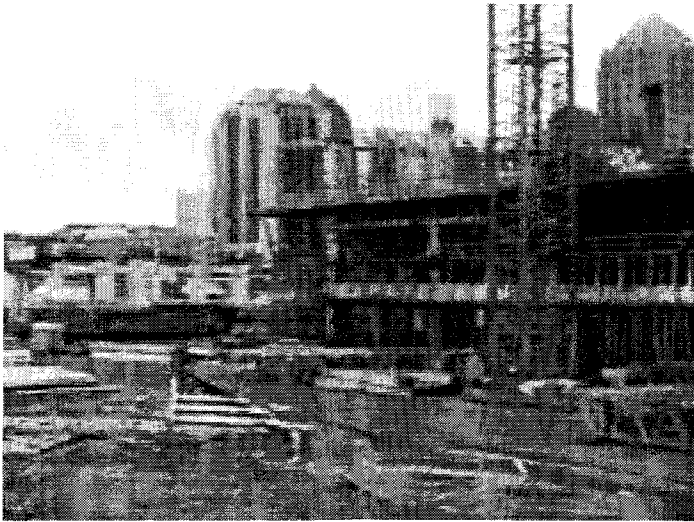


Fig. 5. Construction has begun on the first office tower at Atlantic Station, a 400,000 square-foot building to be completed in April 2004.

5.2 Territorial Legibility

The contemporary city is not a ground, and the brownfield is not merely a problem of toxicity or urban infill. The American urban brownfield under re-construction today cannot be produced by the force of the Vitruvian firmity. The issue is not whether building is the problem or the solution. Sola-Morales concludes his essay by asking the central question, "How can

architecture operate in the terrain vague without becoming an aggressive instrument of power, rationalization and abstract reason?" In other words, "How can the American urban brownfield be creatively conceived and designed today to respond to the multiple energies and flows on site, offering territorial legibility and experience while conferring the urbanity of city, art, and ecology?"

REFERENCES

- [1] New York City has identified more than 6,500 brownfield tracks, most of them in old industrial areas of Brooklyn, the Bronx and Queens.
- [2] Andrew Revkin, "Cities are Reviving Toxic Industrial Brownfields," *New York Times*, March 3, 1998.
- [3] Within the discourse of architecture, ecology arouses a historic paradox, since every act of building is inherently anti-ecological to the degree that it induces a displacement of "natural" relationships. Richard Ingersoll, "Second Nature," in *Reconstructing Architecture* (Tom Dutton and Lian Hurst Mann), 1996.
- [4] See "Terrain Vague" by Ignasi de Sola-Morales, *ANYplace* (New York: Rizzoli Press, 1996), pp. 118-123.
- [5] Robert Muggerauer, "Fitting Placement," *Interpretations on Behalf of Place*, pp. 132-150. (New York: SUNY Press, 1994).
- [6] See Ralph Knowles, *Energy and Form. Adaptive Behavior in Nature*, pp. 1-16, and Part Three: *The Shape and Structure of Buildings*, pp. 135-172. MIT Press, 1974.
- [7] The increasingly tighter, hermetically sealed office building has led to acute health problems, including asthma and allergies, bronchitis and other respiratory diseases (M. Addington).
- [8] Mary Miss, "On a Redefinition of Public Sculpture," *Harvard Architectural Review*, (Cambridge: Harvard Press), 1990, p. 53.