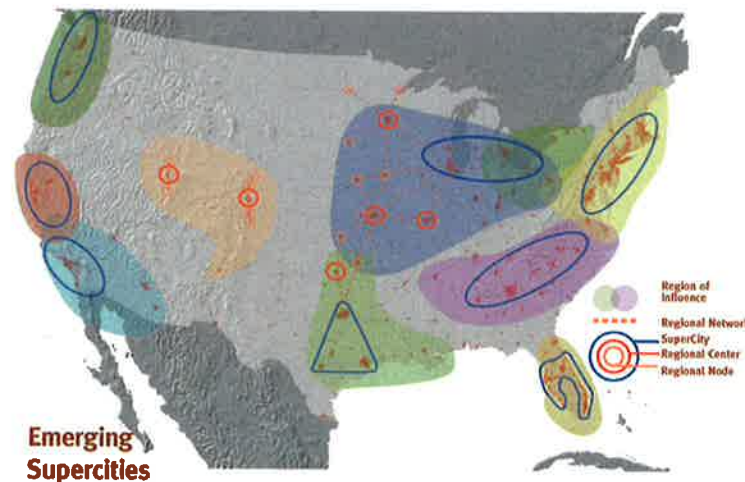


## THE SUPERCONTEXT FOR URBAN DESIGN: IMPLICATIONS AND REPRESENTATIONS

ROBERT LANE



### Emerging Supercities

*Emerging Supercities, 2006.  
Regional Plan Association (RPA)*

This essay explores a fundamental conundrum at the intersection of urban design and regional planning. How should urban design practice respond to the new large-scale challenges presented by the mega-region at a time when the scope of most urban design interventions seems confined to the physical scale of infill sites? An expansive re-conception of site and context – one that extends the idea of context to include social, political and environmental aspects of the mega-region, called the “supercontext” by Lane, attempts to restore the link between local interventions and region-shaping forces. Urban design representation has an important role to play in describing the nexus between these disparate scales. [EDS]

**SCALING THE CONTEXT:** Any individual urban design intervention can be located along a continuum of differently scaled contexts, from the local to the global. The very particular location of a single physical intervention in the built or

natural environment lies at one end of the spectrum. At the other end sits the completely unbounded virtual context created by global networks of information and economy.

Between these two poles, resides the “supercontext” – created at the scale of what have come to be called “megalopolitan regions” and “supercities”. Megalopolitan regions, or mega-regions, consist of several integrated metropolitan areas and their hinterlands. With interconnected economies, markets, transportation systems, and resource support regions, they function as the new unit of planning, infrastructure investment, and global competition. This has created a new dynamic for urban design: vast distances measured in hundreds of miles separate places, and yet physical connections remain meaningful at a scale established by the most efficient distances for high speed rail. Jurisdictional boundaries retain incredible importance, but they are discounted by regional-scale natural systems and mega-regional scale economic and political relationships.

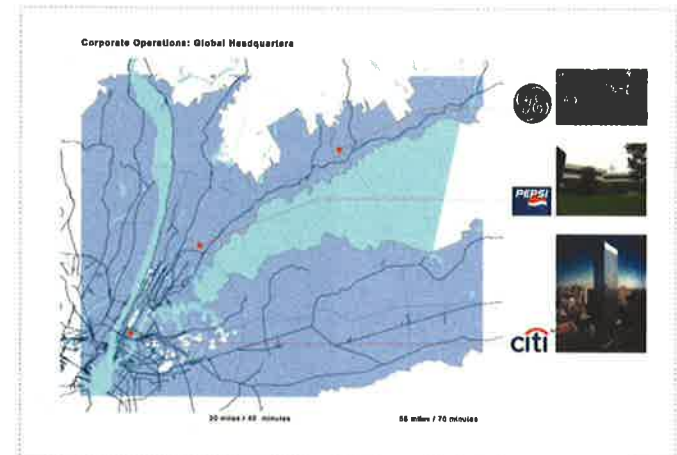
The purpose behind the idea of “supercontext” is not simply to capture a new geographic scale for thinking about green and grey infrastructure. Supercities and mega-regions are primarily physical constructs, usually described in terms of land area and population. The “supercontext” concept means to extend, out to the physical scale of the mega-region, more expansive and conditional ideas about context and site.

In conventional practice, urban designers use “context” to refer to the physical attributes of the area immediately surrounding their intervention. However, context in a broader sense implicates other considerations, from economics to politics to social structures. This, in turn, suggests a broader conception of “site” – expanded beyond the boundaries of a particular physical intervention to the scale of the city and even the region (see *Site Matters* eds. Carol Burns and Andrea Kahn, Routledge, 2005). When this more expansive conception of context extends even farther to encompass the emerging megalopolitan regions, it provides a basis for the idea of a supercontext – the bundle of large-scale physical, economic, natural and jurisdictional factors that may in some way influence design interventions even at the scale of a single building or public space.

Just as the idea of context embeds economic, social, political, and environmental considerations, supercontext captures those considerations at a new and much larger geographic scale. Similarly, if embedded in the idea of “site” are the overlapping boundaries for these same economic, social, political and environmental issues, then supercontext suggests that we will have to find new ways of representing the boundaries between these issues at the scale of the mega-region. For example, an individual urban design intervention may be subject to real estate pressures created by the market dynamics between two cities that at one time were thought of as completely autonomous. The disconnection between the local regulatory framework and the governance protocols beyond the local jurisdictions presents a similar phenomenon associated with the supercontext.

**INCREMENTAL URBANISM: INFILL AND REFILL:** One of the many compelling dynamics activated within the mega-region is the potential synergy between “hot cities” (cities where growth starts to push up against spatial and infrastructure constraints) and “cold cities” (cities that while growing only slowly, have capacity for more expansion). These hot-cold city pairs – New York and Philadelphia, for example, or Boston and New Haven – lie well within range of a true high-speed rail connection. Their dynamic is one whereby the housing and workforce needs of New York and Boston are met by residents of Philadelphia and New Haven, cities with capacity for affordable housing.

*Promiscuous Zoning, Queens, 2003. Atiq Ahmed, Vivian Hernandez, Justin Moore, Travis Smith, Van Hsin-Hung Tsao*



#### **HOT - COLD CITIES**

Corporate conglomerates, like Citibank, respond to a similar hot-market cold-market situation when they distribute their operations across the New York metropolitan region to take advantage of easy transport, high-speed communication and distributed labor pools. [EBS]

Most new capacity will be achieved by dispersed infill redevelopment. By some estimates, ten percent of the land within the Northeast mega-region centers lies vacant – some 2000 square miles capable of accommodating (at an average density of six dwelling units per acre) some seven million households, or 77% of the projected population growth to 2050. Perhaps that explains why urban design practice in the Northeast supercontext has produced few district-scale urban design plans: two New York City projects, Battery Park City and Queens West (very much incomplete), and the Big Dig, in Boston, are among the few examples. Rather, almost all of the urban design interventions take the form of infill scale projects: at most, the redevelopment of several blocks in an established street and block fabric, and more often, single sites (albeit, occasionally large ones) for a single multi-use building (housing over office over retail being the standard formula).



This means that a regional-scale problem – the overall desegregation of housing and workplace – will be solved by a multitude of small interventions, each informed not by some new conception of city or urban form, but by very constraining local physical and regulatory contexts. However, if the ideas of context and site are more broadly conceived – as reaching beyond a purely physical context or the legal boundaries of a specific site – then the architecture at any individual location could presumably impart some larger concept of urban space. The question then stands: how will an individual urban design intervention reflect an idea about site or context that extends not only to the rest of the city, or even the metropolis, but to the geographic scale of the megalopolitan region?

*Northeast Mega Region, 2005. Urbanized Area, 2000, Urbanized Area, 2015 (projected), Urbanized Area, 2050 (projected), RPA*

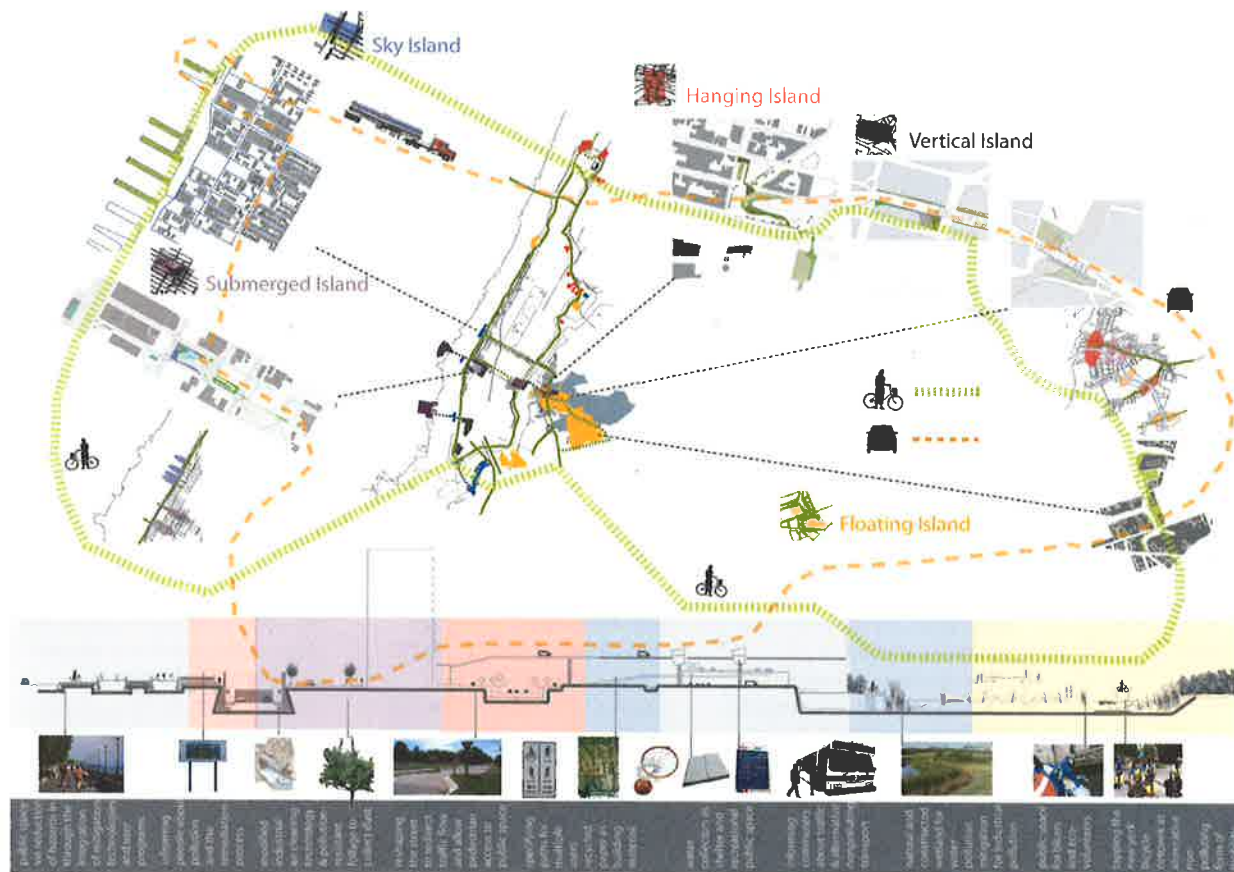
*Public Horizons (Public Spaces, New York City Region, 2005), Urban Constellation, Public Archipelago Diagram, Francisco De La Cruz; Ching-Sheng Lin, Raymond Siu, Di-Hsuan Sing, Hai-Chien Wong, Song-Min You*

**RELATIONAL SITES**

In any given location, urban and regional systems interact in many ways – physical and non-physical, immediate and long-term, etc. The Constellation Studio focuses on these dynamic and spatial relations to introduce an operational understanding of urban sites. Through this bundling method, the Studio offers a third way between incremental urbanism and grand schemes. The “Public Archipelago” project assembles

local operations to construct a larger, more extensive urban design proposal. This approach considers the repercussions of local actions across larger fields, forcing the urban designer to conceptualize urban sites as areas of dynamic effect and influence (to “unbound” site) and to consider the unique linkages an urban site has with other locations (to define “site-specificity” in relational terms). [EDS]

**Public Archipelago**



**LOCAL VERSUS REGIONAL TENSIONS:** To realize the potential of the northeast mega-region requires region-scale interventions. This includes contiguous greensward initiatives to protect entire natural systems which render jurisdictional boundaries meaningless – resources such as the New Jersey-New York-Connecticut Highlands (see the H<sub>2</sub>O discussion by Tony Hiss in this volume) or the Long Island Sound – and infrastructure initiatives such as a commitment to a true high-speed rail network.

However, each of these region-shaping initiatives depends on the integration of local land use policies and broader urban design strategies: a commitment, for example, to direct growth from open space resource areas to transit accessible urbanized areas. At one level, urban design continues to be shaped by local land use laws, development practices and market forces. These likely correspond to jurisdictional boundaries. At another level urban design must conform to the larger scale forces at work in the megalopolitan region. The northeast mega-region comprises some fourteen states, 405 counties and several thousand municipalities. Local land use practice rarely supports – and more often undermines – larger objectives. Most local zoning ordinances still depend on Euclidean ideas about the separation of uses, a post-liberal conception of the ideal city rationalized into a set of single-purpose districts described by Leonardo Benevolo (*The Origins of Modern Town Planning*, trans. Judith Landry, MIT Press, 1967). This discourages the smaller scale of true infill development in complex urban and suburban environments.



*Triborough Bridge Landing, Astoria Queens, 1999. Collage Perspective, Victoria Ackerman*

#### **FINDING PLACE IN THE MEGA-REGION**

Urban systems sustain the contemporary city and provide structuring principles for local places. At the same time, these visible and invisible infrastructures tie specific locales to more distant and expansive networks of influence

and effect. For example, an urban location close to public transit shares in a web of possibilities supported by the transit system as a whole. This “Triborough Bridge Landing” proposal explores the potential for new public spaces at the intersection of differently scaled conditions. The architecture of

the actual landing structure, the local consequence of a network of regional transportation infrastructure, delivers specific programming opportunities to the Astoria neighborhood through an identifiable corridor of space available for public re-appropriation. [EDS]

*New Jersey, Existing  
Conditions, 2004. RPA*



*New Jersey, Projected Build-  
out Based on Existing Zoning,  
2004. RPA*



*New Jersey, Projected Build-  
out Based on Alternative  
Zoning, 2004. RPA*



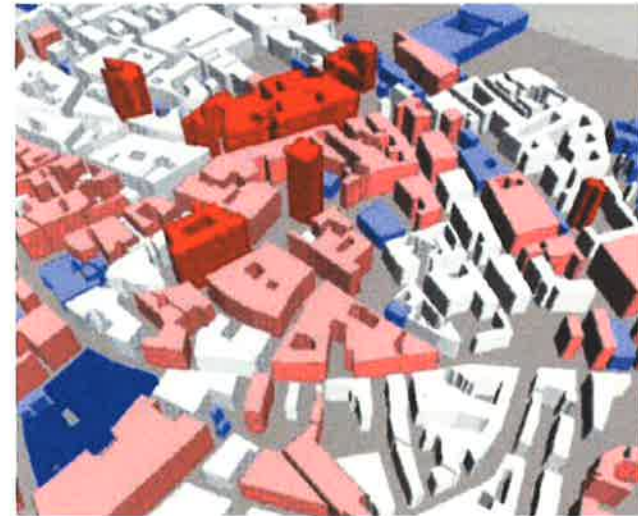
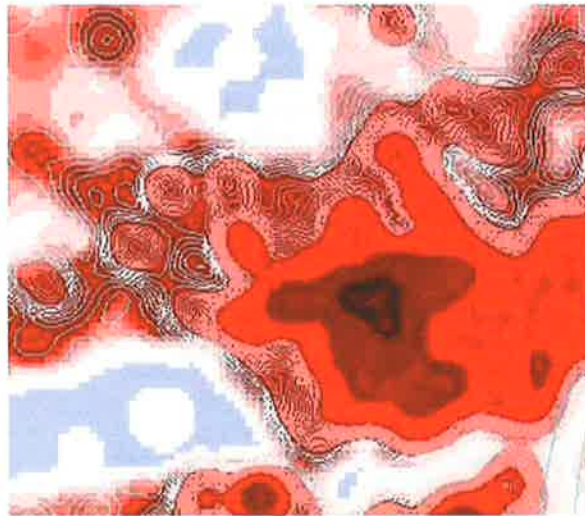
Permissive zoning along commercial corridors, for example, assures the spread of auto-dependent strip retail environments which cannibalize, and then leapfrog past, the soon-to-be abandoned malls and shopping centers built during the previous business cycle. Retrofitting and remaking these suburban landscapes has become a minor specialty of urban design. In this setting, urban design hopes, at best, to achieve what Peter Rowe identified as a “middle landscape,” striving for some level of coherence without denying the imperatives of the suburban developer’s “kit of parts.” Just as “infill” has become the principal operation for city centers, “retrofitting” and “refilling” have become the norm of suburban development. In both cases, it seems that urban design for mature regions must focus on accommodation and compromise to develop new concepts of public space rather than relying on large-scale interventions to impose new urban spaces on the built landscape.

**REPRESENTING INCREMENTAL URBANISM:** How should techniques used to represent urban design interventions respond to the conditions of a mature landscape where design work consists, in large measure, of infilling and retrofitting existing environments? First, urban design representation must take on the challenge of showing incremental change over time. This not only mirrors the way urban and suburban environments actually change in a maturing mega-region, but it also acknowledges a political necessity. Residents of the many local jurisdictions, who must become partners in the larger-scale growth management policies of the mega-region, often will not be receptive to, or accepting of, wholesale change. Urban designers can no longer show single static representations of a final “grand vision” regardless of how compelling their imagery. Rather, urban designers must use two strategies: the first, make visible alternative futures; the second, reveal the phased transformation of places (often through photo-real simulations). Designers need to show, as a kind of straw man, the “business as usual” consequences of growth under existing land-use and design practices in order to convincingly present alternative design that attempts to capture a variety of appealing place-making

objectives. By acknowledging the inevitability of change, this paradigm better positions local municipalities to make more informed choices about growth. The aim here is to present transformation in digestible and understandable increments, as an alternative to sweeping wholesale change.

Technology now offers new capabilities, in large measure the result of a convergence of softwares typically employed by architects with the so-called Graphic Information Systems (GIS) used by geographers and landscape architects. The GIS software enables data sets, formerly presented as numerical tables, to acquire graphic life, often in compelling three-dimensional images at once spatially and dimensionally accurate. Land use – formerly a two-dimensional graphic – can now be described in architectural terms, with different uses assigned to accurately scaled buildings in perspective or axonometric views. This enables the intersection of the world of the planner/policy maker with the world of the urban designer.

Certainly it is exciting to bring together urban form and conventional planning information (zoning, land use). Even more exciting is the ability to assemble urban form and new information from other disciplines, information that previously was not assigned physical or spatial attributes. For example, data about socio-economic status, or health, can now be given spatial, urban design representation.



*The Index of Diversity (left) Mapped onto 3D Building Blocks in Central London (right), 2003. Michael Batty, University of London, Centre for Advanced Spatial Analysis*

**MULTI-SCALAR NETWORKS**

This Urban Constellation diagram begins to identify some of the multifaceted relations between settlement patterns, social agents, infrastructure systems and social services at play across the New York region. Each relationship creates particular networks linking some areas and uses but not others. The diagram suggests that the complexity of the supercontext arises not as a function of its extensive physical geography, but from the variety of its multi-scalar network relations. [E05]

*Layers of Discontinuity, Greenpoint, Brooklyn,  
2003. Exploded Axonometric, Flora Hsiang  
Chen, Pei-Lan Liu, Joe Plouffe, Tim Reed,  
Gurpreet Shah*



This has significant implications for the scale relationships between the supercontext of the mega-region and local interventions. The housing-employment synergies between “hot” and “cold” cities can now be depicted in spatial terms. It is even possible to represent changing use patterns for urban spaces, created as a result of cultural pressures from the large new immigrant populations and spatial pressures exacerbated by the ability of labor to travel huge distances between places of work and habitation. Time, one of the strategic new dimensions of urban design representation, is manifest in several ways, including a new interest in representing changes of activity patterns using spatial architectural models. This can be contrasted with a static representation of a space at a single point in time and at a single time of day.

The changes occurring in terms of urban design representation – the apparent political necessity of presenting alternative futures from which the public can choose; the technological capability of depicting data in three-dimensional and architectural terms; the expanded concepts of representation that relate to activities at different times of the day – are all manifestations of a larger reality: the conflation of representation and process. At base, representation is less about an objective description of a particular physical reality than a subjective interpretation that advances a point of view. This charged relationship between representation and process is at once reciprocal and iterative; drawings and maps change the discussion which, in turn, influences the next round of presentation strategies.

This has several important implications when taking into account the expanded scale and set of concerns associated with the supercontext. With no way to disentangle the relationship between urban design representations and the people who create them, who are the constituents for the maps, drawings and models used to describe, say, the northeast mega-region? The governance issues that have created the need for multi-state, multi-municipal cooperation around land use, environmental, and transportation decisions will be reinscribed in the maps and drawings produced to inform those decisions. This will remain the case until we expand our representations beyond the narrow issue of objective uniform standards for data collection to include the representation of boundaries between different kinds of issues that necessarily overlap. In the most optimistic scenario, the struggle to create a new generation of drawings to represent the supercontext of the mega-region will offer the armature for a new and constructive dialogue about political and economic cooperation.

*Synergetic Urbanism, 2007.  
Intensity Diagrams: Alejandro Guevara, Ulf  
Mazur, René Romero, Kleber Salas*

#### REPRESENTING INTENSITY

The "Synergetic Urbanism" project sought to identify areas for urban design intervention by creating "intensity diagrams", a new mode of representation that condense urban operations (fixed programs, informal practices and the clutter of accidents); scales (metropolitan, regional and global); and timeframes (daily, seasonal, cyclical). While

the ultimate outcome of such graphic experiments remains uncertain, they do open up the possibility that urban designers might one day develop an intuitive response to different registers of information, just as repeated use of a scale ruler builds an intuitive understanding on spatial and proportional relations. [EDS]

