Infrastructural Research: Waste and its Afterlives

WOODBURY SCHOOL OF ARCHITECTURE

ARCH 448.0
PROFESSIONAL PRACTICE 2: RESEARCH AND PRE-DESIGN
Instructor: Curt Gambetta
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ROOM TBA, TIME 9-12
UNITS – 3
PREREQUISITE – ARCH 250 Professional Practice 1,
ARCH 330 Theory of Architecture

Gambetta Infrastructural Research Fall 2012
During the 19th and 20th century, infrastructure was contained and shrouded from public experience by forms of urban management such as sanitation and waste management. Associated early on with public space and public responsibility, responsibility over waste is increasingly construed as a private dilemma. Architecture reinforced this paradigm until the latter half of the twentieth century, evacuating wasted matter and its byproducts from everyday experience. Despite its comprehensive privatization around the world, infrastructures such as waste management remain publicly sensible and politically contested, creeping into ordinary experience in unforeseen ways. With few exceptions, architecture has remained aloof to these conflicts. In this research seminar and ensuing degree project studio, we will speculate on the ways in which architecture might mediate conflicts around ineluctably public dilemmas such as waste making and disposal.

The seminar begins with the proposition that models of sanitation and waste management are also models of urban space and architecture. Conventionally, sanitation and waste management understand dilemmas of waste making as technical and administrative dilemmas that are resolved through technical expertise and the logic of the market. In this way, they are insulated from political contestation. As an engineering problem, they are also insulated from architectural design. Because of the instability and volatility of wasted matter (it smells!), waste upends and troubles these mechanisms of containment. Rather than continue to hide and disappear waste, we will engage these moments of instability and rupture as opportunities to rethink spatial concepts of public life.

Our research will be centered around the development of an assembly drawing. Though assembly drawings are typically understood as technical drawings, they also imply the participation of a range of actors and forces that are conventionally unrepresented. The seminar will enrich technical mappings and assembly diagrams of systems of waste processing and disposal with a rigorous and experimental representation of different forms of agency. For instance, we will examine how technical aspects of waste removal and transport are linked to policy, community struggles, algorithms of efficiency, market forces and regional geology. The semester will begin with a technical drawing of a particular system that will serve as a datum for the remainder of the semester. In order to represent the complex intersection of forces associated with each system, students will investigate methods of decomposition and re-assembling of different layers of information onto this technical drawing. Layers of analysis and reflection may include other forms of representation such as video or three dimensional installation.

The seminar will begin by looking at the technical make-up of the waste stream. How do particular systems work? Following this, the seminar will consider how these systems are made
vulnerable to political and social contestation. Different scales and forms of contestation over the waste stream will serve as our ‘site.’ Site is construed as a complex entanglement of issues, rather than a property line or given political boundary, even though particular places are implicated in any site. As part of the degree project development, students will be encouraged to define different scales of intervention into aspects of the waste stream, ranging from the detail-scale of systems of enclosure to large scale urban systems.
Introduction

Week 1—August 31

Introduction

Week 2—September 7

Architecture and Pollution

Readings


Recommended:


Ponte, Alessandra. “Garbage Art and Garbage Housing” in Log 8.

Projects

Mira Engler “Reclaiming Metaphors out of the Dump, or Four Gestures for Hiriya”

Down Jones Architects and Arup “Rubbish in-Resources Out; Design Ideas for Waste Facilities in London”

Abalos & Herreros “Valdamingomez Dump, Madrid”

Bjarke Ingels Group “Waste-to-Energy Plant, Copenhagen”

Martin Pawley “Garbage Architecture”

How does it work?

Week 3—September 14

What is waste?
Week 4—September 21

**Infrastructural Agency**

**Readings**


**Recommended:**


Andrew Lakoff and Steven Collier “Infrastructure and Event: The Political Technology of Preparedness” in *Political Matter: Technoscience, Democracy and Public Life*.


Week 5—September 28

**Circulation: Routes, Interchanges and Ruptures**

**Readings**


Recommended:


Week 6—October 5

**Review 1**

**What is your site?**

Week 7—October 12

**What is the issue?**

Readings


Recommended:


Week 8—October 19

**Identify Boundaries and Scale**

Readings


Observe

Week 9—October 26
Witnessing The Abject

Readings


Week 10—November 2
Observing Systems

Readings


Week 11—November 9
Review 2

Project

Week 12—November 16
Infrastructural Agency Revisited

Readings


May, John. “Infrastructuralism” in *Quaderns 262*.

**Projects**

Lateral Office “Land Reservations”

Mira Engler and Gina Crandell “Open Waste System Park”
http://www.public.iastate.edu/~miraengl/mira-Projects_4.html

Vito Acconci “City Built on Garbage”

Mel Chin “Revival Field”
http://melchin.org/oeuvre/revival-field

Steven Holl “South Central Connecticut Water Treatment Plant”

Lydia Kallipoliti “Dross City” & “Re-genesis of diverse matter_A Design Post-Praxis” [focus on projects on pages 145-233]

**Week 12—November 23**

**No Class—Holiday**

**Week 13—November 30**

**Group Pin-up**

**Week 14—December 7**

**Individual Desk Critiques**

**Week 15—December 14**

**Final Review**