Growing Power

Sowing Worlds

The term “Plantationocene,” an alternate name for the epoch often called the Anthropocene, refers to the devastating transformation of farms, pastures, and forests into extractive and enclosed plantations, relying on slave labor and other forms of exploited, alienated, and usually spatially transported labor. In the present moment of the environmental crisis, there is little argument that the Plantationocene and the windfall profits of the green revolution deeply exacerbate social inequalities and break connections to the planet. The agricultural abundance of the Plantionocene has been paralleled by the rise in food insecurity and its disproportionate impact on communities of color. The site of the studio, East Boston, is one such neighborhood.

What are other possible design concepts, strategies, and imaginations that begin the repair work and reconcile architecture and agriculture, environment, economy, and justice? The studio Growing Power, Sowing Worlds investigates the politics and aesthetics of food networks—production, distribution, consumption and waste—to the ends of designing forms of co-habitation amongst humans and between humans and more than human worlds. Out of the monopoly of the agribusiness industry in the hinterland, urban spaces are emerging as sites of experimentation that reinstate food as a driver of civic design. How could such food networks restructure sustenance, employment, education, transport, health, communities, the justice system, multi-species commons and the social and natural contracts?

The semester is structured into two main phases. In the first half of the semester, “The Artist, The Philosopher, The Activist, and The Curator,” a series of weekly assignments prompt an exploration of various agencies and modes of representation to the ends of framing a situation around a food “matter of concern.” The Artist creates a Subnature plate. The Philosopher hosts a dinner party. The Activist charts a roadmap. And the Curator produces a food happening or situation. In the second half of the semester, each student, or group of students, develops the proposition outlined in the performance into a project in East Boston, possibly in relation to one of these infrastructural conditions: Boston Harbor Islands, I-90, East Boston Tunnels, Mary Ellen Welch Greenway, Chelsea Creek, Suffolks Down, Bremen Street Park, Logan Airport, New England Produce Center, Mystic River Watershed. Could such sites become the ground, water, and air to grow food in the city and in the process challenge the distinctions between what is edible, arable, and common? The design project becomes an opportunity to critically describe ongoing social and environmental problems and project other possible worlds.
Subject Description

Eating is a social, ecological, and political act. A food system encompasses all the activities necessary to supply an urban settlement with food, including “[...] all biological processes (or agrobiodiversity) as well as the physical infrastructure involved in feeding a population: growing, harvesting, processing, packaging, transporting, marketing, consumption, and disposal of food and food-related items. It also includes the inputs needed and outputs generated at each of these steps. A food system operates within and is influenced by social, political, economic and environmental contexts. It also requires human resources that provide labor, research and education. A food system is derived from and interacts with the ecosystem in which it is located.” (FAO 2011, p. 15).

Food shapes cities and territories. Pre-industrial cities were dependent on neighboring productive lands, characterized by a circular metabolism of energy. With slave labor, railways, industrialization, and food-preserving techniques (canning and refrigeration), urban foodsheds expanded to the scale of the globe. The country and the city came to be defined in opposition to one another. The agricultural landscape however is not an isolated acre of land. In The Urban Revolution, Henri Lefebvre articulated that the distinction between the city and the urban was a historical one, characterized by the ability of the modern city to capture the agricultural surplus of the countryside. In Nature’s Metropolis, William Cronon elaborates on the mutual constitution of the country and the city and explains how Chicago grew by exploiting its hinterlands’ resources, including the corn that farmers cultivated on Illinois and Iowa prairies all while concentrating wealth and distribution in a few high energy agro-industrial monopolies. This food system materializes into space—railroads, agricultural fields, farms, CAFOs, slaughterhouses, warehouses, markets, restaurants, compost heaps, etc.

Donna Haraway introduced the concept of Plantationocene, an alternate name for the epoch often called the Anthropocene, to refer to the “devastating transformation of diverse kinds of human-tended farms into extractive and enclosed plantations, relying on slave labor and other forms of exploited, alienated, and usually spatially transported labor” (Haraway 2015: 162). Haraway refers to it as an area of human history which is still persistent and has economic, social and ecological consequences, including intensive livestock farming, nitrogen runoff, carbon and methane emissions, mineral and metal depletion, soil erosion, droughts and floods, accelerated species loss, and a growing land alienation. To put it simply, plants, people, soil and atmospheres in the world’s Plantationocene all seem exhausted. How to shift away from the Plantationocene and towards equitable urban food practices?

The agricultural abundance of the Plantionocene has been paralleled by food insecurity that disproportionately affects communities of color. Before the Covid-19 pandemic, an estimated 11.5% of US population or 14.3 million households we unable to obtain adequate, affordable, nutritious food, according to USDA. Of the 50 million food insecure people in the US 10.6% are white, 26.1% are Black, 23.7% are Latino and 23% are Native American. The USDA uses the term “food desert” to describe areas with limited supplies of fresh, affordable foods. The Food Justice Movement has re-termed food deserts into food apartheid to better recognize the food system as “a racial project and problematizes the influence of race and class on the production, distribution and consumption of food.”¹ In the US, the South is home to the

counties with the highest average rates of food insecurity. Many such Southern counties are located outside major metropolitan areas are home to large communities of color living at elevated risk food insecurity. Northeast draws an urban portrait of food insecurity characterized by higher meal costs. In Massachusetts, Suffolk County has a higher food insecurity rate than the national average at 11.9% and Boston reaches an 18%, with East Boston as one of two food deserts in the city.

Where do designers fit into this portrait of the food system picture? The food system is increasingly acknowledged to be vital to social, urban, and climate resilience, further bringing such issues to public domain and design culture. “Urban spaces are emerging as sites of transformation out of the monopoly of the food industry,” notes Saskia Sassen. In reaction to the modernist divergence of urbanism and agriculture, such experiments renew the historic ties between culture and cultivation all while advocating for ecological sustainability, social justice, cultural specificity, nutritional economy, an expanded taste palette, and aesthetic issues posed by the presence of food production spaces in our cities. As a result, disciplines that deal with the design of soil seek to recognize that they can and should play a wide range of roles in shaping the food system, be it permaculture, social ecology, agroforestry, urban agriculture, bioregionalism, agroecology, urban foraging, aquaculture, or the Slow Food movement.

The city is a site for experiments in radical reform of food system by addressing its connections to the material environments on which architecture conventionally works: the home, the workplace, the street, the market, the public space, and the “anchor institutions” of hospitals, schools and universities, and even local law authorities. Rather than being valued only as an economic commodity, food is seen as matter of the common. Beyond anthropocentric allegiances, if politics, in its broadest definition, consists in those activities pursued on behalf of the public, then we are left with the thorny questions of what counts as a public and what it would mean to act on its behalf.

What are other ways of procuring and managing food resources and how would humans inhabit and organize such worlds? How do we re-imagine a different relationship with food urbanism: that reduce carbon and ecological footprints, shift from linear to circular systems, create inclusive economies that combine markets with other forms of exchange; imagine forms of conviviality amongst humans and companion species. How do these worlds weave in:
- Geopolitical narratives: global culinary stories, agricultural industry vs local ecologies, forgotten recipes, environmental justice, land sovereignty, hidden kitchens.
- Love and labor: domestic labor, economics of love, hospitality vs hostility, ownership and sharing models.
- Posthuman encounters: interspecies relations, postcolonialism, posthuman narratives and inclusivity.
- Ceremony and ritual: table manners, dining rituals, etiquette, intimacy, myth.
- Expanded perception: multisensory design, gustatory diversity, flavor and experience, palate and diet, health, accessibility.
Place Setting: East Boston

East Boston is an infrastructure crucible that includes sites such as Boston Harbor Islands, I-90, East Boston Tunnels, Mary Ellen Welch Greenway, Chelsea Creek, Suffolks Down, Bremen Street Park, Logan Airport, New England Produce Center, Mystic River Watershed. Could such sites become the ground, water, and air to grow food in the city?

East Boston, or the more affectionately named “Eastie,” is a peninsula that juts outward from Greater Boston. Much of East Boston’s land didn’t exist when the Massachusetts Bay Colony was settled in 1630 and a majority of Indigenous people were forced onto islands in the Harbor. Built on five islands, which were developed and connected by landfill starting 1833 when General William Sumner founded the East Boston Trading Company. In 1836, the city of Boston annexed East Boston. The first railroads to the mainland were completed in 1875 and the first streetcar tunnel to downtown in 1901. Today, East Boston is home to a mix of residential neighborhoods, commercial areas, and major regional transportation assets, including the Big Dig tunnel and Logan Airport that comprises over two-thirds of East Boston’s land area and has several expansion projects in the works.\(^2\) Such large infrastructure and their planning processes have imperiled residents and over the years residents fought over new parkland, noise, and pollution with Massport; the jet fuel, salt and heating oil stored alongside Chelsea Creek; and pollution from freeways and trucking from Expressway 1A.

Much of the neighborhood is low-lying areas susceptible to flooding. Nearly 50 percent of East Boston’s land area will be exposed to coastal flooding at the 1 percent annual chance event as soon as the 2070s, according to a 200-page report issued by Climate Ready Boston in December 2016. Estimates from the 2017 Climate Ready East Boston Plan warn that half of the land could be flooded during a major storm in the next 50 years. The mayor has pledged to dedicate 10 percent of the city’s capital budget to climate resiliency projects and released its first neighborhood-level plans for East Boston and Charlestown. Some experts worry though that the push for climate adaptation could make inequality worse in neighborhoods at the center of the city’s climate resilience strategy, a possible multiplier of the so-called “green gentrification” they say is already underway in East Boston. It is also a neighborhood in transition, as demonstrated by strong real estate development activity, especially in Maverick Square, along Jeffries Point, and along the Eagle Hill waterfront. The ICA Watershed opened in the Boston Harbor Shipyard and Marina in summer 2018, transforming a 15,000-square-foot space into a large-scale art venue. More recently, In May 2020, the Harborkeepers launched Vision Chelsea Creek, which aimed at reshaping an industrial stretch of land located along the polluted waters of Chelsea Creek with its hulking barges and clustered oil drums.

East Boston had a role as a gateway for immigrants who later moved on to higher income areas—the Irish, Russians, Italians, Portuguese. Beginning in the 1980s, a growing stream of Southeast Asians and Latin Americans, mostly from Colombia and El Salvador, began settling in the neighborhood. Today, almost 50% of East Boston’s population is foreign born, the highest percentage of all Boston’s neighborhoods. In 2020, East Boston has been one of the city’s worst clusters of Covid-19—46.8 percent of residents who were tested for the novel coronavirus were positive. Since the COVID-19 pandemic began, food insecurity has remained persistently elevated at record levels. Getting fresh food to families quarantined in dense,

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\(^2\) The airport has been a continuing source of controversy with its seemingly constant expansion. The taking over of Wood Island Park, once one of Boston’s most popular beaches, prompted outrage among the residents with a group of mothers protest parades and sit-ins.
urban neighborhoods has been a major challenge during the COVID-19 pandemic, especially in communities with large immigrant populations. In partnership with the East Boston Neighborhood Health Center, the Institute of Contemporary Art (ICA) Watershed satellite location was transformed into a temporary fresh produce distribution hub for the residents of East Boston over the past weeks.

**Design Methodology**

The studio brings together research, design, and representation to address urgent planetary challenges as a means to prompt architectural propositions and positions. In her book *Staying with The Trouble*, Donna Haraway writes about response-ability and encourages “sym-poietic” thinking, that of bringing something into being that has not yet existed, of encouraging imaginative visioning of the current stage of global geopolitical, environmental, systemic, and interspecies relationships. “The work,” to quote Toni Cade Bambara, is “To make revolution irresistible.”

**Schedule**

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<tr>
<td>SEP 3</td>
<td>Tuesday</td>
<td>First day of classes: Picnic and Interviews</td>
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<td>SEP 8</td>
<td>Tuesday</td>
<td>Review: The Artist, A Subnature Plate</td>
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<td>SEP 10</td>
<td>Thursday</td>
<td>Review: The Philosopher, The Dinner Party</td>
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<td>SEP 15</td>
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<td>Review: The Activist: The Roadmap</td>
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<td>Review: The Curator, Eastie Fiesta Triptych</td>
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<td>OCT 1</td>
<td>Thursday</td>
<td>Indigenous Peoples’ Day (Monday schedule)</td>
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<td>OCT 6</td>
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<td>Mid Review: Project Schematic Design</td>
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<td>NOV 19</td>
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<td>A Common: Mural + Publication</td>
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Evaluation Criteria
Evaluation is contingent on students’ active participation, contribution to the discourse of the studio, demonstrable design development, conceptual care, and representational clarity, exploration, and spirit.

5% Deliverables
5% Attendance/Participation
15% Concept how clearly are you articulating your design intentions?
25% Process: how well are you developing your concept to a spatial and architectural response on site?
25% Final Review:
Did you synthesize your concept into a resolved architecture appropriate for the site and larger planetary context?
25% Representation:
Clarity and Quality of representation and communication

You are allowed three excused absences for the semester. An excused absence is defined as one that was discussed with and approved by the professor at least 24 hours prior to the date of absence, or a family or medical emergency that is confirmed by your physician. Class absences due to COVID-19 symptoms, diagnosis, or exposure will be not be penalized. Students should contact their instructor if they have questions regarding how to access required academic material (and complete assignments during such absences).

Grades will be posted for students to view on their grade report after their work has been archived. The projects need to be properly prepared and formatted, and delivered to the Archiving TA. Studio TA’s will collect project archives from each student immediately following the review. Detailed requirements and instructions for formatting will be sent to students as soon as the department makes them available.

Grading
A Exceptionally good performance demonstrating a superior understanding of the subject matter, a foundation of extensive knowledge, and a skillful use of concepts and/or materials.
B Good performance demonstrating capacity to use the appropriate concepts, a good understanding of the subject matter, and an ability to handle the problems and materials encountered in the subject.
C Adequate performance demonstrating an adequate understanding of the subject matter, an ability to handle relatively simple problems, and adequate preparation for moving on to more advanced work in the field.
D Minimally acceptable performance demonstrating at least partial familiarity with the subject matter and some capacity to deal with relatively simple problems, but also demonstrating deficiencies serious enough to make it inadvisable to proceed further in the field without additional work.
F Failed. This grade also signifies that the student must repeat the subject to receive credit.

Academic Integrity + Honesty
MIT’s expectations and policies regarding academic integrity should be read carefully and adhered to diligently: http://integrity.mit.edu
Respect for Diversity
Diversity is a source of strength and creativity. We value the contributions of each person and respect the profound ways their gender identity, ability, age, status, ethnicity, race, nationality, religion, and culture.

Student Performance Criteria: NAAB
Realm A: Critical Thinking and Representation
A1. Communication Skills: Ability to read, write, speak and listen effectively
A2. Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards
A3. Visual Communication Skills: Ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.
A6. Fundamental Design Skills: Ability to effectively use basic architectural and environmental principles in design.
A7. Use of Precedents: Ability to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.
A8. Ordering Systems Skills: Understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.
Realm C: Leadership and Practice
C3. Client Role in Architecture: Understanding of the responsibility of the architect to elicit, understand, and reconcile the needs of the client, owner, user groups, and the public and community domains.
Picnic
Thursday September 3

Charles and Ray Eames, Powers of Ten (1977)

An informal meal taken outdoors (alfresco), in which everyone brings their own dish. According to some dictionaries, the French word pique-nique is based on the verb piquer, which means 'pick', 'peck', or 'nab', and the rhyming addition nique, which means 'thing of little importance', 'bagatelle', 'trifle.' Some picnics are a potluck at which each person contributed some dish to a common table for all to share. From the informal picnic, the outdoor feast developed. In Victorian Britain picnics may not have been as formal as country-house dinners, but they were often elaborate affairs. Weekend shooting parties and sporting events were occasions for grand picnics, with extensive menus and elaborate presentation.

Pack a picnic and meet at Killian Court on Thursday September 3rd.
Bring along a blanket (if possible), food, book(s), other objects.

See Futurefarmers, A Variation on the Powers of Ten.
http://www.futurefarmers.com/powersoften/picnics.html
“Subnature” is a word coined by architectural historian David Gissen for aspects of nature that the architectural discipline has traditionally shunned, such as dankness, darkness, mud, weeds, smoke, puddles, dust, debris, crowds, and pigeons. The objective of this exercise is to extend the topic of “subnature” from architecture to cuisine and to critically visualize and analyze modes of food production and preparation as well as the distinction between “edible” and “inedible.” What does your recipe say about terroirs, ingredients, materials, tools, techniques, procedures, actions and about how humans relate to food, nature, the world, and to each other?

Food’s mediated biopolitics work across the registers of the visual. This exercise situates itself within a legacy of artworks that adopted the format of the cookbook to explore how recipes can provide a space for play and invention. Consider The Futurist Cookbook (1932) in which F.T. Marinetti rallied for the possibilities of a low-carb diet. Or Salvador Dali’s opulently illustrated ode to gastronomic surrealism, Les Diners de Gala (1972), which featured an array of sensual delicacies in unusual formats and situations. Or even Esther Choi’s Le Corbuffet, which riffs off famous artists or architects and the works they are known for and Studio Olafur Eliasson: The Kitchen (Phaidon, 2016).

References:

Gastropodcast: Bite: Smoked Pigeon and Other Subnatural Delights
https://gastropod.com/bite-smoked-pigeon-subnatural-delights/

Nicola Twilley, Edible Geography, Smog Meringues
http://www.ediblegeography.com/smog-meringues/

Natalie Jeremijenko, Cross(x)Species Adventure Club
http://eco-publicart.org/xspecies-adventure-club/
The Philosopher: The Dinner Table

Thursday September 17

Philosophers, anthropologists, gastronomes, and other cultural theorists have outlined the significance of food in humans’ relations to the world.

Work with a philosopher from the list below. Develop a working vocabulary of terms and concepts in the philosophy of food of your assigned author. Articulate the central theoretical issues in their study of food.

The philosopher is hosting dinner you are the event planner. How does the dinner table itself become a make eating itself a philosophical act? Set the table.

Submit: one axonometric drawing. 70cmx70cm.

Philosophers
– Claude Lévi-Strauss, The Raw and the Cooked (1964); or “The Culinary Triangle”
– Vandana Shiva, Terra Viva, 2015
– Anna Tsing, The Mushroom at the End of the World
– Isabelle Stengers, In Catastrophic Times: Resisting Coming Barbarism
The Activist: A Seat in the Food Parliament

Thursday September 24

Bureau d’Etudes, Government of the Agro-Food System.

Urban Farming Institute of Boston, http://urbanfarminginstitute.org
Boston Area Gleaners, https://www.bostonareagleaners.org
The Food Project, https://thefoodproject.org
Food For Free, https://foodforfree.org
Massachusetts Food System Collaborative, https://mafoodsystem.org
Project Bread, http://www.projectbread.org
Boston Good Food Purchasing Program, https://goodfoodpurchasing.org
My Way Café, https://www.mywaycafe.org
Green City Growers, https://greencitygrowers.com
Menus of Change, www.menusofchange.org
The Edible Schoolyard Project, https://edibleschoolyard.org
Maverick Landing Community Services, https://mlcsboston.org
Veronica Robles Cultural Center, https://veronicaroblesculturalcenter.org
Gaining Ground Farm, https://gainingground.org
Soul Fire Farm, https://www.soulfirefarm.org
Black Panther, Free Breakfast for School Children Program
Urban Growers Collective, https://urbangrowerscollective.org
Rise & Root Farm, https://www.riseandrootfarm.com
Food Print Farms, https://footprintfarmsmms.com
Soil Generation, https://soilgeneration.org
The ICA Watershed Curator proposes a “situation” in East Boston that engages the previously identified artist, philosopher, activist along with an Eastie-based organization to assemble a public on a food as matter of concern. John Dewey claims that the public and its interests do not pre-exist the real-time situation and events that call them into being. A situation is the manner in which objects, species, and/or people are disposed in a particular location and time. It situation is a site-specific temporal assemblage, always in the process of forming and dissolving. To describe the situation is often to speculate on the various possibilities for actions or consequences given the circumstances.

Precedents
Futurefarmers, Flatbread Society
Seitu Jones, The Community Meal
Haus Rucket-Co, Food City, 1971
Alison Knowles, Make a Salad, 2008/2012
Michael Rakowitz, Enemy Kitchen, Pantry Palaces, Date Syrup Cookbook
Theaster Gates, Rebuild Foundation, Soul Food Pavilion

East Boston Organizations
East Boston Main Streets, https://www.ebmainstreets.org
94.9 FM ZUMIX Radio, https://www.zumix.org/radio
Airport Impact Relief, Inc., https://airportimpactreliefinc.org
Friends of Belle Isle Marsh, http://friendsofbelleislemarsh.com
The Harborkeepers, https://www.harborkeepers.org
East Boston Community Soup Kitchen, www.ebkitchen.org
East Boston Farmers Market
East Boston Neighborhood Health Center
Eastie Farm, https://eastiefarm.com