

## Collectivity

At the beginning of 2017, the development of a cohesive framework for a pluralistic and divided society seems to be an increasingly urgent social and political question. Considering the contemporary city, one encounters a highly complex and unequal assemblage influenced not by overall coordination or integrated agency but rather overlapping and sometimes contradictory market forces, speculation, and commercial pressures. In this milieu, the clearly defined realms of public and private space are increasingly dissolved, blurred, or fragmented. This raises the fundamental question, how do we achieve any form of collectivity, and to what extent is coherence required?

The studio will entail a disciplinary investigation into theories of collectivity, from Fumihiko Maki's Investigations in Collective Form (compositional form, megastructure, group form)<sup>1</sup>, to O.M. Unger's Cities within the City<sup>2,3</sup> and its model of the Green Archipelago of heterogeneous fragments. In doing so, the ambition is to engage questions such as, how does architecture resolve (or reveal) its own internal differences? What are the compound relationships between architecture and urbanism? How does architecture engage with, rather than retreat from, the broader environments of politics, the economy, and the city?

1  
Maki, Fumihiko. Investigations in Collective Form. St. Louis: The School of Architecture, Washington University, June 1964.

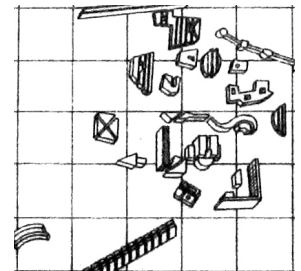
2  
Ungers, O.M., Rem Koolhaas, Peter Riemann, Hans Kollhoff, and Artur Ovaska. Cities within the City. Sommer Akademie of Berlin by Cornell University. 1978.

3  
Schrijver, Lara. "The Archipelago City: Piecing together the Collectivities." OASE 71 (2016): 18-37.

4  
Aureli, Pier Vittorio. "Labor and Architecture: Revisiting Cedric Price's Potteries Thinkbelt." LOG 23 (Fall 2011): 97-118.



1

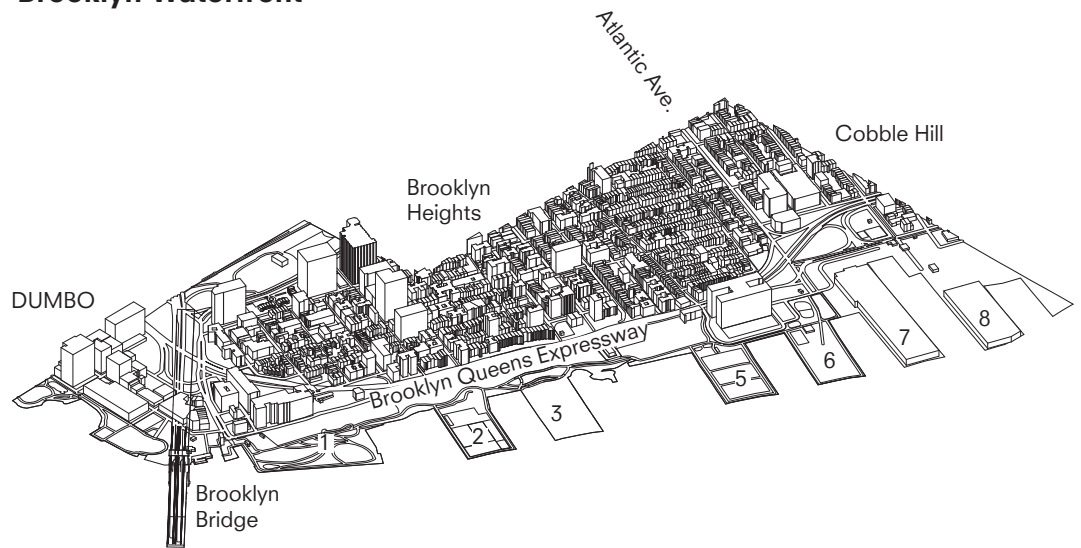


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Along the Brooklyn Heights waterfront, the studio will collectively design the "BQE Biotech Corridor", a new campus for the Applied Life Sciences. As a type, the campus is an ideal platform to examine collectivity: it consists of multiple, diverse and specialized yet interrelated buildings and disciplines of knowledge production. Like Cedric Price's speculative Potteries Thinkbelt,<sup>4</sup> the BQE Biotech Corridor will not be an ivory tower or enclave, but rather a dispersed ensemble of components that will operate together, connected to, rather than detached from, the post-industrial knowledge economy.

The Applied Life Sciences Campus is an initiative in the earliest stages of consideration now and will likely be realized through public / private partnerships. As such, it offers the opportunity to not only to engage current issues of urban policy, but also to speculate upon future forms of collectivity.

## Brooklyn Waterfront



5  
Bruner Foundation, Inc.  
"Brooklyn Bridge Park"  
Partnering Strategies for the  
Urban Edge: Rudy Brunner  
Award for Urban Excellence.  
2011: 41-74.

6  
New York City, Department  
of Transportation. "BQE  
Atlantic to Sands Project  
Overview." 20 Apr 2016.  
Web: [http://www.nyc.gov/  
html/dot/downloads/pdf/  
bqe-atlantic-to-sands-  
apr2016.pdf](http://www.nyc.gov/html/dot/downloads/pdf/bqe-atlantic-to-sands-apr2016.pdf). Accessed 1 Jan  
2017.

7  
New York City, Department  
of Transportation. "BQE  
Atlantic to Sands Project  
Update." 1 Nov. 2016. Web:  
[http://www.nyc.gov/html/  
dot/downloads/pdf/bqe-  
atlantic-to-sands-nov2016.  
pdf](http://www.nyc.gov/html/dot/downloads/pdf/bqe-atlantic-to-sands-nov2016.pdf) Accessed 1 Jan 2017.

The studio site is located along the East River waterfront from the west edge of DUMBO and Brooklyn Heights to the north edge of Cobble Hill. The site includes the landing of the Brooklyn Bridge and the recently completed, 85-acre Brooklyn Bridge Park,<sup>5</sup> which converted the post-industrial waterfront into a new landscape and park. This territory includes a range of different urban fabrics, existing building types, road infrastructure, tunnels, bridges, and piers.

Additionally, the site encompasses a section of the I-278 Brooklyn Queens Expressway (BQE) running from Sands Street to the Atlantic Avenue interchange, which includes twenty-one bridges and is slated for replacement or upgrade over the next ten to fifteen years.<sup>6,7</sup> Despite Robert Moses' highly innovative "triple cantilever" structure beneath the Brooklyn Heights Promenade that configures automobile and pedestrian traffic into a diagonal stack, this section of the BQE does not meet NYS highway standards. A more radical adjustment to its geometry, structure, and location may be considered, in line with recent efforts to re-conceptualize the presence and status of interstate highways in cities.

Aside from dealing with a highly complex urban site, the intention of working here is to engage the waterfront and the body of the East River, which is increasingly vulnerable to climate change and sea level rise. Along the waterfront, the ground can no longer be considered a fixed and stable datum. Additionally, projects may work with the linear infrastructure of the highway and sectional differences across the site.

7  
New York State. "Governor Cuomo Announces Groundbreaking \$650 Million Initiative to Fuel Growth of a World-Class Life Science Cluster in New York." 12 Dec. 2016.

## BQE Biotech Corridor

In December 2016, Mayor de Blasio and Governor Cuomo announced two parallel initiatives, totaling over \$1.1 billion in capital investments, research grants, and tax credits to attract the life sciences industry to New York City. According to New York State, "the Life Science sector encompasses the fields of biotechnology, pharmaceuticals, biomedical technologies, life systems technologies, and includes organizations and institutions that devote the majority of their efforts to the various stages of research, development, technology transfer and commercialization."<sup>7</sup> Capitalizing on its proximity to finance and academic institutions, New York City intends to compete with similar clusters in Silicon Valley and Boston. Existing facilities for biotech startups in New York City include several incubators and the Alexandria Center for Life Sciences, a complex on Manhattan's east side that opened in 2010. Nonetheless, more space is in demand. In response, as part of these new initiatives, plans for a new Applied Life Sciences Campus along the East River, similar to Cornell Tech, are currently in development, although a final location has not yet been determined.

8  
Braun, Hardo and Dieter Grömling, and Helmut Bleher, Eds. Research and Technology Buildings: A Design Manual. Basel: Birkhauser, 2005.

Drawing on its proximity to transit and the Brooklyn Tech Triangle, the studio will propose an Applied Life Sciences Campus dispersed throughout the Brooklyn Heights waterfront to accommodate approximately 10,000 knowledge workers and supporting staff. The campus will include office space, modular laboratory spaces<sup>8</sup> (wet-lab and dry-labs), classrooms, a library, auditoria, conference centers & event spaces, restaurants, cafes, and hotel/dormitories.

## Process

Throughout the semester, students will work collectively in teams. There will be three phases:

### I. Research (2 weeks)

Teams will conduct site analysis and develop case studies of relevant precedents. Architectural research is intended to be generative, i.e. leading to specific insights and potential design directions. Scale comparison, superimposition, and figure-ground will be important techniques and representational devices. The studio will also construct a large-scale, physical site model (1" = 60' or 1:1000, TBD) and digital base files. Teams may focus on topics like the construction of the site physical model, assembly of digital base files, site analysis, collective form as an architectural and urban problem, the tech campus, the laboratory as a type, the linear building, the urban highway, etc...

II. Envelope and Urban Proposal (4 weeks)

Each team will define and work within a specific envelope within the overall BQE Biotech Corridor. These envelopes may take on existing buildings in the site (i.e. the Jehovah's Witness Watchtower), existing development locations (i.e. the site south of One Brooklyn Bridge Park), existing piers (i.e. Piers 7 or 8), or other existing elements or infrastructure within the site (i.e. linear segments along the BQE Envelopes may also be proposed for new areas, irrespective of land ownership, or in / over the water (i.e. the re-construction of Pier 4). Because the entire studio is creating a sort of "masterplan" of the BQE Biotech Corridor, negotiation with the whole in terms of the form, programmatic elaboration, and relationship to other parts will be important to define the identity and role of the individual. Each envelope will accommodate some proportion of the 10,000 knowledge workers and approximately 250,000SF-750,000SF of built area, consisting of a diverse mixture of the given program. In this phase, the emphasis is on the development of a volume, narrative and polemical position relative to the larger territory.

III. Architectural Elaboration (8 weeks)

Within each envelope, teams will create a "campus within the campus." Strategies and insights from the urban scale may be translated to an architectural scale as structure, materiality, and program is elaborated. In particular, how do urban frameworks of collectivity, difference, or multiplicity occur at an architectural scale? Large-scale thinking and large-scale models will be important techniques for the development of the design.

**Notes**

The studio meets for desk crits on Monday and Thursdays from 1:30-6:30pm. There will also be a workshop/seminar session on Wednesdays from 3-5pm.

Additionally, pin-ups and reviews will be announced in a schedule to be distributed at the beginning of the semester.

A more detailed agenda will be distributed for Phase II and III, which will include requirements for presentations.

All studio work will be compiled into a book summarizing the studies and outcomes of the semester.