# COMpostABLE: NETWORKED URBAN GARDENING John Geisler

The recovery of biological nutrients involves a wide range of boundaries. The first boundary is the human epidermis. Unused food, although ingested moments earlier, becomes repugnant to the touch. Individuals seeks to minimize contact with waste food at all costs. For those that do take a moment to separate biological nutrients, they would like to see them out of the boundaries of their living space as quickly as possible. This is accomplished in two ways. The first and easiest is to place the waste inside a new boundary, the trash bag, thus separating it from interior living space. Alternatively, the biological nutrients are placed outside the home in compost bin. Even outside the home, most people would prefer to have biological waste off their property when it begins to accumulate. At each level, the probability that the biological nutrients escape the boundary in which they have been placed and return to the nutrient cycle is reduced.

The object most associated with Biological Nutrients is the compost bin. This project links the individual, private act of bin composting with a potential new economy of urban compost exchange. At the level of the site, the probe communicates heat levels through an RGB LED. Simultaneously, the probe transmits the information to a website that describes a topography of compost generation in the city, allowing backyard composting to participate in a larger community of exchange. -JG

# COMMUNICATING THRESHOLDS Mark Nowaczyk

Though levels of pollution are heavily monitored at the landfill site through sensors and other instruments, such feedback is exclusive to the technicians and engineers who are in charge of the public's well-being. I am proposing that such feedback about the migration of pollution from landfills be accessibly communicated on a daily basis through the creation of communicating thresholds along the boundaries of the landfill site as well as within the thresholds that surround private domestic realm. Such communicating thresholds exist as a "coupled" condition, engrained in the experience and use of a particular space or environment.

The research proposal includes a catalog of potential strategies of indicating pollution in a way that is quickly and intuitively perceived within everyday space. Such strategies range from the digital, chemical, to the very low-tech, with each providing different advantages at different scales and within different sites. It will be observed as a part of the everyday experience of space and architecture and become an intuitive articulation of space and its hidden dangers.

The site of this research is at the thresholds where landfill air pollution leaves the landfill and travels into public spaces and private domains. These research interventions are designed to be coupled with traditional thresholds, such as a fence, window, garbage can etc., in order to provide visual information of the hidden dangers of that specific place. In the long term, these communicating devices could become a permanent component of everyday space as the pollution issue escalates. -MN

# CONSPICUOUS WASTING Cheng Yang Lee

If consumption is so ingrained and encoded into urban life, what is its flipside? The act of throwing, or wasting naturally follows consumption. Further, it can be said that wasting is a necessary precondition for further consumption, since one would otherwise be very literally bogged down by garbage. While consumer culture is, for better or worse, a celebrated ritual of modern life, however, wasting—the enabling act—is relegated to a shameful place.

Trash cans in public are a component of urban and waste infrastructure that is frequently taken for granted. They are designed and placed at once to be invisible and visible; to not contaminate urban space with its glaring presence, and at the same time encourage users to keep urban space from contamination. Their regular presence is expected, and their users remarkably "seasoned."

Riffing off themes of surveillance, ritual, and performance, I propose a media installation that invites, or forces, the participation of a user in an act of "conspicuous wasting." -BL



The Voluntary Prisoners of Waste: Free your compost! Like a message in a bottle organic waste is ritually set free to be picked up by strangers.



Study: the probe deployed in a backyard compost container records temperature and visually displays the changes over time via a single RGB Led. The temperatures are also transmitted to the home computer via an Xbee wireless chip. As the compost passes through the various temperature cycles, it's state can be displayed via networked maps to show the landscape of backyard composting in the city.



LEFT: LED testing; RIGHT: Arduino board assembly



RIGHT: Device assembly drawings and photograph



ABOVE The Voluntary Prisoners of Waste: Methane release pipes are outfitted with sound-making devices, producing a symphony of sound in decommissioned

BELOW: Research for the project was conducted on how toxins at landfills, dumps and industrial sites is recorded, ranging from personal clip on devices to large scale mapping.











in his "final act." What will it be like?

unmoved? Will he feel shame, humor,

annoyance, confusion...?

projection to be undertaken in order bring more clarity and resolution to the visual presence of such particulate matter. RIGHT: The projection through the sticky screens is perhaps the most potent representation because through this augmentation it produces an augmented spatial condition by literally being immersed in the particles and dirt lifted from surfaces. The projector is a way of permanently suspending particle pollution in space allowing for further observation and experience.



The Voluntary Prisoners of Waste: What if we were forced to carry our trash around? Denied the convenience of discarding our refuse, we would accumulate the byproducts of our consumption habits ... for all to see. Consumption = exhibition; wasting = voyeuristic?



"The invisible link:" the contemporary city is a premier site for consumer culture. If urban life is predicated on consumption, then it is important to recognize that the act of wasting or throwing is the crucial link in completing the cycle.



When the threshold zone is activated by the user, the screet "wakes up" and starts a countdown timer of a photo booth inviting the "garbage thrower" to get ready.



Iteration 2

When the threshold zone is activated by the user, the camera "wakes up" and starts recording the processional "moment." In an eerie twis the video is played back in real time, except at half speed. In effect, the "moment" can be prolonged to infinity as long as the user stays within the area.



this respect, we will work to build on skill-sets, demands of the problem to be identified. In are intentionally diverse and responsive to the and doing, the methods that we will investigate methodologically diverse practice of thinking sense) is at its heart a highly synthetic and architectural practice (in the non-protessional an intrastructural system. Understanding that and represent the material and social life of we will investigate how to observe, analyze I hrough a series of structured assignments,

discussions and methodological case studies. site within the waste stream through reading The semester will begin by identifying a research table. methods and interests that each of us bring to the

reviewed journal postings and presentations. reflection and collaborative critique through peer Emphasis will be placed on collective weekly its ongoing work in the form of a user's guide. will be conducted and the seminar will present of waste processing and disposal. Research ot research that is sited within a particular system Following this, participants will propose a method

torces that one encounters when engaging with and observation into the complicated mixture of figures out an adequate method of intervention about how one figures out a site, and how one primary phases, providing a set of questions is written as something of a kit of parts in two from these and other examples, the course experiment with ethnographic research. Drawing a bit from the design studio as a format to Irony, no doubt, because their seminars borrow in the background of this design exploration, an anthropologists Chris Kelty and Kim Fortun hover (ie: what is an ethnography?). Seminars by as anthropology are particularly good at this Intensely methodological fields of study such Every course should have an assembly manual.

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gies, the media mesh will be able to provide analytical visual information on the degree, location, and density of air pollution plumes. The interpretation is irst-hand and real-time, thus having the potential to shape occupancy and use of space based on the location of threats.

This manual documents research and pedagogy from the Infrastructural Research seminar, taught at the Buffalo School of Architecture and Planning during Fall 2011 by Curt Gambetta, Peter Reyner Banham Fellow 2011-12.

Students: Matthieu Bain, John Geisler, Nicole Halstead, Cheng Yang Lee, Mark Nowaczyk, Anwesha Samanta

Above: cut-outs from Francis Alÿs, "The Collector," video, 1991-2006.

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is the usage of sticky paper and plastics as a way of capturing airborne pa well as lifting particulate off of surfaces for further visual analysis. The lifting technique is especially interesting because it allows one to forensically de contextualize surface matter into a suspended transparent state. This allows for augmenting processes such as scanning and raising contrast, as well as

The camera snaps a picture of the consume When the system is not activated, the screen flashes a slideshow of all images taken, as an ongoing documentation and reflection Will he pose with his waste? Will he be process. What will people's attitudes be during the act, in relation to the catalog, or after the fact?



When the system is not activated, the screen plays a continuous loop of all the video "moments" recorded, at double the speed, as an almost hurried caricature of waste generators. What are the patterns or emotive qualities that can be gleaned from the different playback speeds?



# Research lenutountsental

# Introduction

unacknowledged politics of ordinary life. throwing into illumination an otherwise largely is once again an object of public contestation, sheer tragility and instability of intrastructure century anxieties about urban decline, the and political discourse. Recalling nineteenth center of a cultural imagination of urban life Orleans in 2005 figure infrastructure at the catastrophe such as the flooding of New or instances of large scale intrastructural populates American political discourse today political rhetoric of "broken infrastructure" that to admit. Recent experiences such as the imagination of global difference would like called developed world than this cultural the contemporary experience of the so ot leakage and rupture may be closer to worlds—first and third—the experience map a clean distinction between these two improvisational repair. Though we tend to perpetual breakdown, decay, seepage and intrastructure tunctions in a state of technologies. In the postcolonial world, and proper functioning of infrastructural intrastructure is contingent on the seamless have rightly pointed out that this narrative of postcolonial urbanism and techno-politics presence known or sensible. Writers on or support system that rarely makes its initiastructure is designed as a back structure which means below or behind. Urban Intrastructure contains the Latin root intra,

technologies of enclosure. Nonetheless, waste production through increasingly precise sud 'silence' the unintended consequences of corporations endeavor to manage, contain private responsibility. Private entities such as waste is today widely understood as a public dilemma, responsibility over municipal experience. Historically understood as a focus on the dynamics of everyday intrastructure of garbage, with a particular of basic infrastructure by focusing on the The seminar will investigate the public life

with wasted matter are drawn and articulated. about responsibility, ownership and contact through their research how these boundaries and re-imagined. Students will interrogate conceptual and legal—be constantly reworked responsibility—spatial, material-architectural, the thresholds between public and private intractable presence of waste demands that intrastructural breakdown or leakage. The of scavenging to the spectacle of large-scale ways, ranging from the quotidian experience erupts into public experience in a variety of enclose it as private matter of concern. Waste the physical and conceptual boundaries that as water or electricity, persistently exceeds waste, like other intrastructural objects such

the task of political life is not only to make increasingly private domain of infrastructure, disposal"). When directed to the secretive and landfill: "my memory, sir, is like a garbage memory of everything, telt something like a of Funes, who, burdened with a detailed Borges acknowledged this in his parable tor an individual to master fully (Jorge Luis abundant, overwhelming, and too plentiful not unlike our own. Intormation was, and is, backdrop of an exploding media culture, into perceptions. Dewey wrote amidst the made public, sensations must be turned wrote in the 1910's that for an issue to be experiences. Philosopher John Dewey tickling of the senses and other affective social articulation is the work of feeling: the Part and parcel of these forms of spatial and

draw out and mediate our interface with infrastructure, how can research and design Given our lack of contact with waste information, but to sense in the first place. sense of this crowded landscape of

with daily experience? difficult to acces, and yet totally enmeshed intrastructure that is thoroughly shrouded and wasted matter? How does one engage with an

merely analyze it. Research is slowly being research participate in their site of inquiry, not the seminar insists that forms of architectural performance art and installation practices, anthropological participant-observation, fieldwork and public performance such as Learning from diverse trajectories of

# Site

Waste is a difficult object to contain. As the Great Pacific Garbage Patch makes clear, small acts of wasting can lead to large scale consequences. In addition to its movement across economies of disposal and processes of natural flux, the secondary or tertiary consequences of waste percolate through dynamic ecological systems and animal bodies. Issues emerge across a spectrum of things immediately sensed and recognized from afar. In this context, what is a research site?

We will consider a range of methodological case studies in order to understand how they construct a research site. Questions we will raise include: How is the research site shaped by the issues under consideration? Are issues about waste raised intentionally or unintentionally by the work in question? What unintended consequences are being tested, or are produced, by the work? We will analyze, through a number of assigned tasks, the audience, infrastructure, scale and boundaries that are drawn around each public experiment, using our inquiry to expand our imagination of potential strategies for our own research.

We will use the readings each week to test and interrogate the implications of each case project. We will also use each case to guestion and enrich some of the perspectives that we will unpack in our readings. In addition to the assigned reading, other forms of representation will be required to illustrate how each experiment represents itself to its audience or users.

# Case studies

The Collector, 1991-2006. Francis Alÿs (urban performance)

Revival Field, 1990-present. Mel Chin (land installation)

Natural Selection, 1981. Antony Gormley (installation)

The Lost Letter Technique, 1969. Stanley Milgram (social psychology)

Trash Track, 2009. SENSEable City Laboratory—MIT (mapping)

Social Mirror and Touch Sanitation, 1983 and 1978-80. Mierle Ukeles (performance)

# Task 1 Identify an issue

Read and Review

1. Marres, Noortje. "Issues Spark a Public Into Being" in Making Things Public, Atmospheres of Democracy (Cambridge: MIT Press, 2005).

2. Melosi, Martin V. The Sanitary City: Urban Infrastructure in America from Colonial Times to the Present. Creating the North American Landscape (Baltimore: Johns Hopkins University Press, 2000). [excerpts]

3. Case study

<u>Respond</u>

In no more than 800 words, respond to the problems raised by each reading through an integrated set of reflections about the readings and the case study you are analyzing.

Please respond to the following questions:

What is the relationship that Dewey and Lipmann pose between information, knowledge and democracy? Does the quality or quantity of information matter? According to Marres' analysis of Dewey and Lipmann, is complexity a roadblock to democratic politics, or a condition of possibility? What makes a public 'public,' according to Marres? Does it have a particular duration (indefinite or temporary)? Is it assigned to a particular location? Does it inhabit particular spaces over others, if at all?

Following from Marres' analysis of Lipmann and Dewey's model of public life, where in Melosi's history can we identify moments of

issue-driven politics? Where did trash become a public issue, and where did it become a private issue? Noting two contrasting examples, consider how issues were defined and where they emerged from. Aesthetic concerns? Anxieties about disease and health? Who was contesting existing paradigms of handling and transporting waste? Individuals? Collective organizations? Who was deemed responsible for wasted matter, and who was not?

How does case x imagine a problem or issue? Does the performer or author explicitly imagine a particular issue, or are issues raised secondarily by the performance of the experiment? Who is the intended audience? Are the issues they are raising directed to an open-ended audience, or to a particular set of practices or disciplinary concerns (say, traditions of performance art or social psychology)? What spaces or infrastructures is case x reliant upon in order to communicate to a potential user, viewer or audience (ie: plot of land, dirt, street, video, book, gallery)?

## <u>Illustrate</u>

Pick two excerpts from the case study and describe in two sentences how they illustrate the issue as you see it. Illustrations may include, but are not limited to, a drawing, an image, a body of text or a video clip.

## <u>Disseminate</u>

Include the illustration and textual reflection in a PDF document, and send it to your peer reviewers by Monday 10:00am, September 5th.

## <u>Critique</u>

Peer reviewers should review each response text and illustration, in no more than 200 words. Comment on any aspects or issues that you think could be addressed differently or more comprehensively. Reviewing at this stage is as much a brainstorming exercise as it is an exercise in refining or honing in on an analysis. Do not hesitate to provide suggestions about other sources or heretofore unanswered questions.

# Task 2 What is your object of inquiry?

### Read and Review

1. Chaturvedi, Bharati and Vinay Gidwani. "Poverty as Geography;' Motility, Stoppage and Circuits of Waste in Delhi" in Anjaria and McFarlane, Urban Navigations: Politics, Space and the City in South Asia (Delhi: Routledge, 2011), pp. 50-78.

2. Lynch, Kevin. "Then What is Waste?" and "Appendix A: Talking about Waste" in Wasting Away (San Francisco: Sierra Club Books, 1990), pp. 146-166, 202-232.

3. Rathje, William and Cullen Murphy. "Yes, Wonderful Things" and "What We Say, What we Do" in Rubbish! The Archaeology of Gar*bage* (New York: Harper Perennial, 1992), pp. 3-29, 53-78.

### 4. Case study

### <u>Respond</u>

In no more than 600 words, respond to the following questions.

Readings: Reflect on how the argument or is- <u>Describe</u> sue that is being raised (think back to Task 1) describes, illustrates and narrates its object of concern. What forms of waste does each author identify? How is it described by the author(s)? Is their perspective one of narrative observation, or other methods of studying waste? How specific or general is the idea of waste that they are narrating? What materials is it composed of, and what are their consequences or effects? How is it being used in order to raise a larger set of questions? Is it evaluated as an artifact or image of social experience? Are there actors that are internal to the narrative that also attempt to define or represent it? If so, how? In what ways are the consequences of waste being contested? By whom?

Case study: What forms of waste or act of

wasting does the performance focus on? Are their multiple forms of waste that are illuminated? How are wasted things or acts of wasting made visible through performance or representation? Who is meant to see it or sense it? What media or techniques are used to enact the performance? What mechanisms are designed to regulate our interaction with the forms of waste under scrutiny? Are these mechanisms appropriated or transformed from given infrastructure, or imagined anew?

### <u>Evaluate</u>

Evaluate two critical perspectives about the case study. Include bibliographic information for each piece (use Turabian for citations).

Select and read two articles, reviews or interviews about your case study. The point of view should be critical and substantive. In 200 words (total), summarize how each perspective interprets the case. In addition to bearing in mind the argument of the article, pay attention to the following questions: How is the performance contextualized? What implications is it claimed to have? For the artist/author/researcher's body of work? For a larger social dilemma? Is waste foregrounded as a primary or secondary object by the authors?

# <u>Represent</u>

Pick 8-10 images, drawings or diagrams that you think best represent the process being investigated by each case and the form of waste under scrutiny. Process and thing each in their own way constitute an object of inquiry for our study of method. How do different techniques of representation mediate our reading or experience of the work? What does each image or drawing convey, and what does it conceal? Write a caption of no more than a few sentences that describes each form of representation and analyzes how it functions in relation to its object.

# Task 3 Understanding boundaries and scale

Read and Review

Kaviraj, Sudipta. "Filth and the Public Sphere: Concepts and Practices about Space in Calcutta," Public Culture (Fall 1997) pp. 61-81.

El Khoury, Rodolphe. "Polish and Deodorize: Paving the City in Late-Eighteenth-Century France," Assemblage, No. 31 (Dec., 1996).

Gal, Susan. "A Semiotics of the Public/Private Distinction," *Differences* (13.1 2002) pp. 77-95.

# <u>Respond</u>

In a written response of 600 words, consider the boundaries that are imagined and constructed around waste. Boundaries include, but are not limited to, conceptual/social, legal, material or chemical thresholds between one set of conditions and another. For our purposes, these boundaries are largely, though not wholly, expressive of notions of public and private life, or common and individual responsibility. Discuss the kinds of boundaries that each author focuses on, and how they are expressed either socially or materially. What is each boundary composed of? Is it mobile or static? Who or what claims authority over each boundary? Does it have a particular duration or scale? Are the boundaries under consideration localized to a particular process, region or community? How are boundaries broken down, ruptured or re-negotiated, and at what scale?

Keeping in mind the questions raised about the readings, identify the boundaries and thresholds that are implicated in your case study. They may be invisible or they may be material, or both. Consider the artist's attitude towards the boundaries that they are interrogating. After identifying the boundaries that are being tested, constructed or punctured in each work, look for more information about the boundary itself. Investigate and describe its qualities and properties, through textual description and/or a diagram. Pay particular attention to its instability and leakage (its ruptures or excesses) by noting or notating the physical properties, terms, consequences, forms of authority and scale about each boundary. Description should be comprehensive, and should be accompanied by images or other samples (ie: legal tracts or forms of

data) if the representation is textual. If there are multiple boundaries, consider the relationship of each layer to another. If you choose to describe through a diagram, be sure to include a brief title and description, in 50 words or less.

## <u>Critique</u>

Please submit your response and description to your peers. Responding in no more than 200 words, critique and comment on the textual and diagrammatic analysis of your peer. Are there boundaries that are not being considered, or which could be considered in different ways? How effective is the diagram in communicating the significance of the project?

# Task 4 **Research Manual**

### <u>Revise</u>

Revisit your responses and improve them by revising and refining your thoughts. Be sure to return to the questions that were fielded in Tasks 1-3, in addition to any criticism or discussion that has been raised during class.

Include an introductory statement to your analysis. Here, you will need to consolidate and reflect further some of the observations that you have been building up over the past three weeks. You have enough material now to think more analytically, and speculate on the larger implications of the work. What is significant about this work for the issues we are discussing? How do you think the work reframes or alters how we engage with systems of waste processing and disposal? Does the work challenge our notions of research, and how a research site is imagined, designed and performed?

Follow the structure that we have followed over the past few weeks to organize your analysis: issue, object, boundary. Include endnotes for each reference, and a bibliography of your sources.

Last but not least, title your analysis. Many of you are already using terms, phrases, neologisms etc. that describe the significance of your case study. Don't be afraid to bring them in as a title to both the text and presentation

### <u>Present</u>

Using the organization of your analysis as a structure, consolidate images, videos and diagrams for each work into a PowerPoint or Flash presentation (PDF is acceptable if there is only static information). Be sure to include comprehensive images, drawings and other relevant documentation of the work itself, in addition to any other works and images that you think will support and enrich your analysis. Many of you have contextualized the work within a larger body of work. Unlike most case studies, I encourage you to represent other works and forms of research by either the artist you are focusing on or other parallel practices.

# Observation

Waste is understood through two primary frames of observation. On the one hand, waste is understood as a concealed and illunderstood object, hidden from view. On the other hand, waste is also frequently portrayed as a mirror image of society: what we waste is evidence of how we live, love and work. Narration and analysis often depart from these impressions, attempting to politicize waste by unveiling the cloak of secrecy over it and illustrating how individual acts have large-scale consequences.

Drawing from the visual and sensory impact of waste, exposés and documentaries deploy perspectives ranging from didacticism to shock in order to educate readers about the secret world of waste infrastructure. However secret, waste is always already an artifact (think of Derrida on 'artifacuality' here): measured, represented and filmed by an array of mechanisms, including journalistic narrative, artistic performance, industry discourse and environmental regulation. In a sense, waste is over-represented. Despite this, waste continues to drift from public life and consciousness. Its material and sensory consequences are cordoned off into technocratic debates and technological problem solving. It is also difficult to access, because it is tightly guarded and complex. Where does one enter into issues about waste? Acknowledging that complexity is not a hindrance to contestation and critique, how does one observe a complex, large-scale infrastructure that is both difficult to access and constantly moving?

Following the identification of a site, we will design and undertake a number of sitebased investigations about the observation of an infrastructural phenomenon. Each research group will identify a scale and temporality of inquiry, medium of investigation and a method of recording their findings. We will begin with reading discussions and will develop a design for research. After presenting the research design in a public review, we will dedicate a number of weeks to setting up the site and techniques of inquiry and testing our methods of research.

# Task 1 Witnessing

### <u>Read and Review</u>

Abalos and Herreros. *Recycling Madrid* (Barcelona: Actar, 2001). [excerpts]

Engler, Mira. Designing America's Waste Landscapes (Baltimore: Johns Hopkins University Press, 2004). [excerpts]

Rogers, Heather. Gone Tomorrow, The Hidden Life of Garbage (New York: The New Press, 2005). [excerpts]

Royte, Elizabeth. Garbageland, On the Secret Trail of Trash (New York: Little, Brown and Company, 2005). [excerpts]

# <u>Interview</u>

Develop 8 questions for a hypothetical interview at a landfill site. Direct your questions towards an area of focus that is of interest to you. What do you want to learn about? Landfill chemistry? Methods of containment? Methods of recording contamination? How it is constructed? Policy issues? Community relations?

### <u>Visit</u>

When: Thursday October 6th, 9:30 am-12:00pm.

Where: 1445 Pletcher Road Model City, NY 14107 (716) 692-1272

We will be visiting the Modern Landfill that is managed by Modern Waste in Model City.

# <u>Research diary</u>

Following our visit to Modern Landfill, record your impressions in three to four descriptive paragraphs. You are welcome to write more if you want to. Think of this assignment as a research diary entry. What was surprising to you? What issues were raised that you would like to learn more about? Were your questions answered? What did it look like? What did it feel like to be there? Who did you meet? What did they say that you found interesting (or problematic)? How were we guided through the premises?

These questions are merely a guide. Feel free to reflect on whatever you like. As a rule of thumb, conclude your research diary entries with a number of questions that you leave for yourself. They can describe issues you want to further explore, or more general questions about the significance of the experience that you have reflected on.

# Task 2 Brainstorm!

Schematically identify the following:

1. What issue would like to investigate?

2. Scale and temporality of inquiry: how big? what duration? will it be repeated? if so, how many times? indefinitely? what limits will you set on it, in terms of its scope?

3. Medium of investigation: what techniques will you employ to conduct your research? what materials?

4. Method of recording your findings: how will findings be recorded? will the recording of findings be simultaneous with your medium (ie: video), or will it follow an initial set of experiments after the fact?

Don't be afraid to take on unformed ideas, or ideas that may seem unfeasible. This is supposed to be a brainstorming session. Sketches or quick diagrams (think: trace paper!) will be useful, as are photomontages or photographs/drawings/etc that you think describe particular components of your idea. The emphasis is less on aesthetics and more on ideas.

# Task 3.1 What is your site?

## Describe your site

What is your research site? Remember, a site is only partially a place or physical territory. It is partly a place, but also a set of issues and physical processes that are entangled with each other. In order to identify your research site, identify an issue, an object of inquiry and the boundaries and scale of this issue. Each of the three components of your research site should be described in a paragraph, and be accompanied by 4 images each, to be presented in class.

# [1] Issue

What issue or spatial relationship are you going to investigate? For whom or what is it an issue, and where is this issue currently contested? If it is not contested, why do you see it as a matter of concern?

# [2] Object

Though "object" suggests a singular physical thing, your object of inquiry will likely comprise a system of multiple objects, materialities and concepts. For instance, contestations over the line of curtilage involve a number of physical things (plastic bags, containers, grass or pavement, and so forth) as well as a world of ideas about where such a line is drawn, and how it is materialized. What will you observe? How is your object of inquiry defined? What is composed of? What is it, materially? If it is an immaterial process (such as a social process), how is it materialized? How is it represented as a system?

# [3] Boundaries

What is the scale of your problem? How are boundaries and limits drawn around it? How are they represented?

# **Task 3.2** The Voluntary Prisoners of Waste

### <u>Image</u>

Exodus, or, The Voluntary Prisoners of Architecture (1972) envisioned a world where its inhabitants choose to be imprisoned by architecture. Architecture, burdened with the

Drawing from your initial sketches of minor and major interventions into waste infrastructures, compose 3 schematic images of what the world that you are proposing looks like, and join them with a caption that describes what we are seeing. Who is using it? What kind of objects, people and systems does it bring together? What is your point of view? Irony? Humor? Hope? Images can function chronologically in relation to one other, or may also represent different responses to your system that are simultaneous. Either way, you are telling a story about how your system functions as a technology of daily life.

# Task 4 Instability and Method

What are you going to observe, and how are you going to observe it? Be open to unpredictable evidence and heretofore unconsidered questions. Many of the case studies we examined earlier in the semester were unable to foresee what the results of their research and performance might be. Nonetheless, each project set up clear constraints and limits to their projects, based on background research or embodied experience. In order to set up the limits and terms of our research, we will focus on moments of instability, rupture and escape.

# <u>Understanding instability</u>

The instability of infrastructural systems make visible how these systems are shaped by a web of intersecting forces, including the demands of social life. In order to understand pressure points that we might identify within the waste stream, learn more about your object: time, organic waste, air quality, concepts of public space, and so forth. Continue to read about how each of these elements factor into a larger waste stream. What is their composition, materially or socially? Where are these materials or social forms unstable or contested? How is instability currently mediated or controlled by the system that you are examining? Release valves? Social mores and codes? City ordinances? Membranes? Buildings? Transport vessels? Think about instability as a productive force, rather than as a failure of the system to perform properly. What kind of consequences does the instability of your object have for social and material inscriptions of space, such as boundaries, codes and membranes? Are there zones of potential instability that are not currently acknowledged?

Propose four images or drawings that describe what you will observe. Write a short paragraph to accompany each of these images. If you have more images that you want to show, please include them.

function?

How will you observe or test instability? How will you record your findings? In a paragraph and a number of sketches, describe how you will conduct your research, and what techniques you will use to record your findings. Walk us through how it will work. Think of designing your method with the same rigor you would design the assembly of a design project. Part of research design is projecting how you will conduct a research exercise. Where will it take place? How long will it take to conduct? What will it observe? What techniques and supporting equipment will you use to conduct your research? Is your relationship one of intrusion, benevolence, antagonism or aloofness?

impossible expectations of freedom, confronted a world of increasing containment (think of the Berlin wall, which Koolhaas was also researching at the time). Not unlike our investigation of boundaries about waste, the project suggested that containment was not a hindrance to politics but its conditions of possibility.

In The Voluntary Prisoners of Architecture, users occupy schematic spaces comprised of art povera textures and rudimentary drawings. Representation is schematic, but evocative, coupling the political image of mass exodus and the confrontational, collissive juxtaposition of diagrammatic shapes and media filth. In this respect, the project is not imagined as a proposal to be built, but a commentary on the limits and possibilities of architecture

- 2 images/drawings: how does your object
- 2 images/drawings: how is it unstable, or potentially unstable?
- Identify a method of observation

# Task 5 **Research Design**

The research design is comprised of your cumulative work throughout the semester. We will reflect on your work through two platforms. One, you will draw from your completed and ongoing work in order to produce a "user's guide" to your research method. The user's guide is comprised of a focused explanation of your research method, as well as speculation about how you imagine it to be represented. Two, you will present your research proposal to a group of visiting critics, building on the presentation you have already presented and developed

#### <u>User's Guide</u>

Imagine having to explain your method to another person who will follow through and develop some of your research methods in the future. Respond to each of the following questions in a paragraph and an image (or multiple images/ drawings).

What are you going to observe, and how are you going to observe it?

Where will it take place? What is your research site? In what ways in your site a place? An issue? A system?

What techniques and supporting equipment will you use to conduct your research?

How will you record your findings?

Through what medium will you reflect on your findings?

How do you intend to represent your research to an audience? A film? A book? A map? An installation? A website? Who do you imagine your audience or user to be?

Consolidate all of your responses into a lettersized document that includes the text and accompanying images. This document should function in support of your final presentation.

#### <u>Bibliography</u>

Please include a comprehensive bibliography of your sources for your research project. (Format should be Chicago Manual of Style/Turabian)

#### **Research** Presentation

Your proposal for a program of research will be presented to a group of critics. As part of the presentation, we will review the case studies and your insights about these interventions. We will then move into a discussion of each research project. The presentation should respond clearly to the questions posed during the past few weeks about what you are observing, how you are observing it, and how you intend to reflect on these observations. Please also speculate about you intend the research work will be represented.