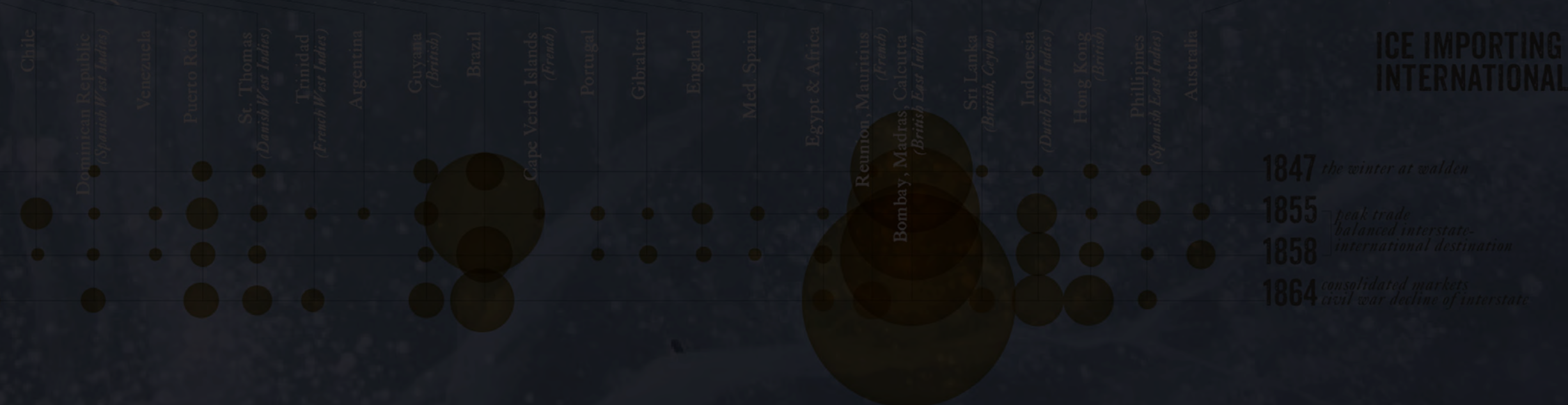


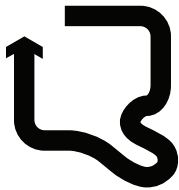
Backhaul, Ballasts, & Trade “Triangles”

LOGISTIC LINKS & MATERIALS



SITEATIONS





ASPIRATIONS

Trained as a ‘researcher’ and a ‘maker,’ I aspire to craft visualizations, exhibitions, and courses that both inform and invite engagement. I enjoy explaining socio-material processes, but am interested in collaborative projects and inquisitive peers.

AGENDA

My research focuses on landscape logistics and media ecologies. The former explores the operations and resources that underlie public works. The latter examines the communications networks indexed by land-art’s territorial traces.

EXPERIENCE

I was at Stoss Landscape Urbanism for 4+ years. As an associate, I led design and competition teams as well as coordinating internships and proposals. Recently, I left to focus on Siteations, a research and collaboration-oriented studio, and to gain additional coding and digital skills at NYU’s program in Interactive Telecommunications.

EXPLORATIONS

I split most of my time between code and archives, stacks and stats. If this sampling intrigues you, please stop by my portfolio site, [siteations.com](#), for projects in-process. Additional sites, courses, and projects are accessible there.

MEG STUDER

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GITHUB [siteations](#)

STACKOVERFLOW [siteations](#)

WWW.SITEATIONS.COM

RESEARCH GRAPHICS

5

LANDSCAPE PROJECTS

49

MANIFESTOS TO MOVIES

91

My research falls into the overlapping territory of material culture, media studies, and infrastructural urbanism. I use infographics and mapping to address the lost or forgotten socio-material operations behind both seemingly stable infrastructure and communication networks. Coming out of art and architectural history, emblematic objects and specific sites act as my lens onto the intersection of big, bureaucratic data and mundane resource usage. On-going works are noted with ~.

7	SALT ENABLING EMPTINESS	
13	PRISON SOLITARY SOCIABILITY	
19	POUR FEEDBACK FLOWS	
		SPECIOUS SPACE PAPER 27
		AERIAL ARTS~ PROJECTION 31
		EDGE OPERATIONS~ WALDEN 41

This project excavates road salt, one of New York’s many ubiquitous, geologic engagements, unpacking the logistical networks enabling seasonal use. Part of a collaboration with Smudge Studios, we exhibited boards, booklets, and annotated environments as on-going research into the anthropocene appropriation of lithics. Initially hosted at Columbia’s Studio X in New York, a second, blog-formatted, series are will be posted at [landscapeurbanism.com](#) this year.

Collectively, these salt infographics elaborate on the energy, envelopes, agents, trips, trade, territories, mechanisms and symbiotic scenarios lodged behind salt’s annual margin of melt.

DATE 2011

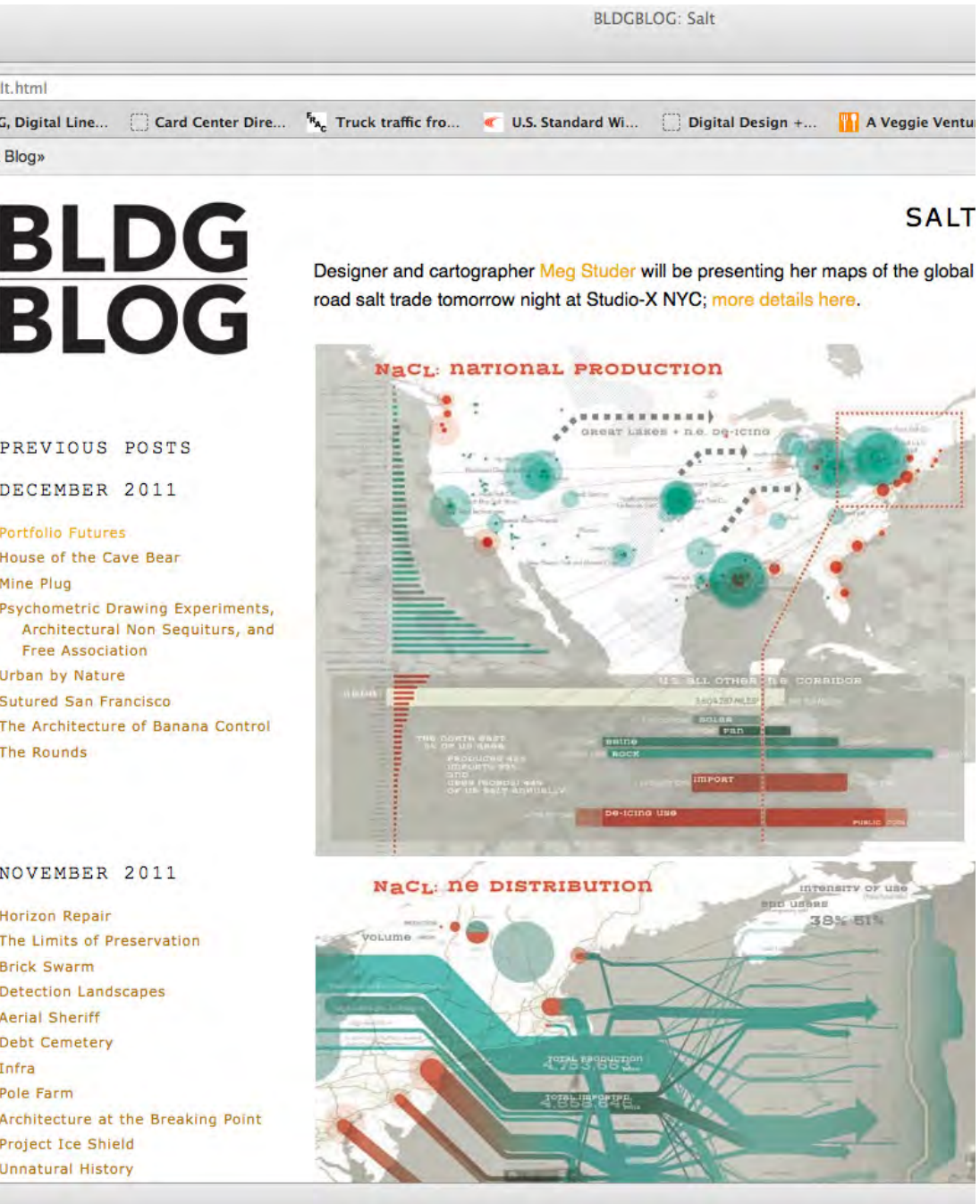
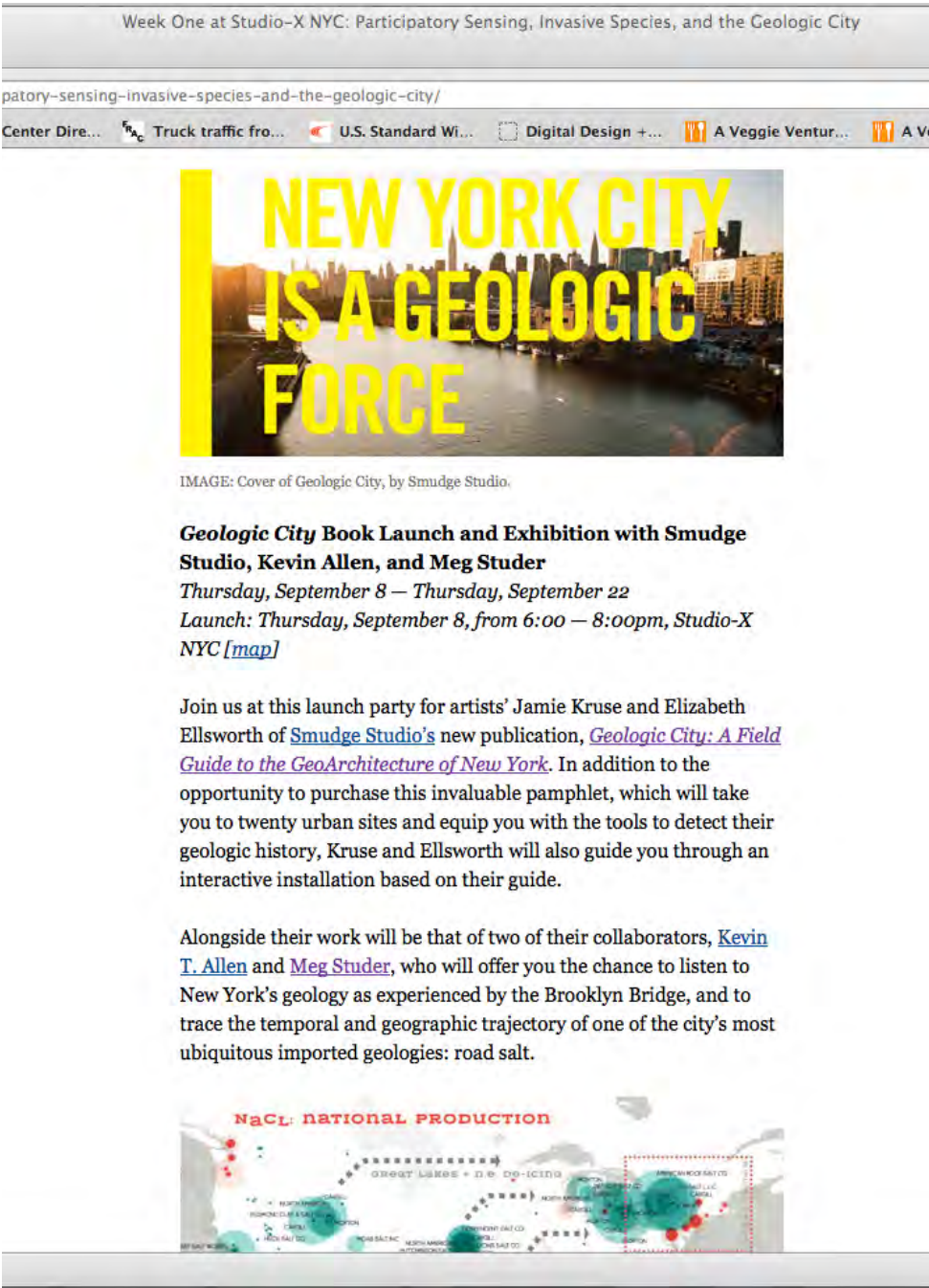
ROLE collaborator, designer

EXPOSURE

- 2011, Studio X, Columbia U.
- 2011, BldgBlog, Edible Geographies
- 2013, Scenario Magazine

TOOLS/DATA

- gis
- ai
- psd
- mixed: usgs, state contracts, logistics records

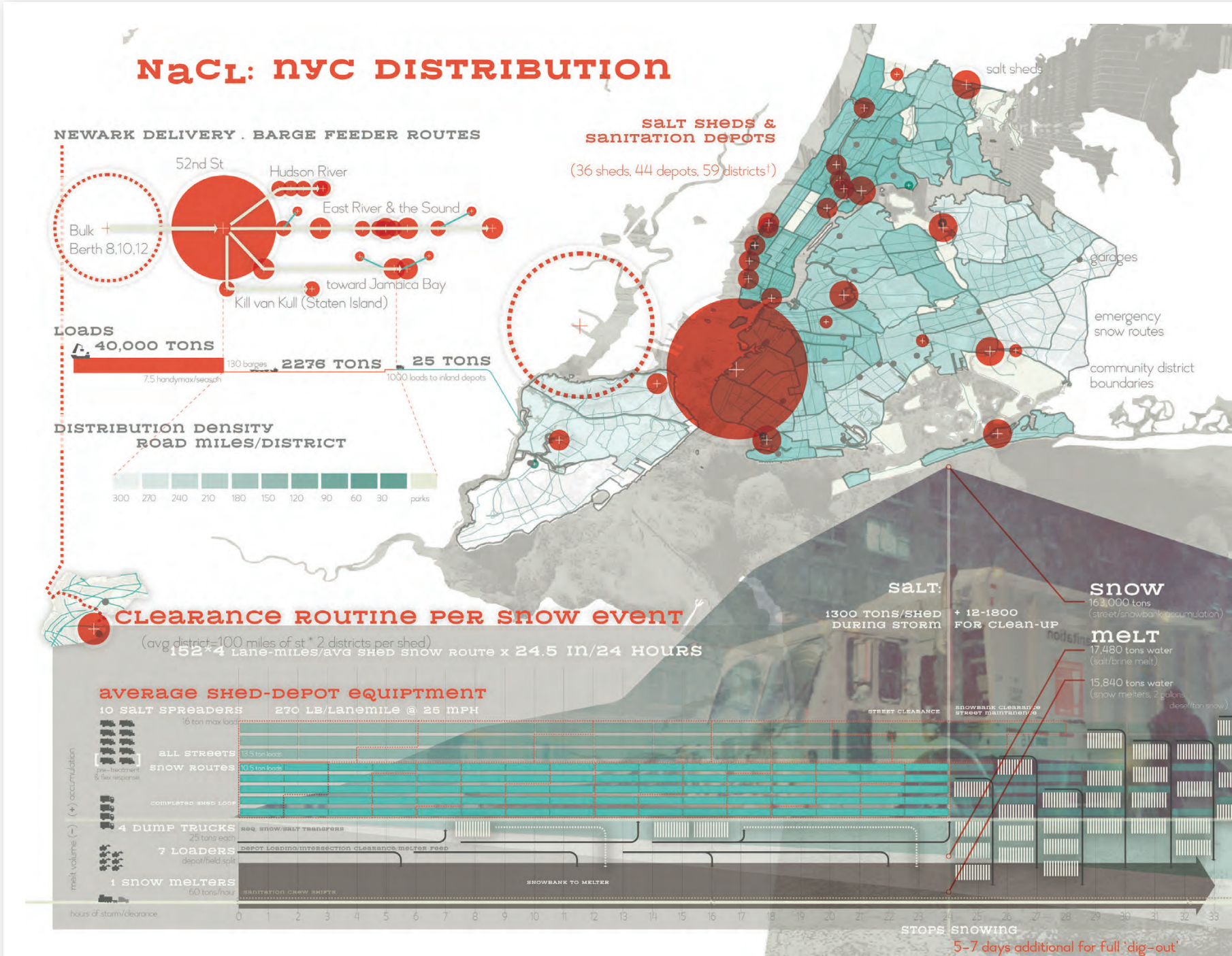
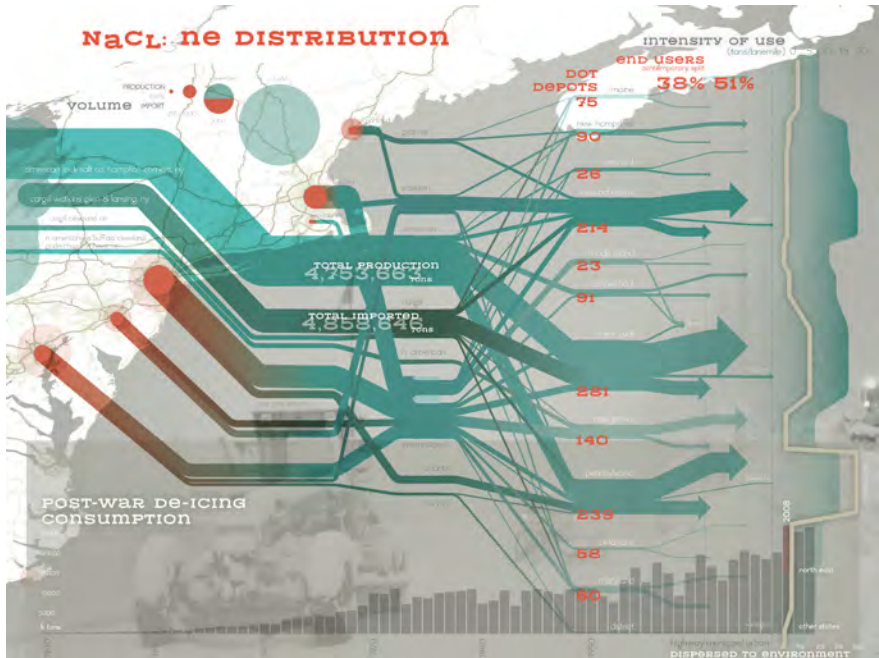
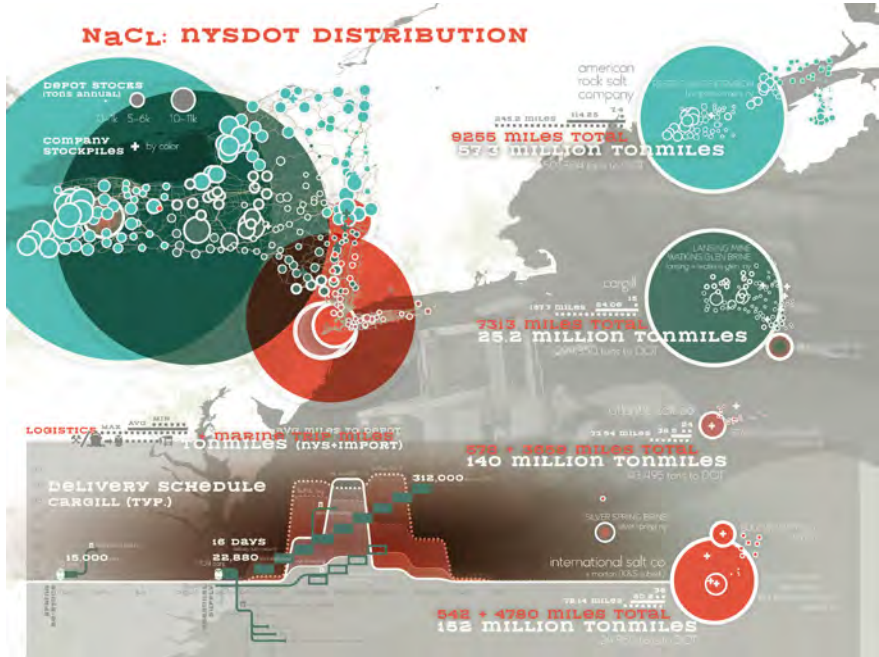


Salt has long been synonymous with imperial reach and mobility. Salt monopolies fueled and financed Venice, Portugal, the Mayans, and the British in India (for a time). It funded Napoleonic wars (the Gabelle), the rise of industrial Liverpool and corporate colonization.

Salt's ability to preserve meant that whoever controlled the flow of salt controlled internal markets (internal labor forces), cargo and shipping, as well as profitable, political alliances. The analogy of historic salt monopolies and contemporary petrol politics derives from these exaggerated, geo-political dependencies and their obvious spatial impacts.

Today, salt is readily available due to industrial mining, brine extraction and commercial chemistry. Of course, ubiquitous access underpins more than just food preservation. Our everyday interactions with salt fall in the processed form of chlorinated water, paper products, neoprene fabrics, vinyl upholstery, acrylics/plastics, detergents, digital semiconductors, and (at 52-3% of U.S. use) road salt.

As the later, it is a thoroughly modern mineral: It keeps freight moving. It opens arterial routes. It sets speed in the wintry north. Millions of tons, millions of moments, millions of dollars are finally figured as emptiness and access.



New York City, Boston, Philadelphia and Baltimore, all fight snow with imported salt, waterborne local distribution networks, and extended sanitation shifts.

NYC's annual allowance – about 300 thousand tons of Chilean rock salt – is supplied by International Salt Co. through the port of Newark. From there, International's feeder barges transport stock to major depots in Brooklyn, Albany, and up to New Haven. In transit between (and pulling from) these stocks, International is able to deliver to roughly half of New York's salt sheds (about 20 sit direct on the water). The city sanitation department uses its 282 loaders and 149 'cut-down' trucks to transfer supplies to the remaining 16 inland domes and sheds.

In a storm event, the average depot has a little over 200 miles of road to cover and clear. Even with concentrated attention to emergency routes (152 miles with 2-4 lane clearance) it takes 5 plow/spreaders almost 3 hours to loop the emergency routes once, distributing approximately 82.08 short tons of salt per loop. Covering all the streets takes 3 salt spreaders a full 6 hours and 5 salt re-fills. An average driver clears around 450 miles, plowing just over 9,000 tons of snow in a single 12 hr shift. When a storm dumps 223,000 tons of snow per depot in a single day, complete clearance can require almost 7 days of continual salting, vehicular clearance, and mechanical melting.

Sources:
* DSNY: Garage Locations, Proposed Garages & Salt Sheds, NYC budgets 08-10 (capital for shed repairs). Shed/depot locations (not all 36 locations determinable).
* DSNY: Annual Report, 2009, Equipment/salt use/crew shifts/ melter speeds.
* International Salt/Emprimar Shipping: Services- Business Line 1 Salt Transport.
* Water Quality Research: Renosdotter, et. al. Road Salt Influence on Pollutant Releases from Melting Urban Snow Disturbed vs. still salting melt speeds.

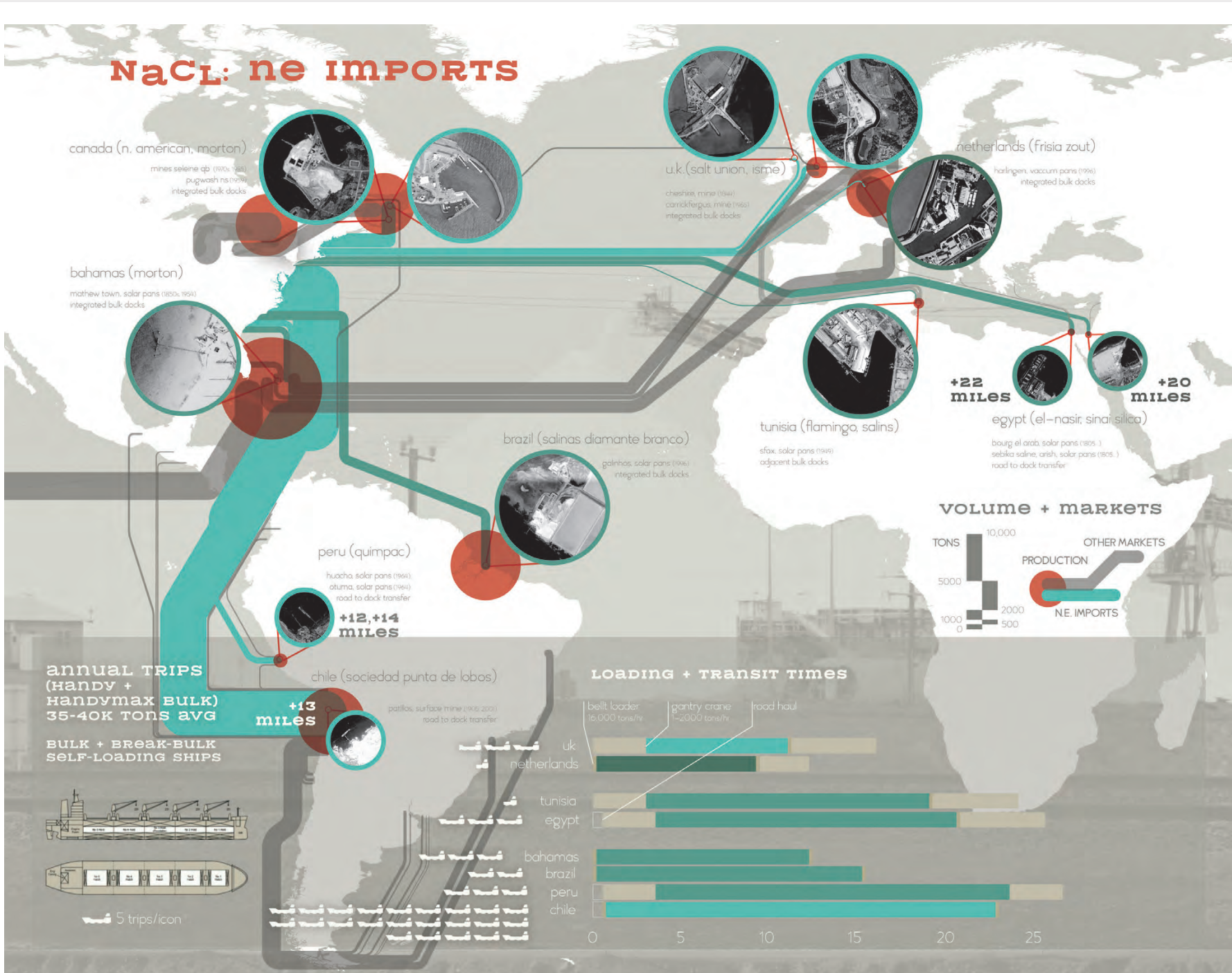
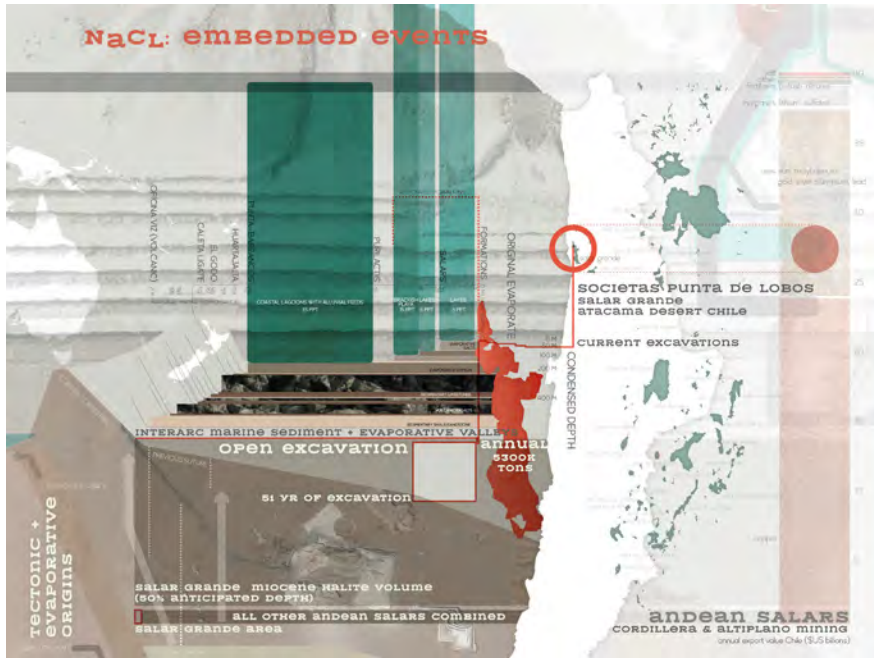
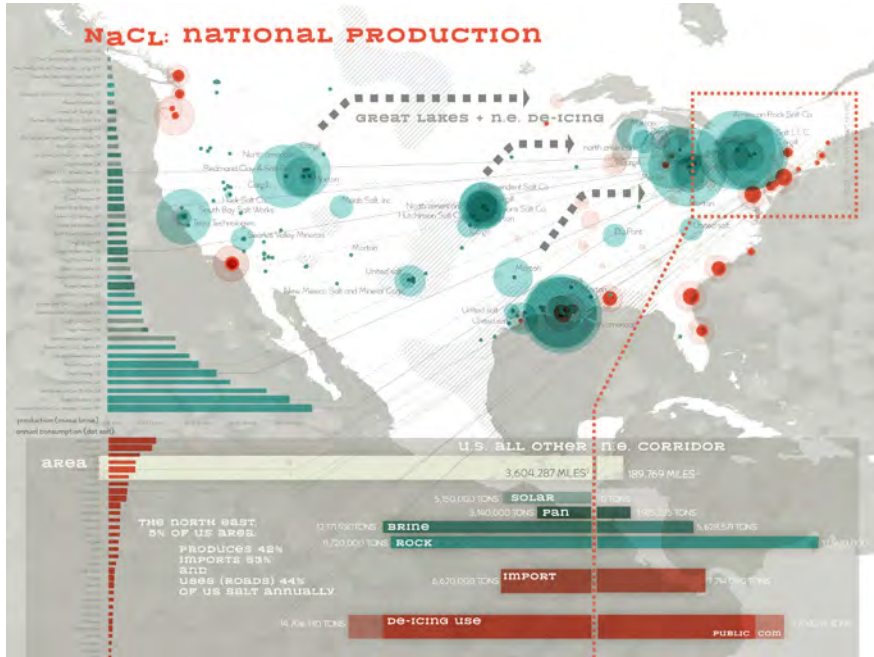
ENABLING EMPTINESS

SALT

Today, the N.E.'s consolidated yet complex salt distribution system covers nearly 90,000 miles of highway. Eight major corporations supply salt to over 1200 state DOT depots and countless municipal buyers. Approximately 51% of the N.E. de-icing market (over 4.5 million tons) arrives annually from the Caribbean, S. America, Europe, and N. Africa. The efficiencies of water transport—lower costs, less congestion, larger loads and better fuel efficiency—are supplemented by trade agreements and 'return' goods from the East Coasts' major free trade zones.

Norden, hired by Empressa for International Salt Co, provides an interesting example. Norden's ships run salt from Societas Punta de Lobos in Chile north to Boston. From there, they back turn south, making further deliveries at Newark, Philadelphia, and Baltimore. As they unload salt, handi-max cargo holds are re-filled with grains bound for Columbia and hard coal destined for South America. In Columbia, Norden 'top's up' with more coal, which is finally delivered in southern Chile, for electric generation.

In this trade triangle salt is the 'backhaul' good. Thus, Norden capitalizes on salt's inelastic demand to offset shipping costs for more lucrative wheat (\$200-400/metric ton) and coal (\$100-150/metric ton). In doing so, the North East becomes entangled in Chilean energy politics.



At Baltimore, Newark, and Boston, over 4.5 million tons of salt arrives annually from the Caribbean, S. America, Europe, and N. Africa. The efficiencies of water transport— lower costs, less congestion, larger loads and better fuel efficiency— have been critical in driving NYC's barge feeder alliance as well as capturing 51% of the N.E. de-icing market.

The instruments of modern bulk loading— mechanized belts and massive gantry cranes— enable between 2–16,000 tons/hour to be loaded into 40,000 ton cargo holds, operating with a scale and speed lacking in land transfer. These industrial loading mechanisms, often built into today's standardized handysize and handymax vessels, make any deep river or mid-sized berth into an ideal drop or pick-up point for multimodal cargo. To a certain extent, the rise of industrialized shipping has drawn production towards the sea as well, making the traditional and time intensive production of salt in solar pans and evaporative pools economically viable. For instance, in Sfax, Tunisia a series of inland shallows created by the port's post-war extension was opportunisticly tiered by Salins for use as commercial salt pans, capitalizing on adjacency to reach European markets.

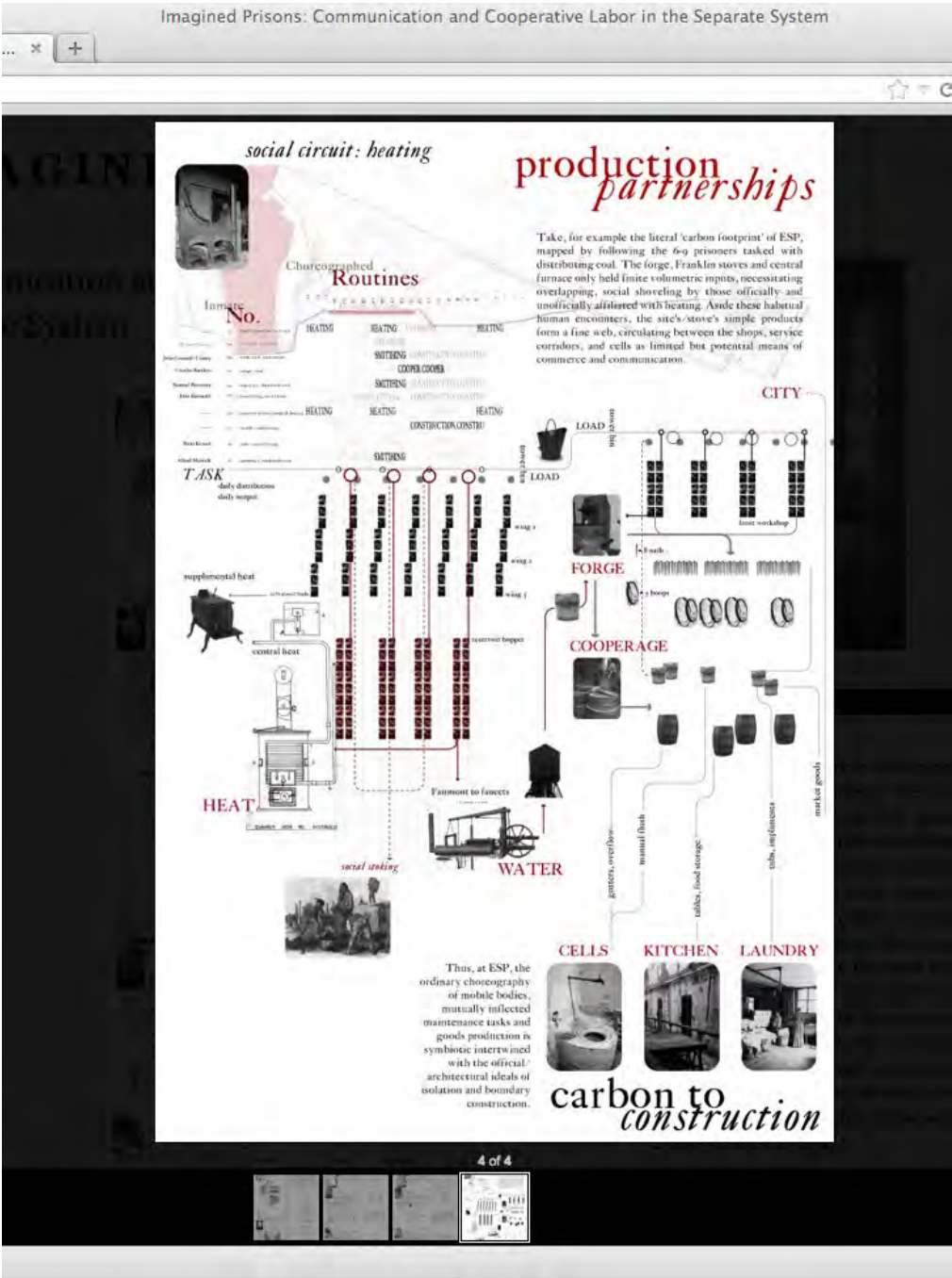
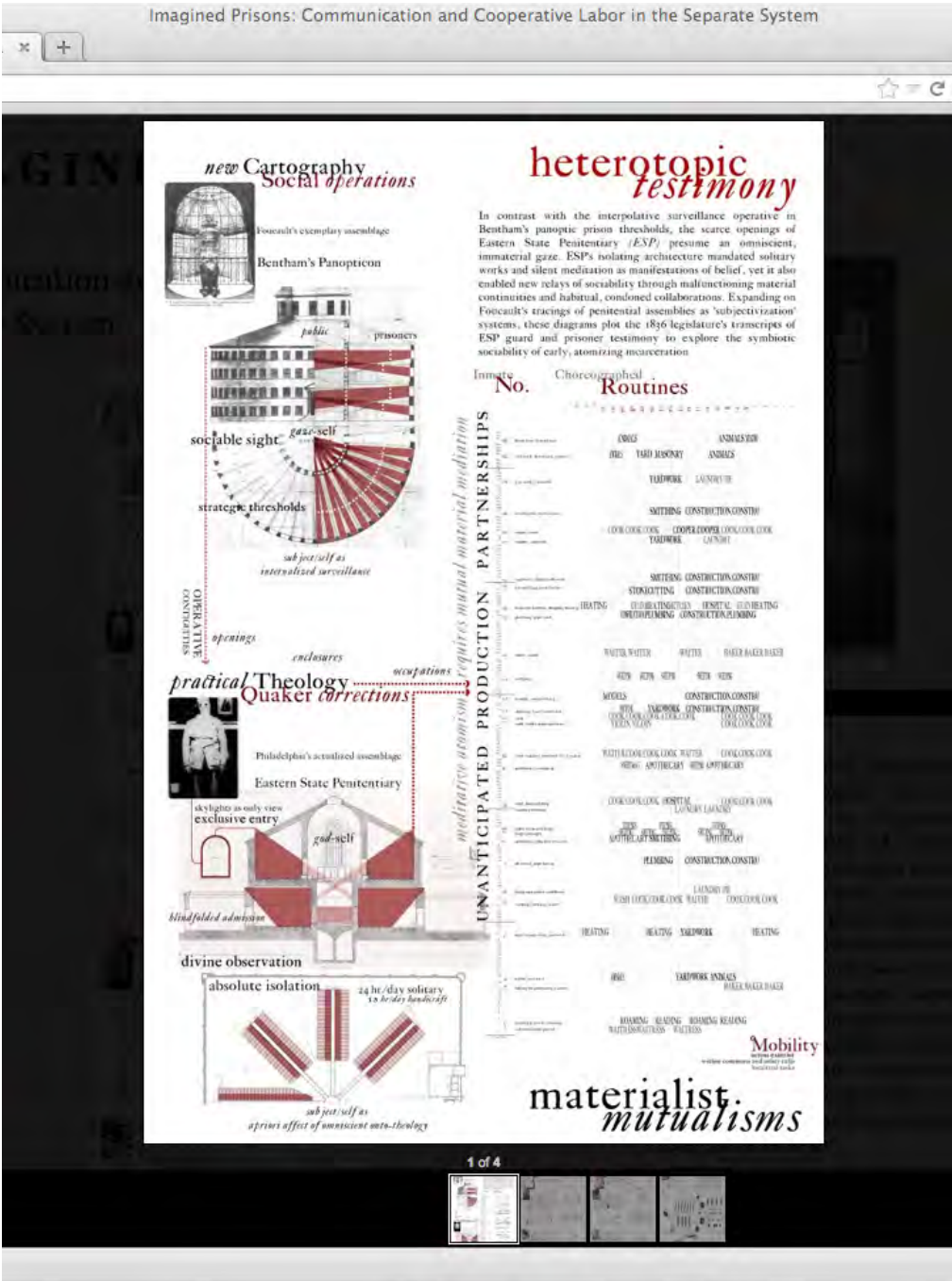
Room-and-pillar salt mining, where possible, has also evolved to profit from water-borne transport. Like the Detroit works beneath the Great Lakes or the Gulf-Coast domes of Louisiana, most of the NE's Canadian and European imports come from mining operations adjacent to or directly under-seas. At ISME and Union (UK), Morton and N American (CA) belt loaders snake directly from production shafts to shipping berths and customized canals. While Union's mines date from Roman and Victorian eras, the majority of the works supplying the NE, (and all those with internal docking facilities) have been developed in the wake of post-war shipping standardization. One can say that, as a driver for today's salt market, the need for open roads has only been matched by the advantages of the open seas.

sources:
* USGS Minerals Information: Salt Mineral Yearbook 2008, adjusted import + use volumes.
* Newark Port Authority vessel tracking. Confirmed liners/routes and turn-around times.
* Salina Corporate website. Tunisia: The Sfax salt works.
* Misc. Google Earth facilities locations.

These diagrams plot the Eastern State Penitentiary (ESP) warden and prisoners testimony before the state legislature in 1834/35. Drawing out mundane, material continuities and condoned collaborations, they examine the architectural feedbacks within the drive for atomized Quaker reflection. Expanding on Foucault's study of penitential discipline, this enquiry elucidates the operations embedded between openings—the inert, but generative material resistances of early solitary incarceration.

Initially a graduate research project, a second version of the infographics were posted at imaginedprisons.org, Caleb Smith's companion blog to *The Prison and the American Imagination* (Yale U, 2009).

- DATE 2008, rev. 2009
- ROLE researcher, designer
- EXPOSURE
 - L780 Da Cunha
 - 2009, imaginedprisons.org (ed. Caleb Smith)
- TOOLS/DATA
 - gis
 - ai
 - psd
 - mixed: *The History of ESP* (1836), HAB/HALS reports, misc. Philadelphia urban histories



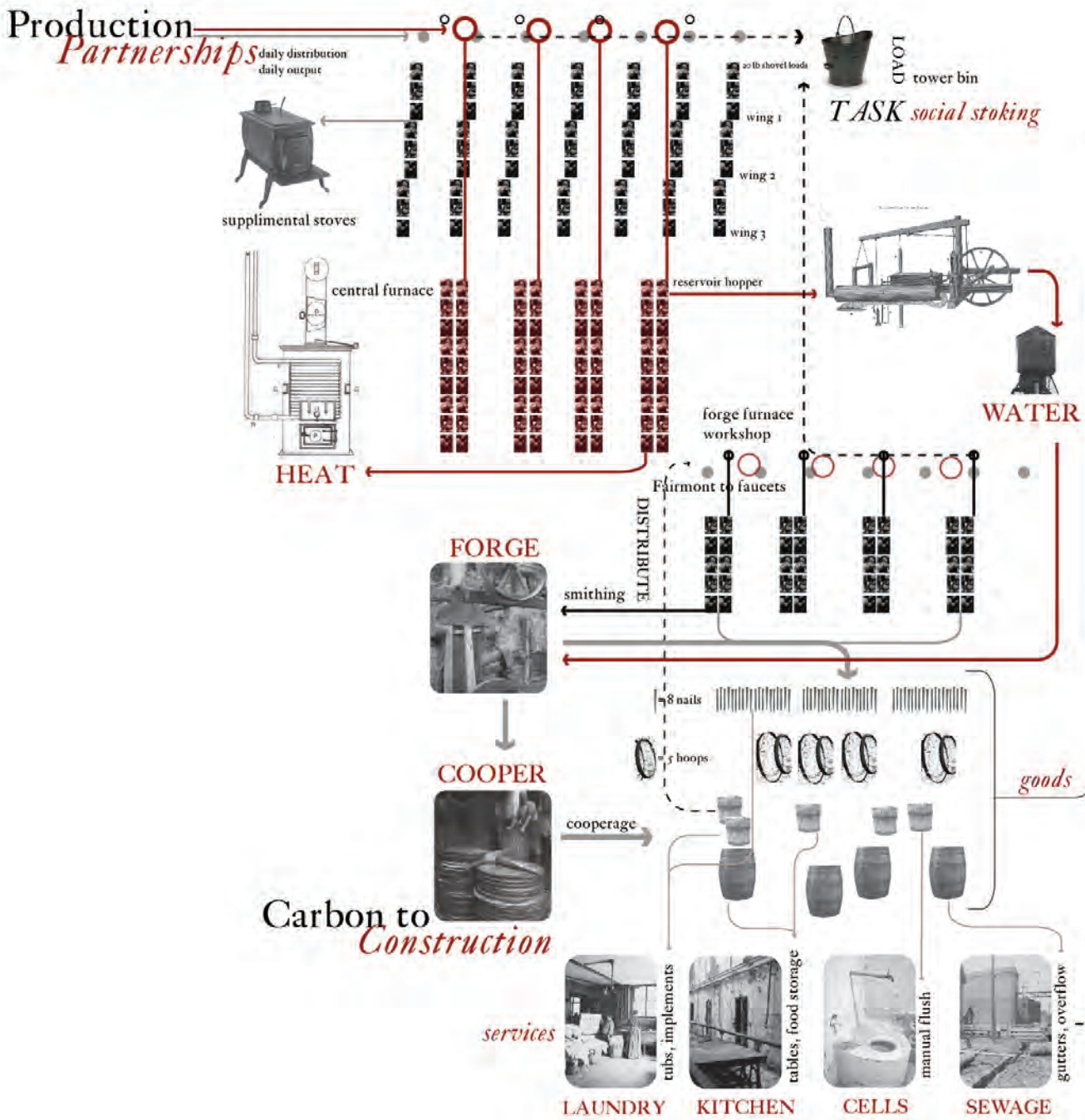
PRISON

Yet more than consumable services, the actualization of cellular isolation and the (uneven) advancements in climate control meant that ESP was prone to symbiotically exaggerated externalities. The early central heating required a supplemental, satellite system of franklin stoves. The plumbing, sitting above the city's reservoir, required a secondary water-tower and coal-fed pump to maintain pressure. And yet, because of inadequate valves, the lowest and last cells in this gravity-fed system frequently flooded. As a result, the well-aired hilltop prison became a haven for malaria.

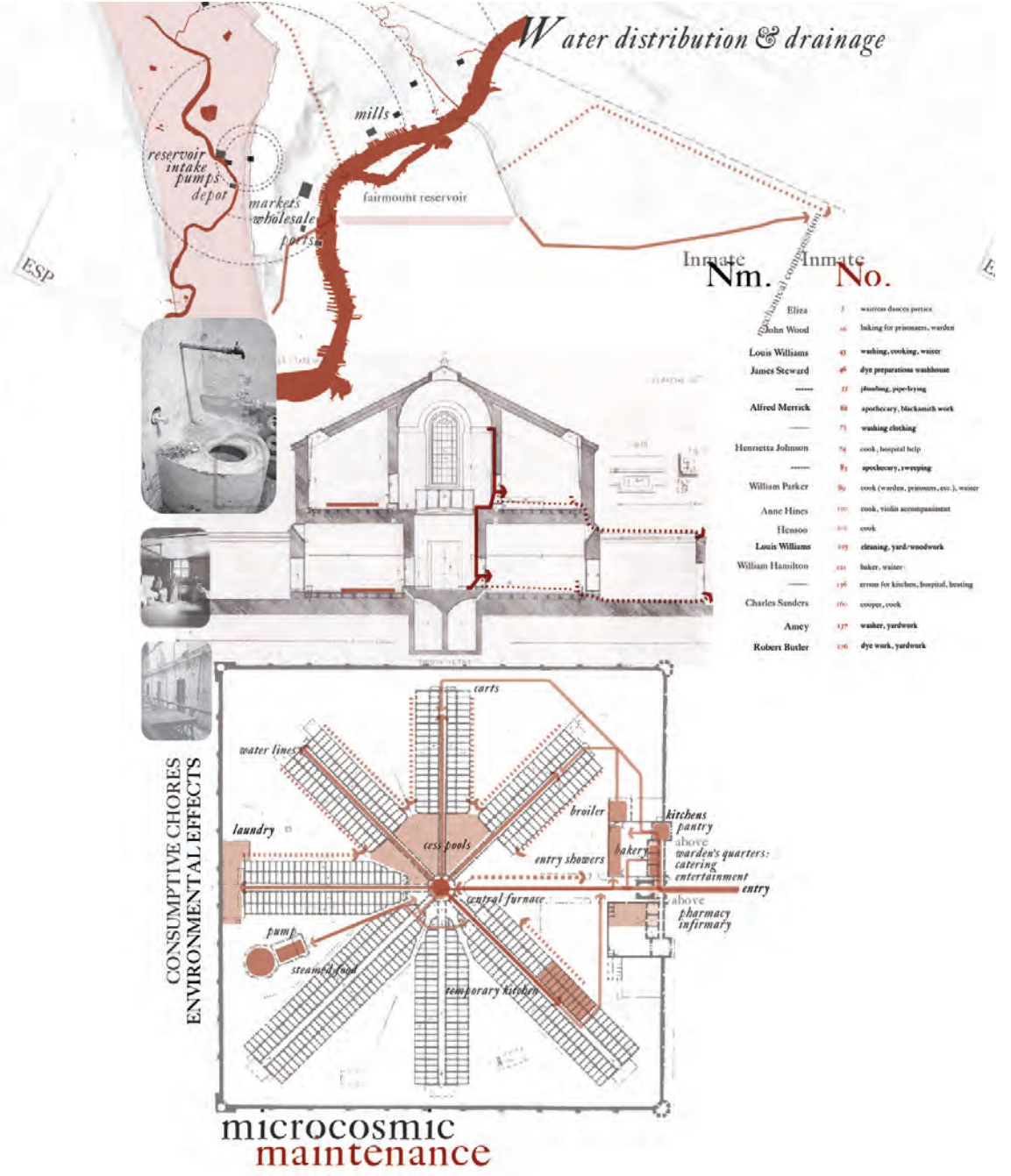
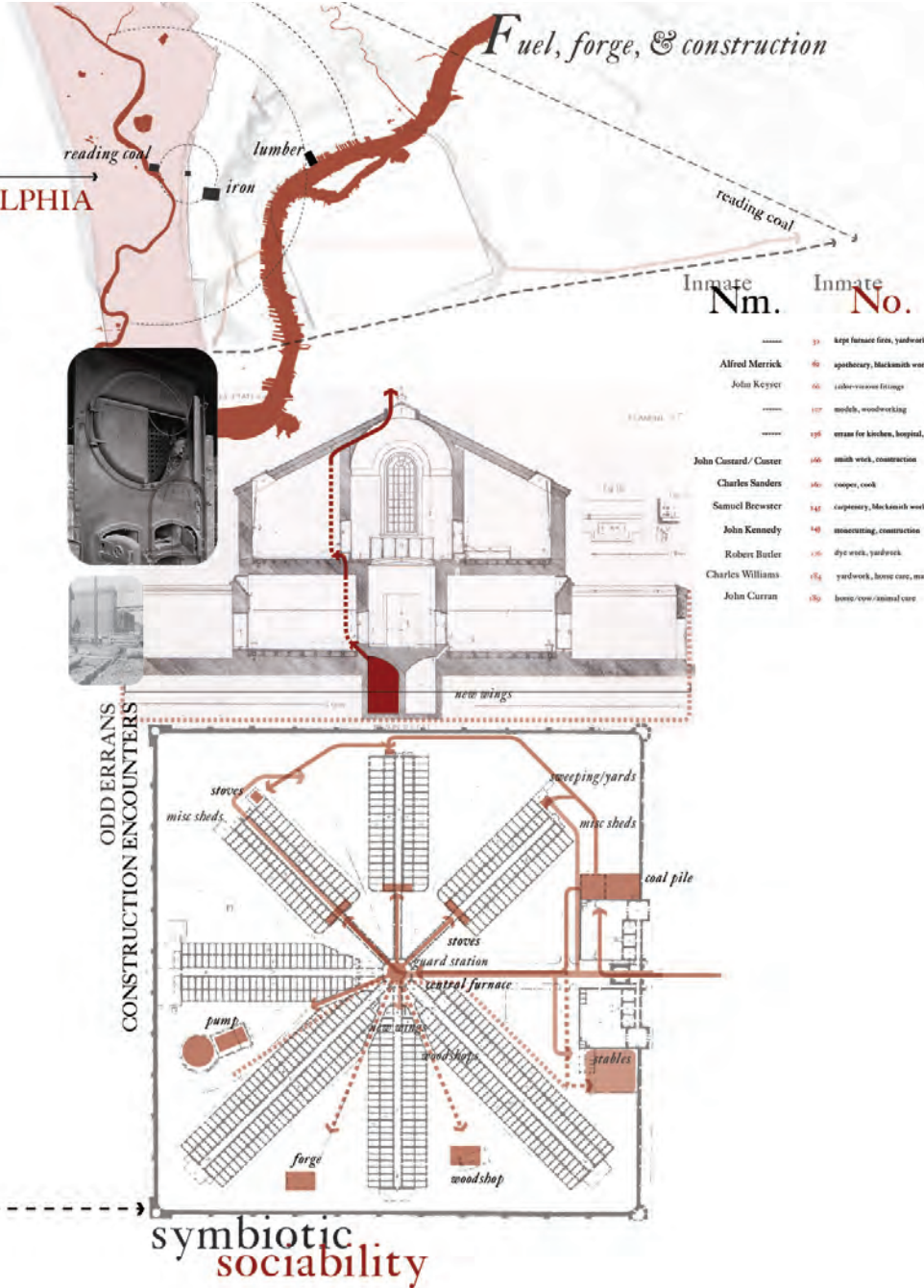


From extra infirmary workers to constant stove stokers, the temperamental material feedback between location, urban utilities, and HVAC innovation served as generative social infrastructure requiring more, rather than less, interactive labor and site circulation.

Take, for example the literal ‘carbon footprint’ of ESP, mapped by following the 6-9 prisoners tasked with distributing coal. The forge, Franklin stoves and central furnace only held finite volumetric inputs, necessitating overlapping, social shoveling by those officially affiliated with heating (as well as outside laborers from the workshop, the kitchens, etc). The site’s servicing and products form a fine web, circulating between the shops, service corridors, and cells; a limited but potent means of commerce and communication. Thus, at ESP, a whole condoned choreography of maintenance tasks and internal goods production was intertwined with the official ideal of social segregation and boundary construction.



PHILADELPHIA



Robert Smithson's *Concrete Pour* exists as a few photos, regional maps, and an audio recording of Smithson's instructions (for the Chicago Museum of Contemporary Art's (MCA) 'Art by Telephone' show).

This project, forthcoming in the *Third Coast Atlas*, excavates Smithson's *Pour*. These mappings and diagrams start from concrete as material and chemical composite, socio-economic infrastructure, and strategic energy entrainment. Drawing from Smithson's ephemera, they ask how we might alternately explore the new tectonics and territories of process art. Re-tracing his charts and xeroxes, we can see how the Great Lakes' limestone and concrete negotiate, negate, and redefine distance, engaging contemporary questions of medium and McLuhan in their own way. Instead of mere entropic matter, the *Pour* becomes an urbanist guide to the inter-dependencies of industry.

DATE 2010, forthcoming

ROLE researcher, designer

EXPOSURE

- *Third Coast Atlas*, Ed. Charles Waldheim, Mason White, Clare Lyster

TOOLS/DATA

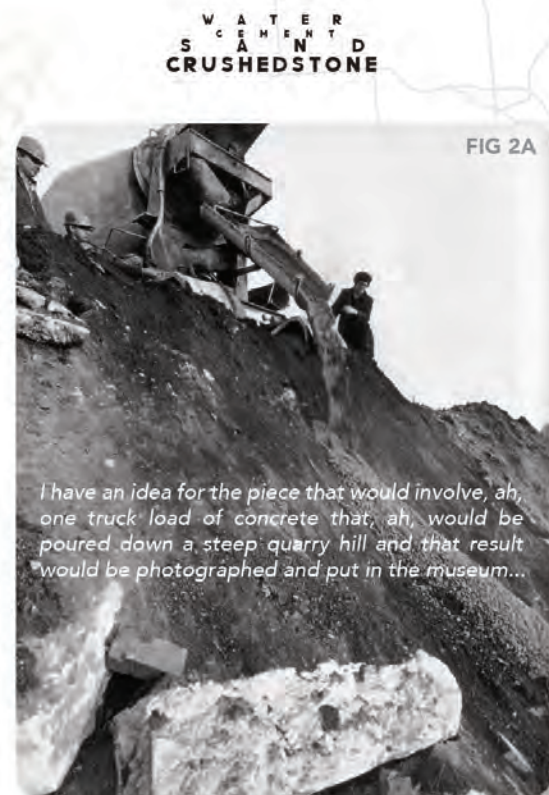
- gis
- ai
- psd
- mixed: Smithsonian archives, usgs & state mineral records, diversion, power, & water-use data (late 1960s, present)

GRONSON +
VAN DER MARCK +
CREW EXECUTION



CONCRETE POUR

DOYDENAS +
VAN DER MARCK +
CREW EXECUTION



[Are you talking about the textures and the continuity or the pile?...]

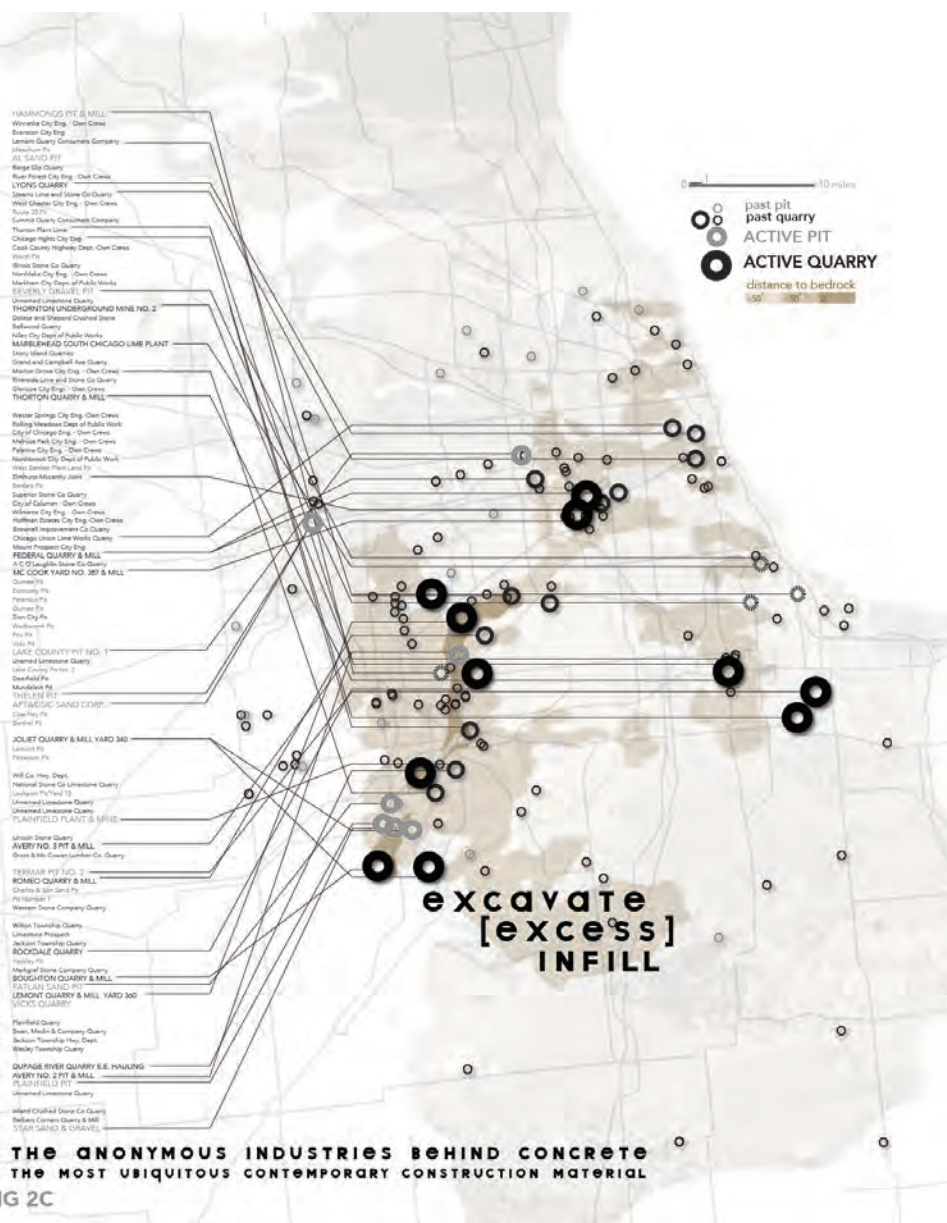
It has that, it moves, coming out of the movement, that movement is kinda lava-like and it freezes. I think the things is to get the slow movement of the fill, ah, that's gradual in the end until it hardens. That would be the basis to show the slow cover of seeps.

SMITHSON +
VAN DER MARCK
CORRESPONDENCE



FIG 2B

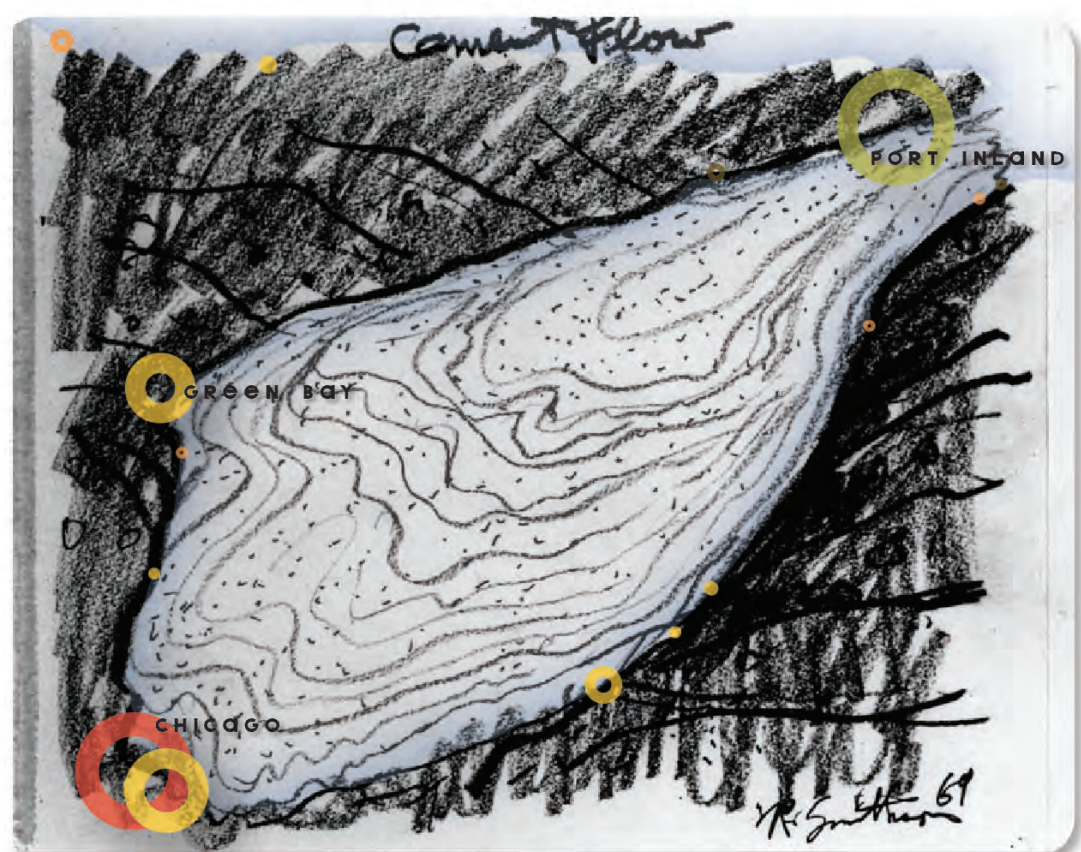
RUINS IN REVERSE



Like the MCA's choice of telephonic communication (in the age of early computing), concrete is a thoroughly modern, but hardly novel material, paving the ring roads of efficient evacuation and post-war suburban sublime.

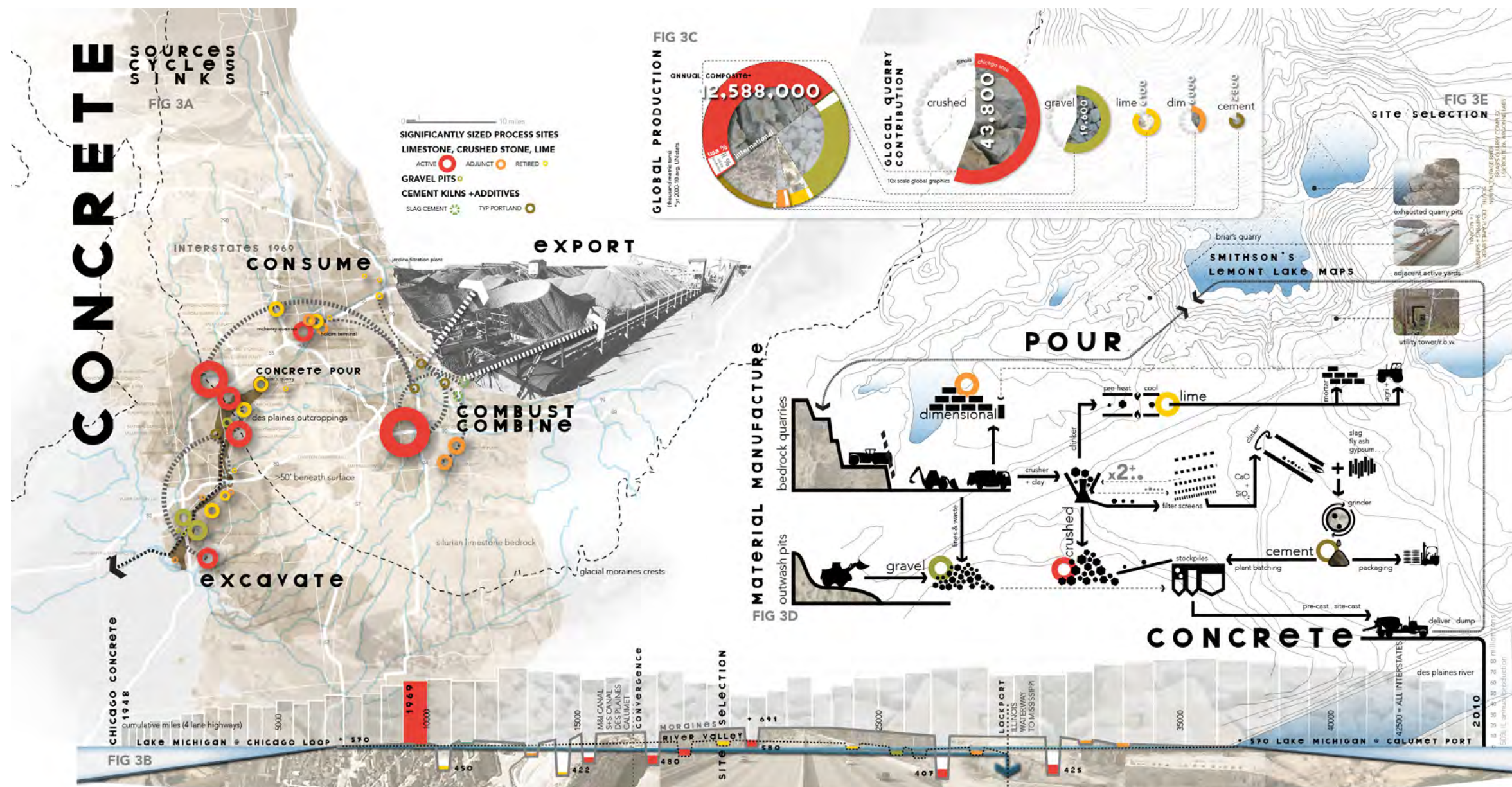
In its immediate context, the *Pour* sits directly amidst Chicago's historic and active limestone quarries. Smithson's material juxtaposition—source and product—draws attention to the larger, adjacent sites and sinks of mineral processing. It points to the cumulative, entropic reification of Chicago concrete as both a complex, composite material and generative diffusion mechanism.

Thus, along with the instrumental mass and materiality of concrete, Smithson's project explores pouring's incomplete action and the potential of indeterminate directionality.



Lake MICHIGAN
(SMITHSON PROJECTION)

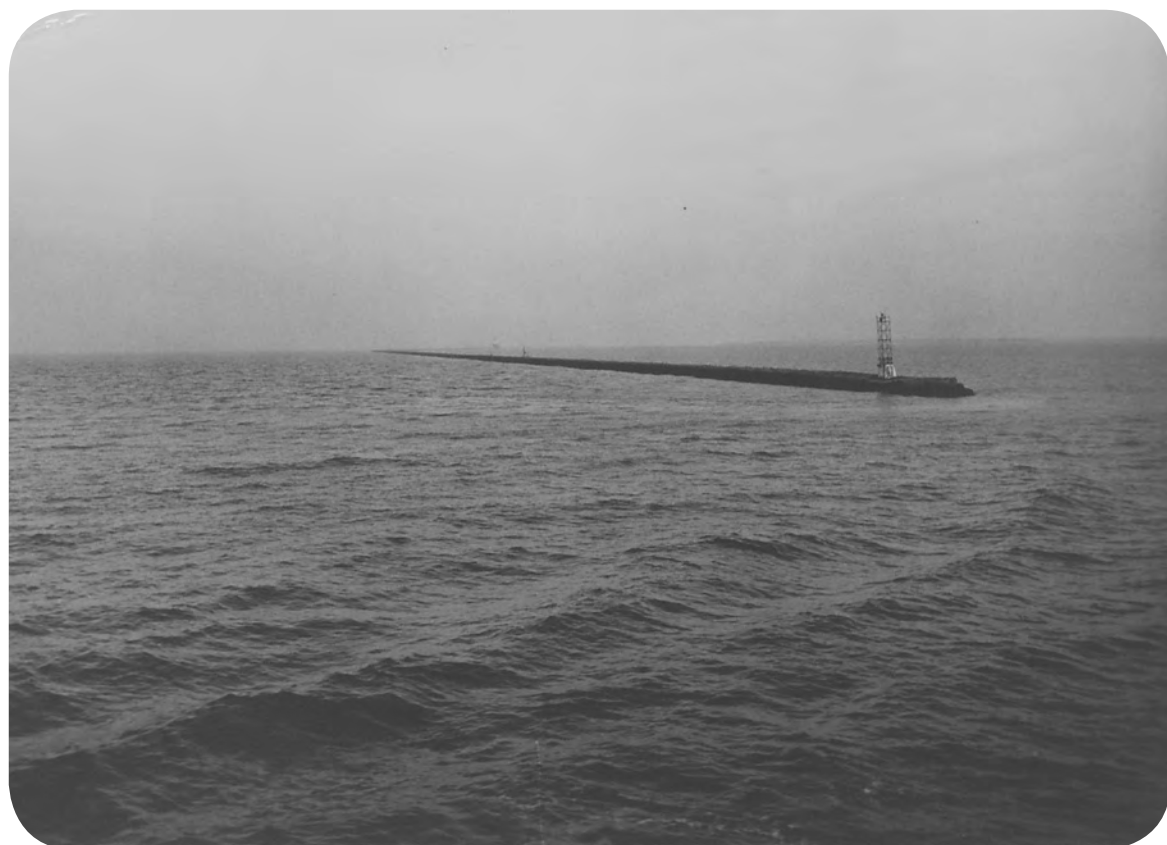
Nested scales + the threshold of bathymetric appearance



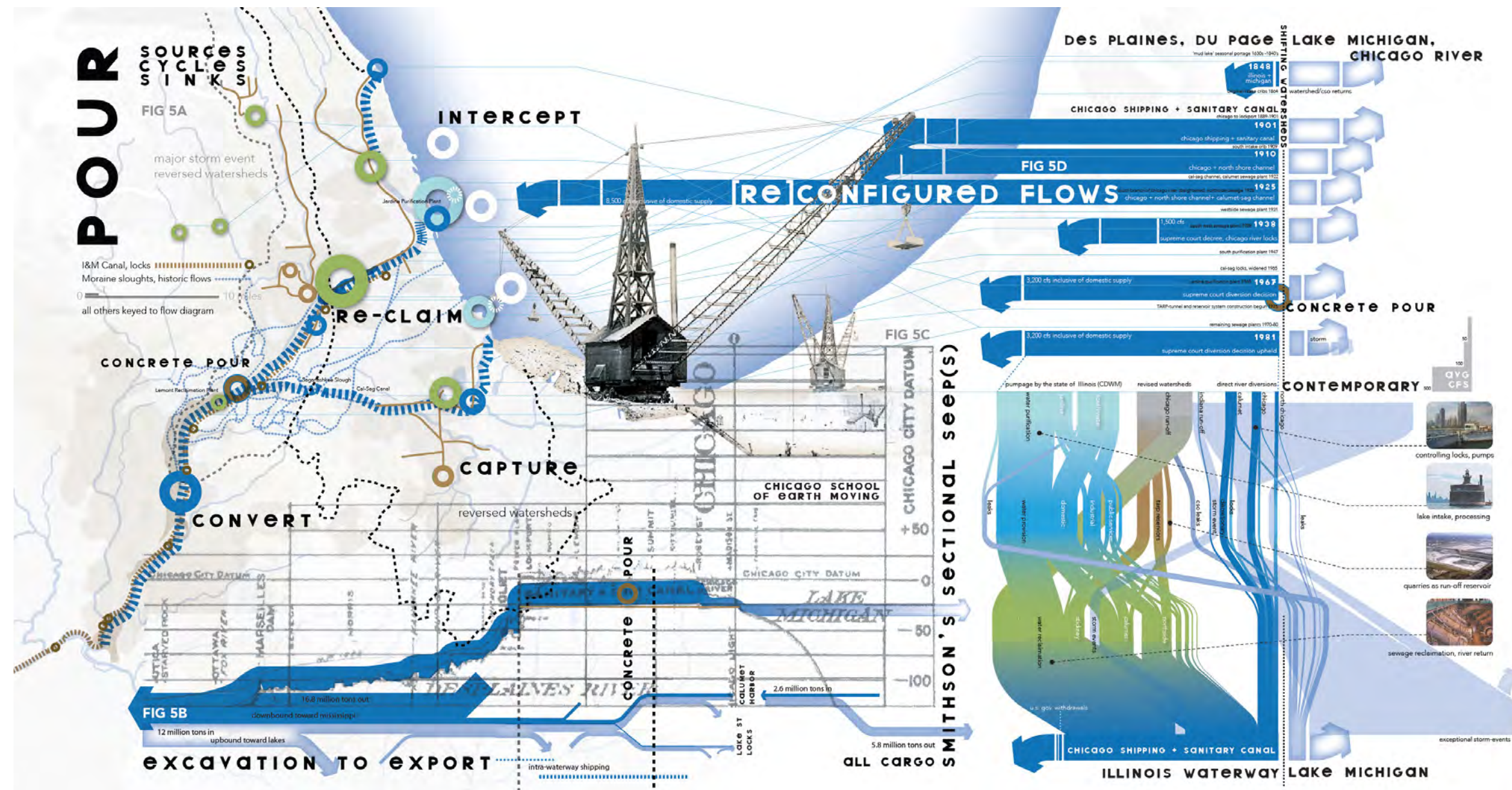
As well as sitting amidst the quarries of Chicago, the *Pour's* location—along the Shipping and Sanitary canal, both above and below the Des Plaines River, adjacent to the Lemont water reclamation plant—figures the ambiguous gravity of both eons of alluvial inversion, and the infrastructural reroutings of Chicago's continental divides. The circuitous paths and intercepts of redundant flow, far from destabilizing, underpin Chicago's everyday use: the processed provisions of water.

In scalar extension, Smithsonian's potentiometric and glacial research maps also evoke a second series of engineered analogs and uses: the withdrawal, conversion, and return of Great Lakes' water (for agriculture, industry, drinking, and, most of all, thermal-electric power generation).

Here, in contrast to McLuhan's sublime electric immersion, Smithson's flows and stoppages index a few of the instrumental functions of concrete reification and (water) flows, manifest in construction, commerce, and even electric communications.



**SUBMERGED SYSTEMS AND MINOR MANIFESTATIONS
(SMITHSON'S JETTY PHOTOS)**

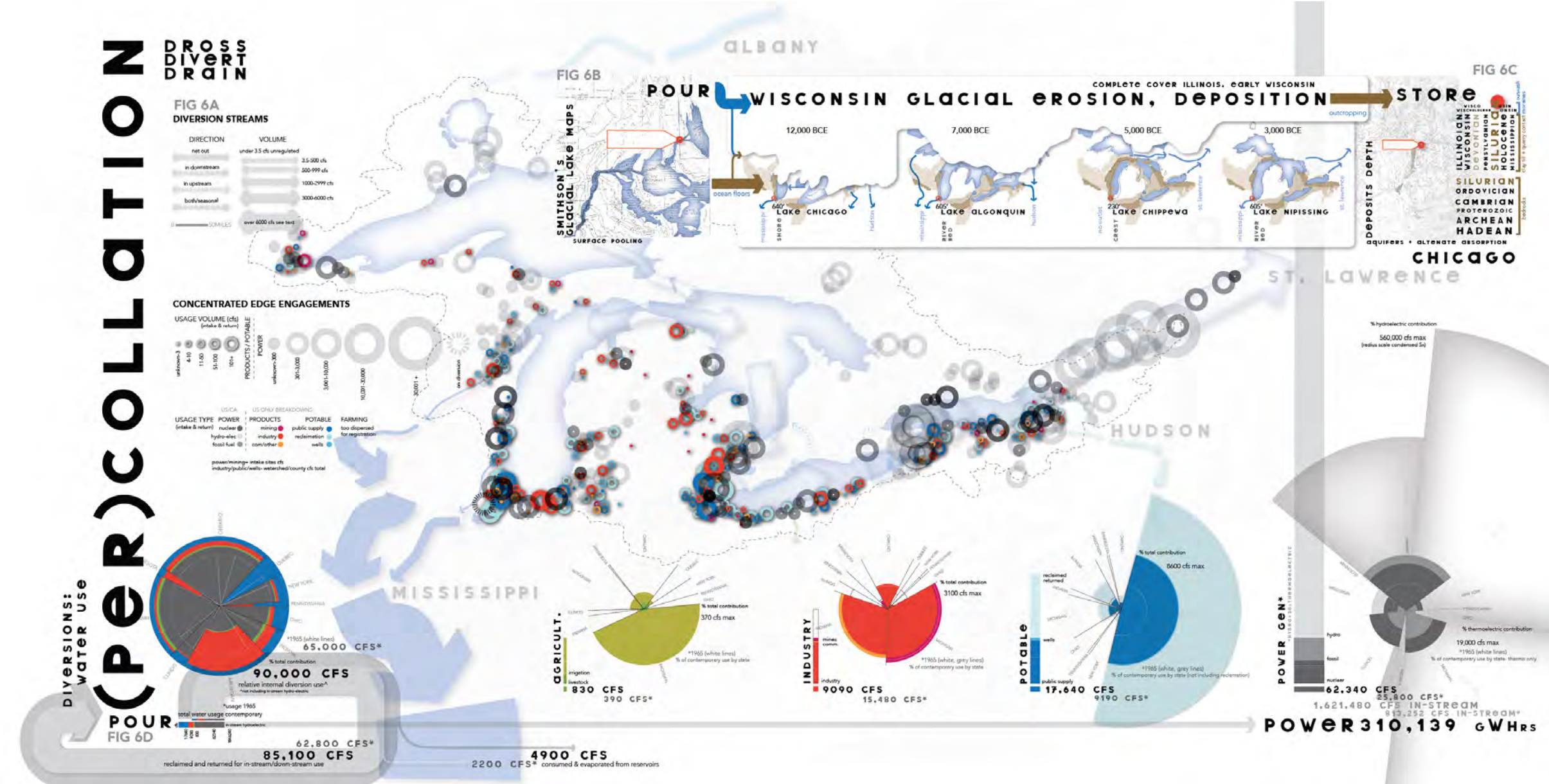
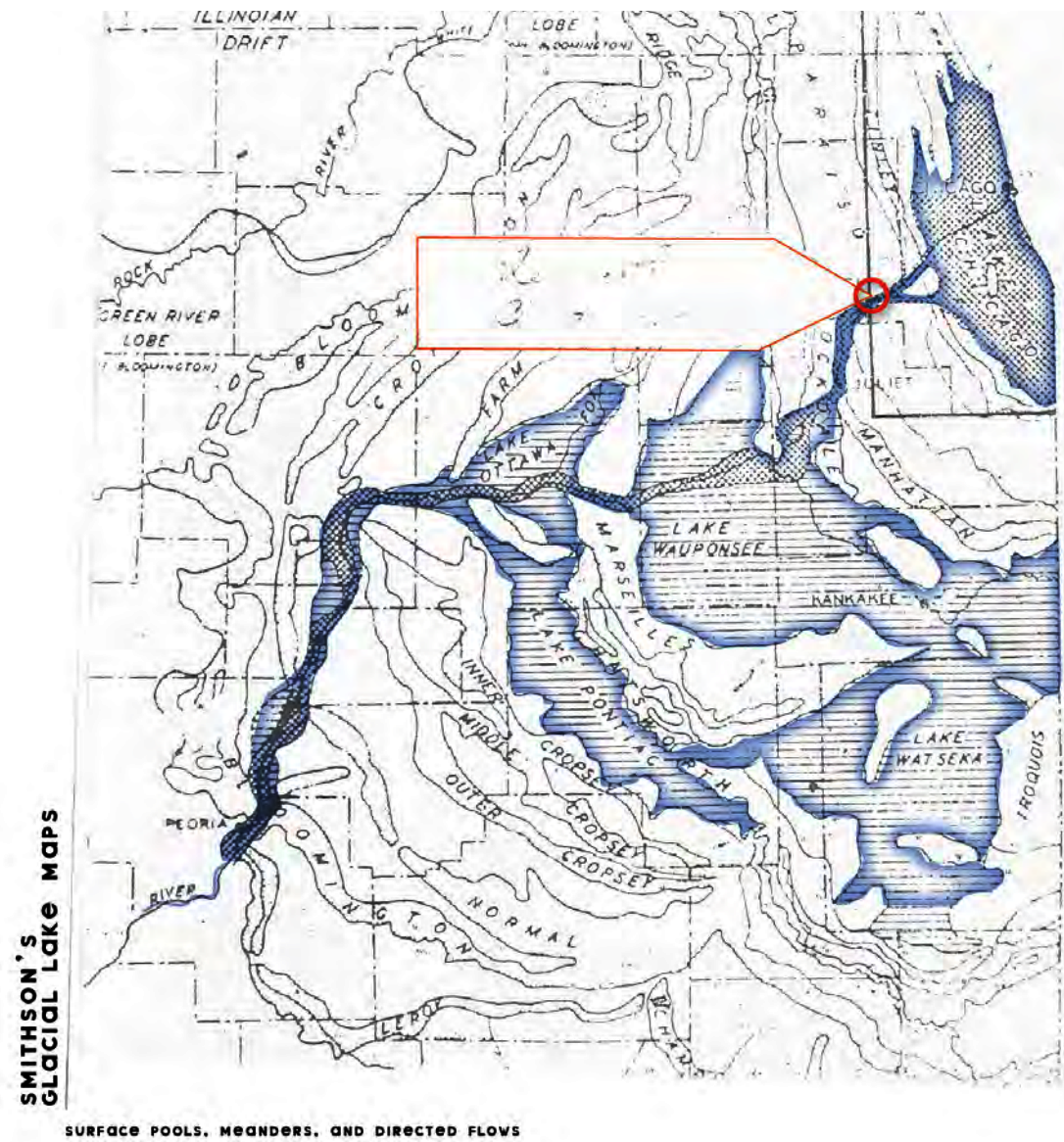


FEEDBACK FLOWS

POUR

Through these expanded flows, the *Pour* materializes Smithson's parallel address of media theory, offering a 'particulate' practice of reverse engineering. From Chicago's glacial lakes to its water-pumping present, Smithson's research samplings foreground the shifting forms and, in Marshall McLuhan's words, alternate 'scales or paces or patterns' conjoined in limestone and water's mutual deployment.

Smithson's proposed sites juxtapose unseen structures, iterative excavations and eons of erosion to emphasize the multiple actants (human, otherwise) and complex circuits (navigation, sewage, electricity) constructed in combination with inert aggregate. *Concrete Pour* literally demonstrates, in Smithson's words, that "manifestations of technology are at times less 'extensions' of man (Marshall McLuhan's anthropomorphism) than they are aggregates of elements...things in a state of arrested development."



This project excavates the footprints of paper, examining Georges Perec's observations in *Species of Space* (*Especies d'espaces*). His playful, mis-memory—confusing rag and wood pulp publishing—invites readers to explore the forgotten habits of reading and publishing as they evolving in 19th century Paris. *Les Trois Mousquetaires* serves as the exemplary object for this history.

While initially just a playful research project, this examination offers an opportunity to perform and reflect on the aesthetic and narrative lure of infographic articulation. In particular, Perec's general oscillations—between code, cartography, classification, and narrative—parallel not just landscape's tools, but the contemporary, capitalist vogue for consumptive geographies.

The text and graphics are currently in revision for article submission.

DATE 2012

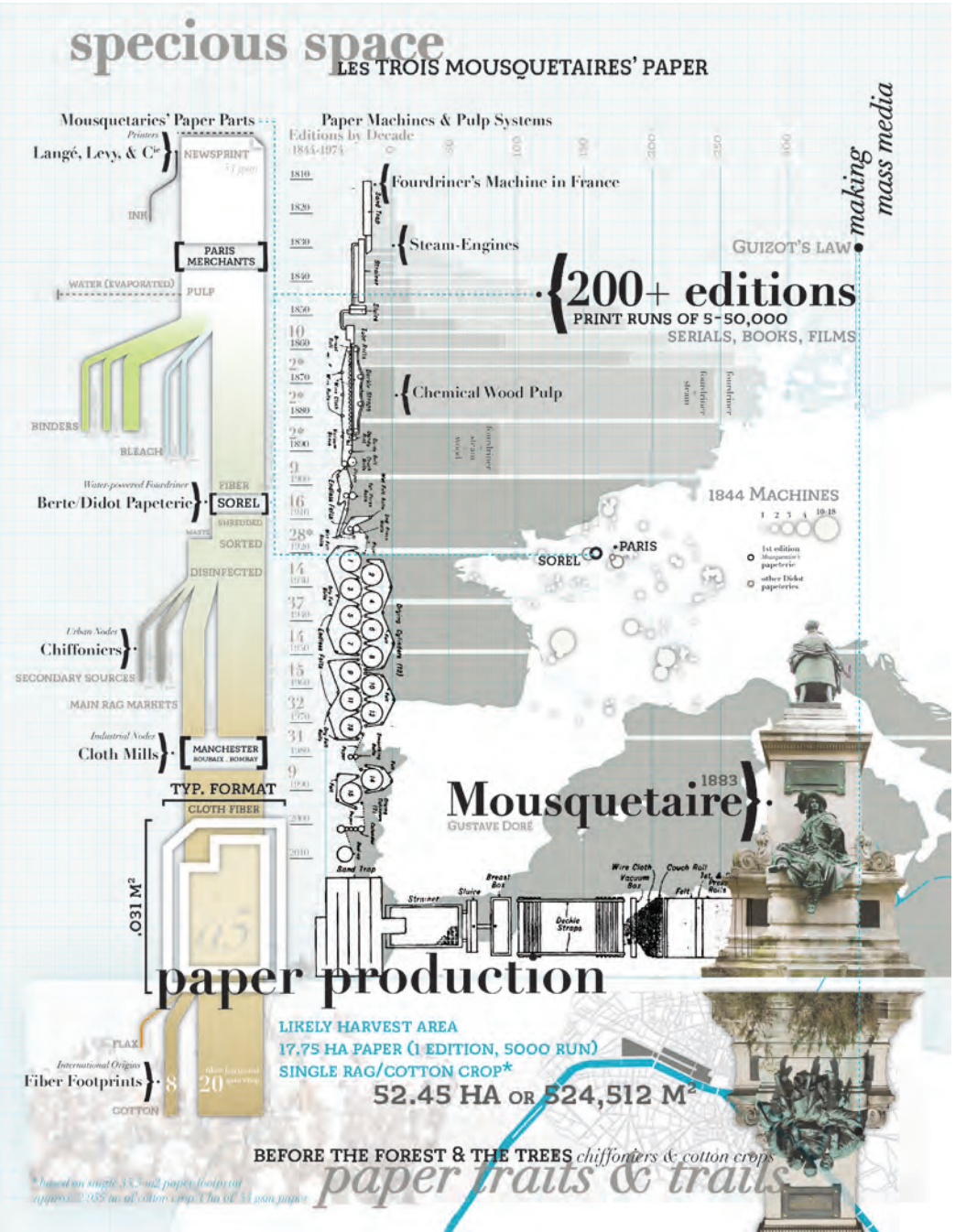
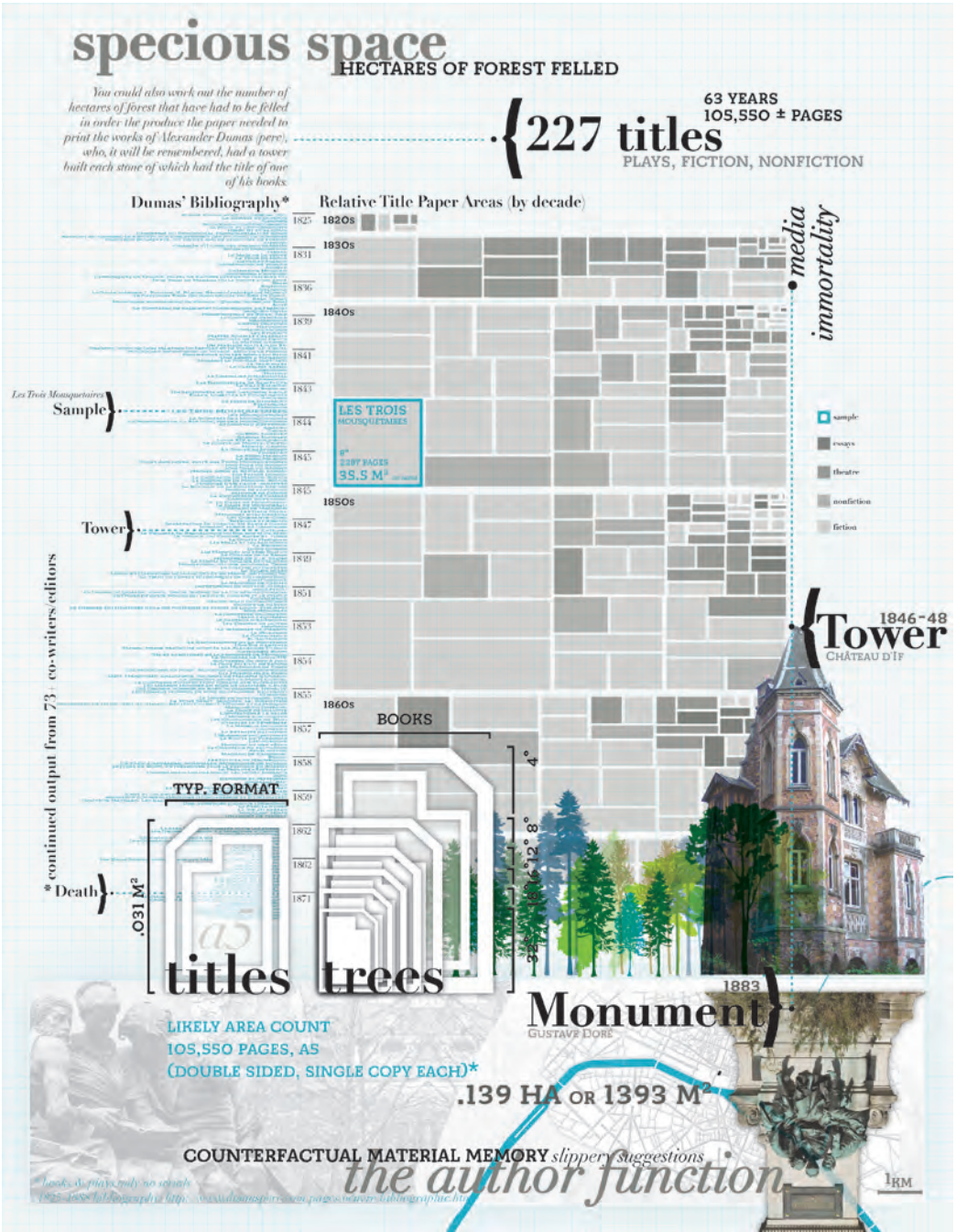
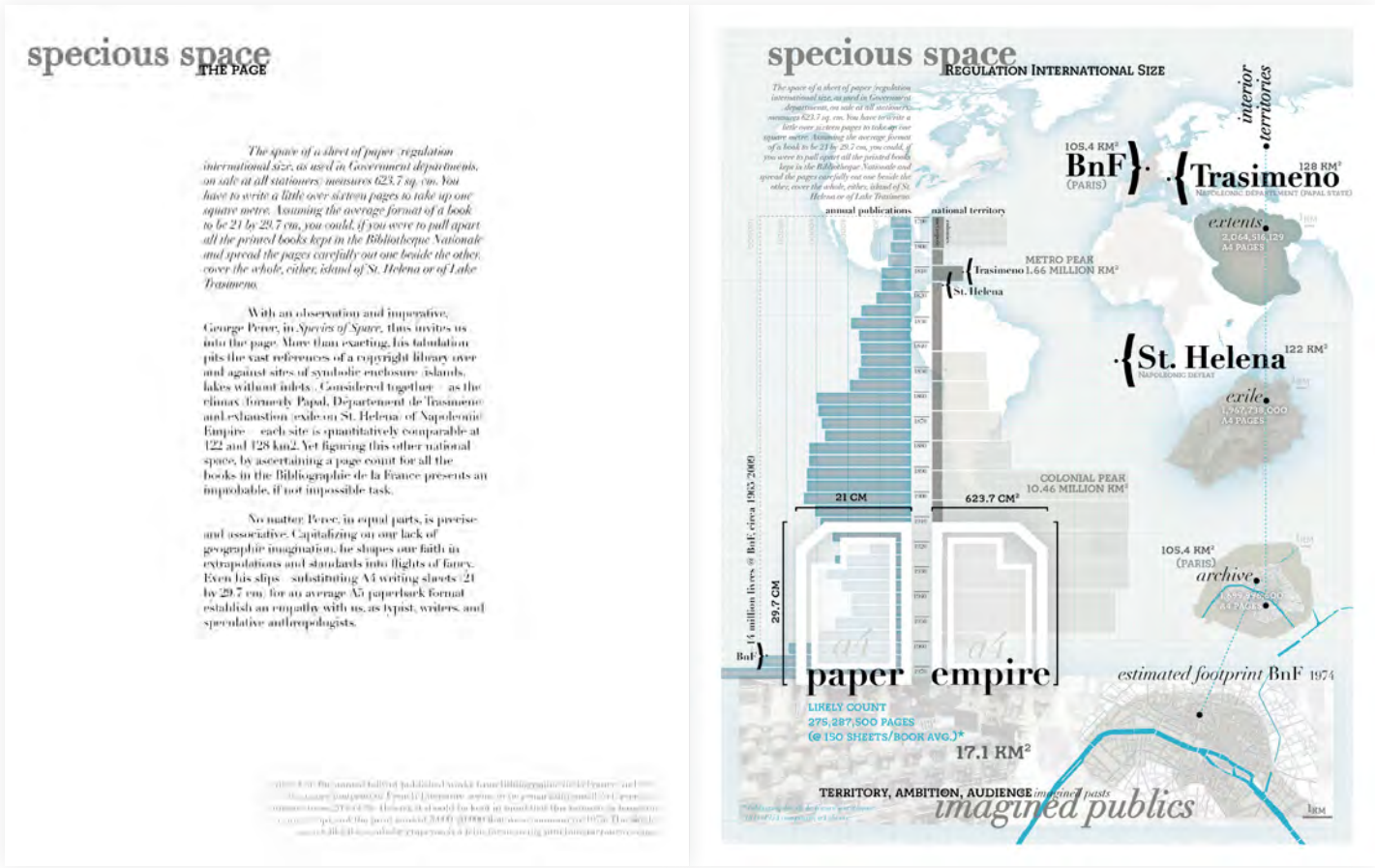
ROLE researcher, designer

EXPOSURE

- in revision, journal submission anticipated

TOOLS/DATA

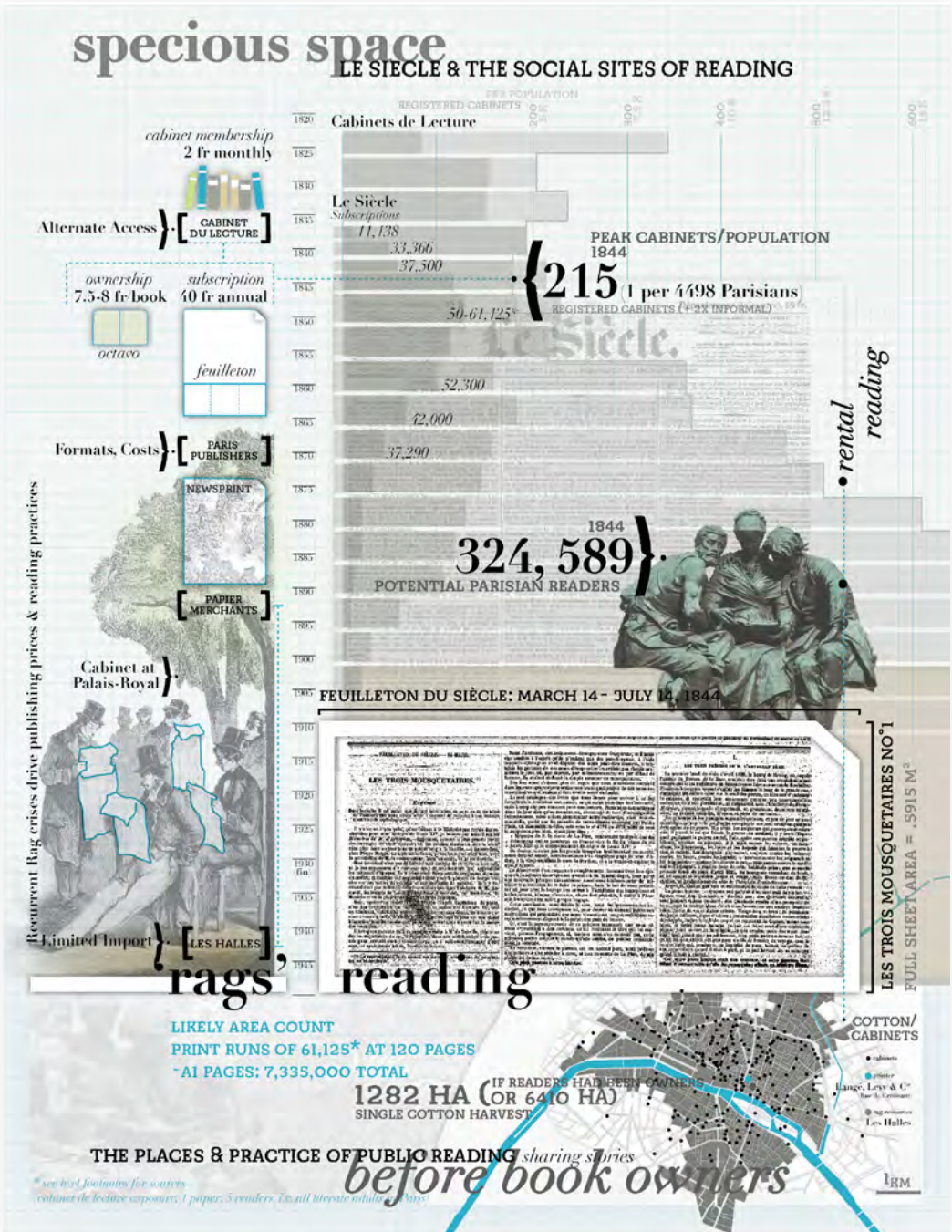
- gis
- ai
- psd
- mixed: an array of French book history titles, 1840s paper texts, 1880s paper manufacturing & labor census info (US & France)



As shown above, Perec conflates written and national territory, asking his audience to consider the paper footprint of BnF's collections aside the extents of Napoleonic empire. Punning on the 'imagined publics' of French literacy, Perec continues his embrace of media-as-material by appealing to the wood-pulp footprint of Alexandre Dumas' mass-market works. While the volume of Dumas's translations and publications is massive, Perec's ironic omission of rag-paper propels this examination of *Les Trois Mousquetaires*.

Published in 1844, it sits at the climax of several trends in rags and reading: Scarce rags, industrial manufacture, and high prices combined to foster rental libraries and public reading. Publishing rights, taxes, and pay-per-word contracts spurred serial-romances and journal subscriptions. And, in response to these markets, publishers and papeteries produced cheap, acidic papers, enabling rising literacy to translate into book ownership (and archival voids). To map the *Mousquetaires* is thus to trace out the making of mass-media.

A final figuration—*Mousquetaires'* global translations and harvests overlaid on Paris—returns to Perec's initial conflation of empire, material extents, and imaginative impact. As hinted in Perec's pun and shown in these mappings, 'the pen and the paper are mightier than the sword.'



Aerial Arts; Defense Discourses, Cartographic Critiques was an exhibition and lecture series I coordinated at Columbia University's Studio-X NYC. As well as orchestrating the show, I developed the graphics seen on the following pages.

Aerial Arts explores Air-Age cartography, Arctic geopolitics, and their critique in 60s post-minimal art. Infographic boards and mid-century maps chart the polar projections, oblique 'over-views,' and immersive geographies shared between (civil) defense discourses and the 'Aerial Arts' of Robert Smithson, Walter de Maria, and Stewart Brand.

In drawing out cartographic responses to the space and arms races, the show traverses a moment of global, intimate, and militarized mapping which resonates with our own.

DATE 2013, exhibit (on-going, article)

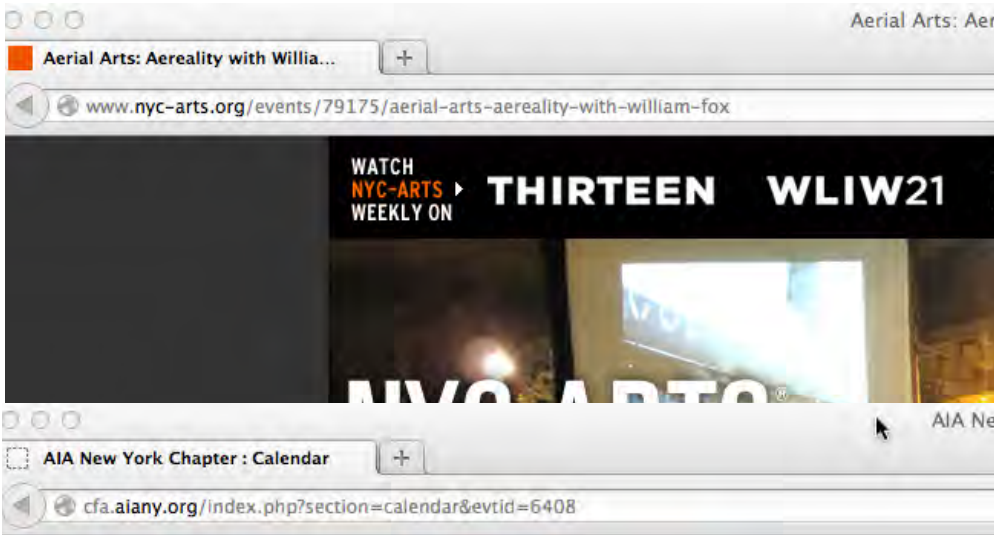
ROLE researcher, designer

EXPOSURE

- 2013, Studio X, Columbia University
- 2013, misc. publicity (right)
- forthcoming, "Aerial Arts in the Space Age" (article on Smithson)

TOOLS/DATA

- gis
- ai
- psd
- ae
- mixed: MoMA & Smithson archives, misc periodicals, period globes, aerials, maps, and satellite data



Calendar of Events

Wed 10.16.2013

Aerial Arts: Reconnaissance Reconsidered

When: 7:00 PM - 8:30 PM WEDNESDAY, ARCHTOBER 16

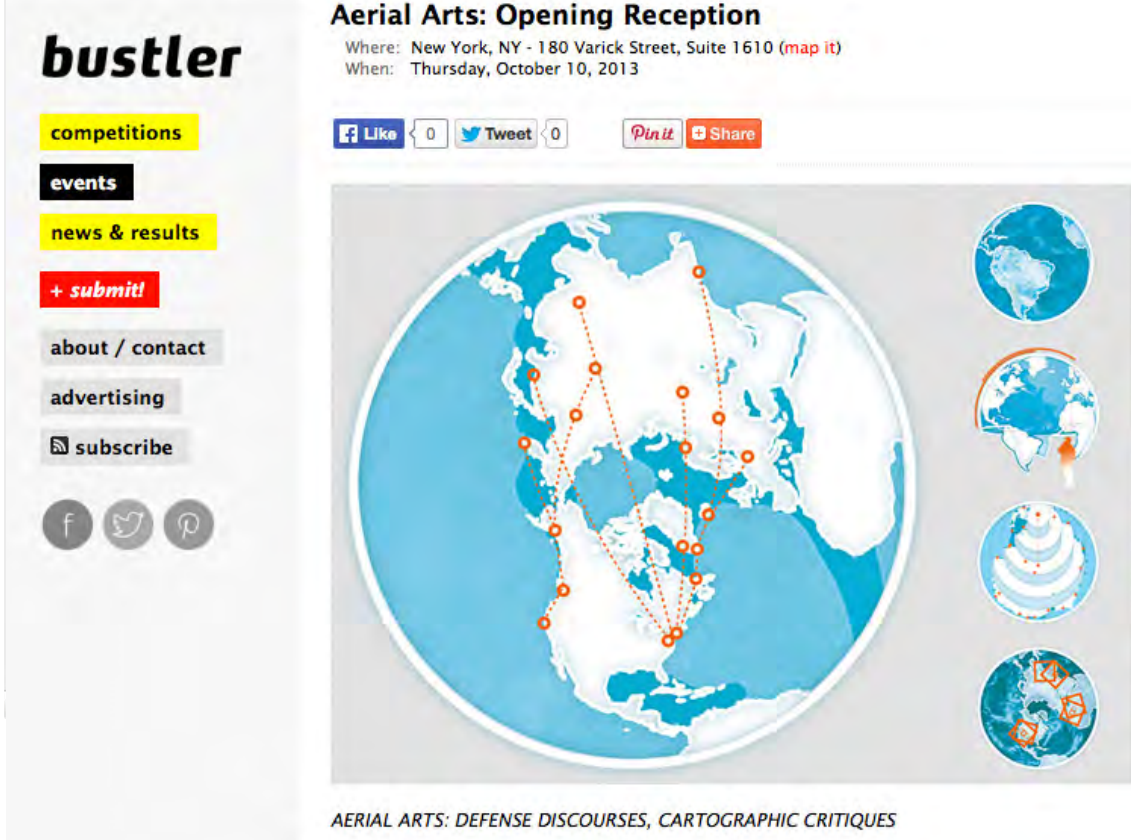
Where: Studio-X NYC 180 Varick Street Suite 1610 NY, NY 10014

Two short talks: "Camouflaging Camouflage: Creating the Anti-Aerial Landscapes of War" by Sonja Duempelmann, folk Aerial View in the Age of Paranoia by Enrique Ramirez.

Join us for an evening of visual feigns and interpretative assumptions at Studio-X NYC, as Sonja Duempelmann and Enri explore the intersection of WWII reconnaissance photography and design. As one of a series of public events accompany Studer's Aerial Arts exhibit, Duempelman and Ramirez's examination of the mid-century aerial imaginary focuses on the f photographic, cartographic, and planning forms.

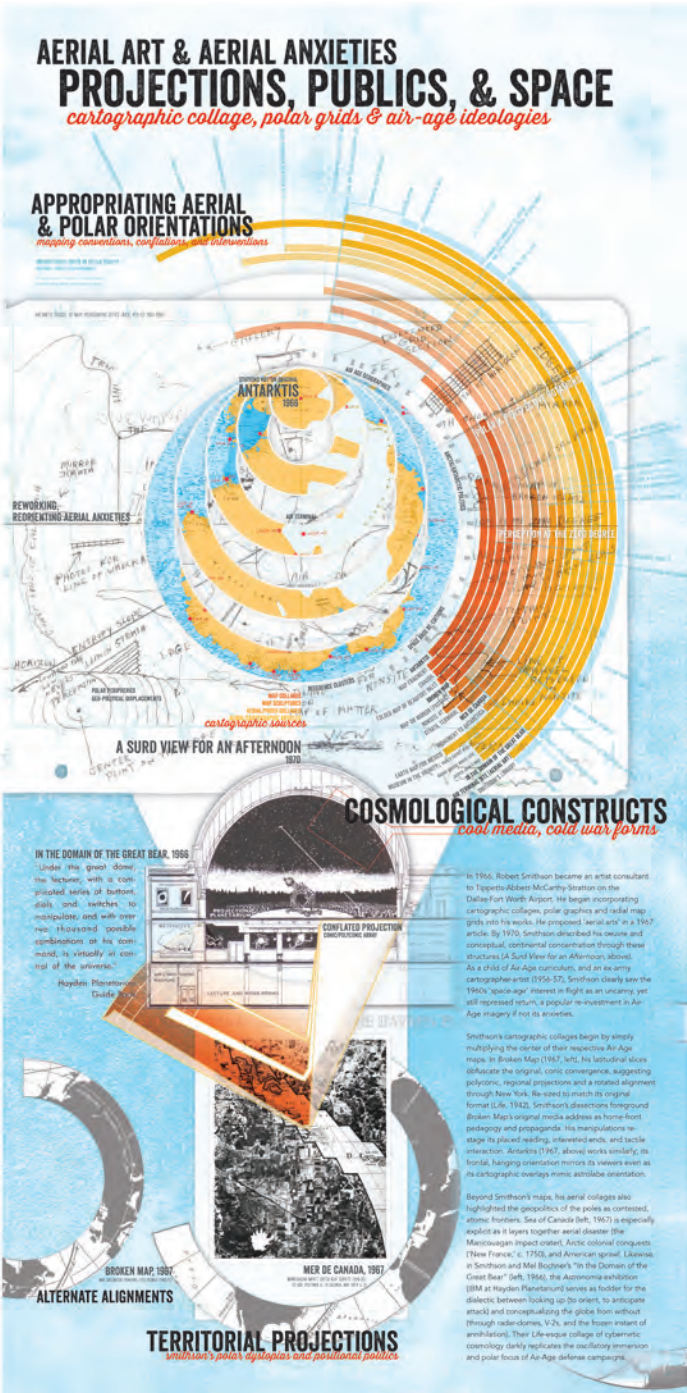
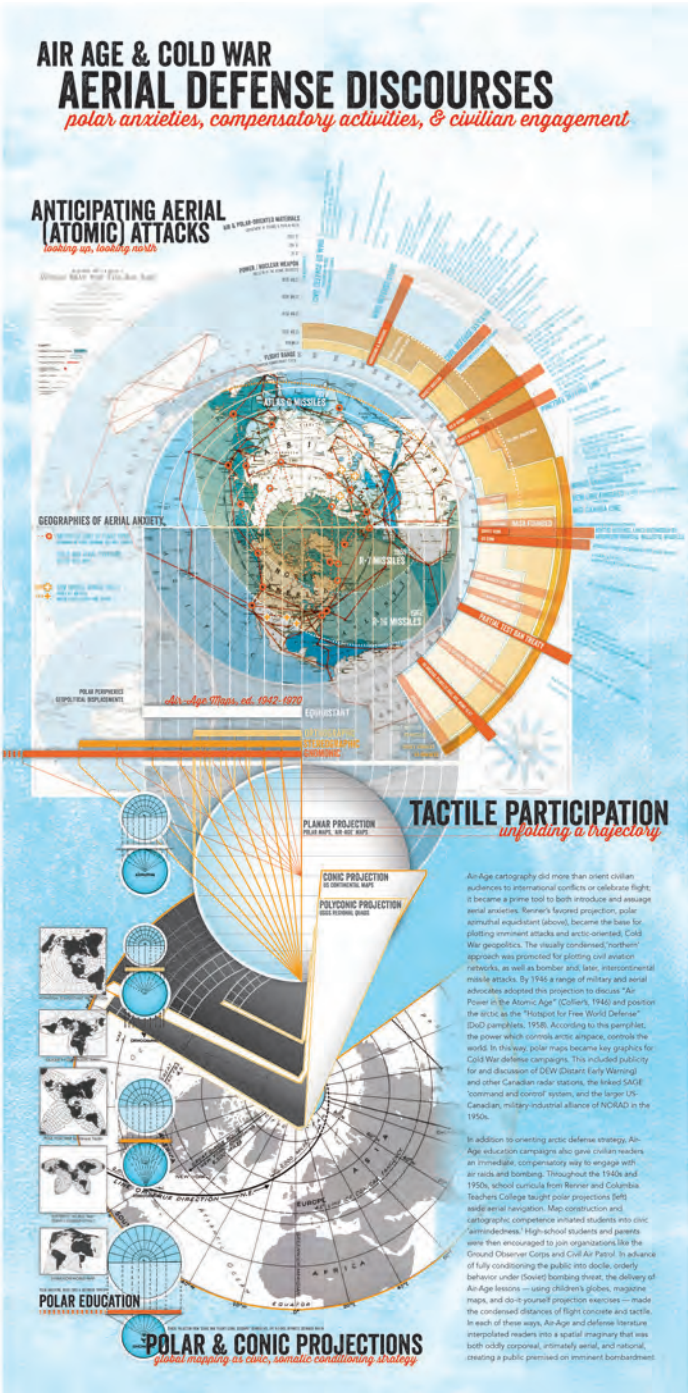
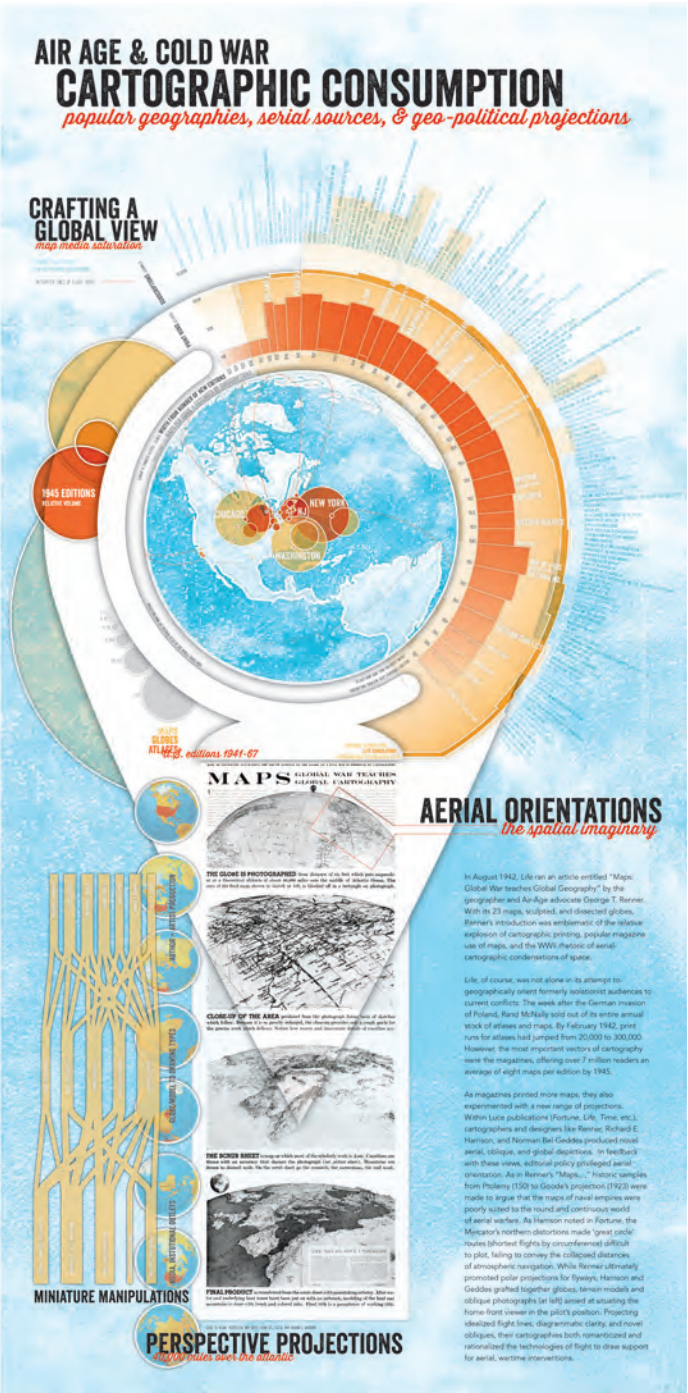
The two short talks will be followed by moderated Q & A discussion. Attendees will also be able to view the accompanying exhibition. Free and open to the public; no RSVP necessary.

Organized by: Studio-X NYC



With the advent of goggle maps and mobile computing, most genealogies of our intimate (and oft aerial) embrace of cartography begin with Apollo 8 and Stewart Brand's *Whole Earth Catalog*. In fact, several artists of the period choose to engage the fundamentally ambivalent, oscillatory structure of aerial imagery; each capturing and contesting the convergence of global imagination and individuating address in their own way. Oscillating between alternate space-race responses and Air-Age antecedent forms, the show explores the intimate, tactile address of cartographic ephemera in cultivating a corporeal,yet national 'space' of aerial, atomic anxiety between WWII and the 1960s.

The initial board examines how the 'Whole Earth' framing of polar maps and satellite scans isolated images from their military-industrial origins, (not shown). The second and third boards then explore the 'Air-Age' popularization of similar polar maps and aerial-obliques in persuading the public of immanent bombardment and the global geographies of aerial warfare. Scattered through *Life*, grade-school curricula, and academic international studies, these maps of flight made international engagement appeared inevitable by emphasizing northern, 'flight-line' proximity, across a closed, continuous, and shrinking sphere. Finally, the fourth board examines Robert Smithson's early cartographic-collages and his literal disassembly of Air-Age cultural/cartographic projections, playing with the tropes of aerial, technological progress and polar, defense discourses.



The fifth board examines Smithsonian's 1968 gallery work. There, his *Infra-Perspective* and *Non-Site* sculptures literalized the distortions of "Air-Age" cartography, reifying the formal biases of polar projection and highlighting the indecipherable alliances of bombing (debris) and maps that drove Cold War defense rhetoric. The sixth board looks at likely 'aerial' exhibit precedents for Smithsonian's cartographic sculptures, from the nested geographic immersions of MoMA's 'Airways to Peace' (1943) to the miniaturized, geographic models and aerial attention of Civil Defense spotters (1941-1958). The seventh board explores the relationship between satellites and the popular reception of post-war aerial imagery and instruments, from Sierra Club books to IBM's *Astronomia* exhibit at Hayden Planetarium. Finally, the eighth board looks at Walter De Maria's *Three Continent Project*, a land-cuts-and-collage proposal that highlighted the technical limits of satellite photography and the schism between popular, military, and scientific imagery use (not shown).

[illegible]

AIR AGE & COLD WAR

INSTITUTIONS & IMMERSIONS

defense campaigns, cultural alliances, & exhibition tactics

MOBILIZING AMERICAN 'AIRMINDEDNESS'

airpower, aerial warfare, & air mobility

SCALE OF MIMMA GLOBES, AERIAL ELEMENTS
A 10-METER SCALE

MIMMA DWE ET AL.
AIRWAYS TO PEACE
1943

SECRET DUE TO
'15° INVERTED GLOBE'

SIGHTS ON THE SKIES

NEW YORK WORLD'S FAIR

ELEVATED VIEWING

viewer perspective as player, equidistant projection device

UNICEF'S DISPLACED AND DEMONSTRATIONS

CULTURAL CONDITIONING

(adult) playing atomic war games

MANHATTAN AIR RAID ESTIMATES
CITY'S [BALTIMORE] EVACUATION SCENARIOS

30,000 FEET OR OVER IN BALTIMORE WOULD KILL

NEW JERSEY

PICTORIAL MANUAL, 1943 (REV. 1961)

OVERHEARD ORGANIZATION

IMPACTS & INTERACTIONS

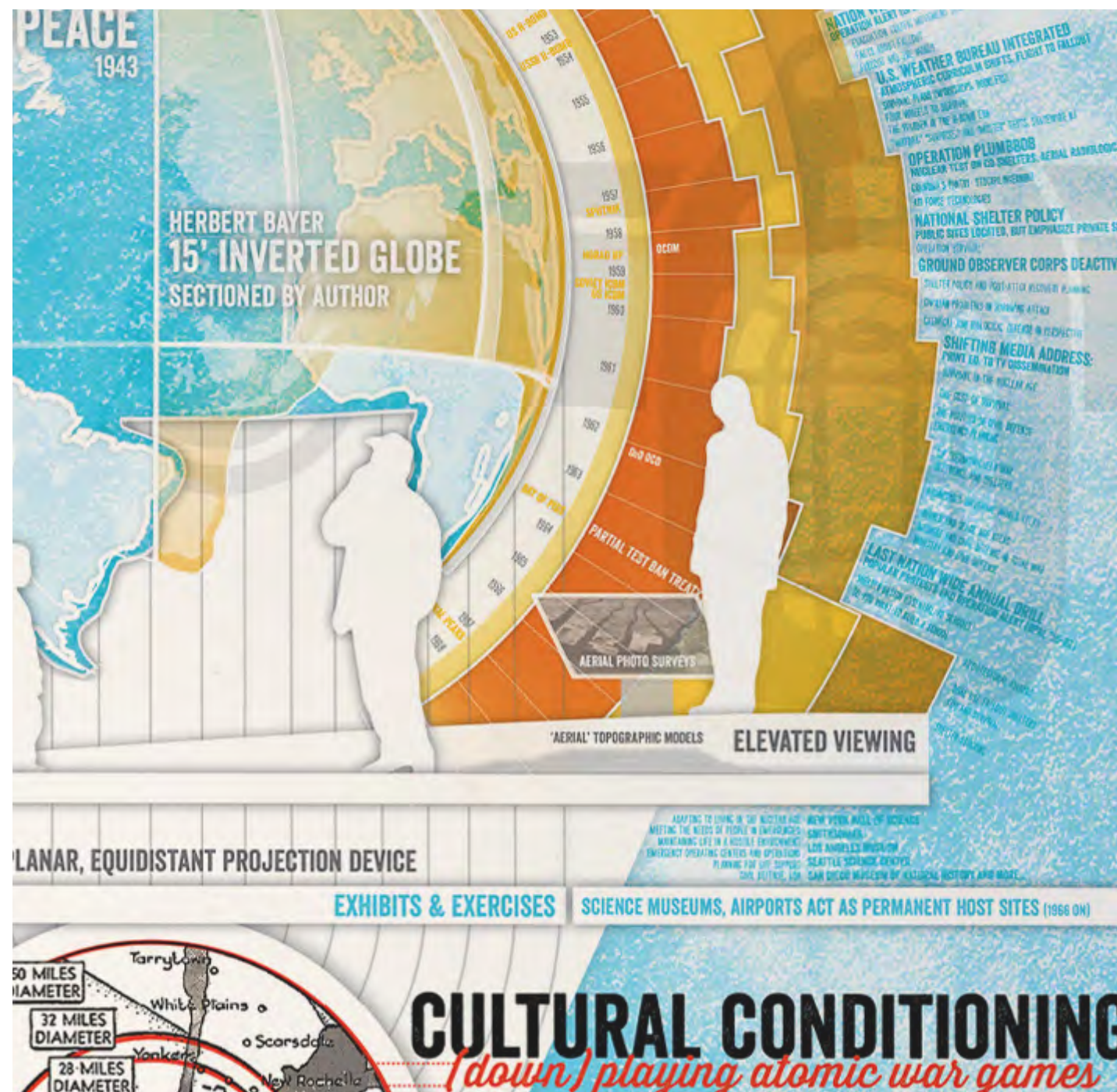
pathways of playframes on society and social scenarios.

[illegible]

In terms of curatorial strategy, the exhibit incorporated a wide array of original, period publications meant to be handled, skimmed, and, for the enthusiast, studiously inspected. Such materials, in McLuhan's terms, would be 'cool,' absorbative and non-linear. I wanted, on one level, to provoke that absorption, inviting visitors to reflect on their own naturalized engagement and seduction by such propaganda.

On another level, I was hoping to address art-history. Within its discourses, magazine-art is often treated as a textual, not sensorial, strategy for conceptual art. When seen (or handled) historically, the explosion of magazine-art in the post-minimal era reads less a medium break and more as the continuator of a critical engagement with Modern art, offering spatial interaction and negotiation with imagined, mass 'publics.'

Extending such absorption, the infographic incorporation of everything from maps to exhibition models and mass-market atlas publication numbers called attention to the much wider spectrum of abstract orientation woven not only into 1940s and 1950s propaganda but also our everyday immersions in space and place.



Thus, through mapping of mapping, analytic infographics and original serials, the exhibit brought together precedent and appropriation, examining how old 'aerial' ideology addressed disciplinary debates on space, media, and immersion as well as the wider, spectacular politics of the late 1960s.

In addition to curating *Aerial Arts'* period materials and graphics, I was happy to coordinate a series of conversations on aerial imaging in art, architecture, and urbanism. Lectures and discussions included:

William Fox, director of the Center for Art + Environment, on aeriality;

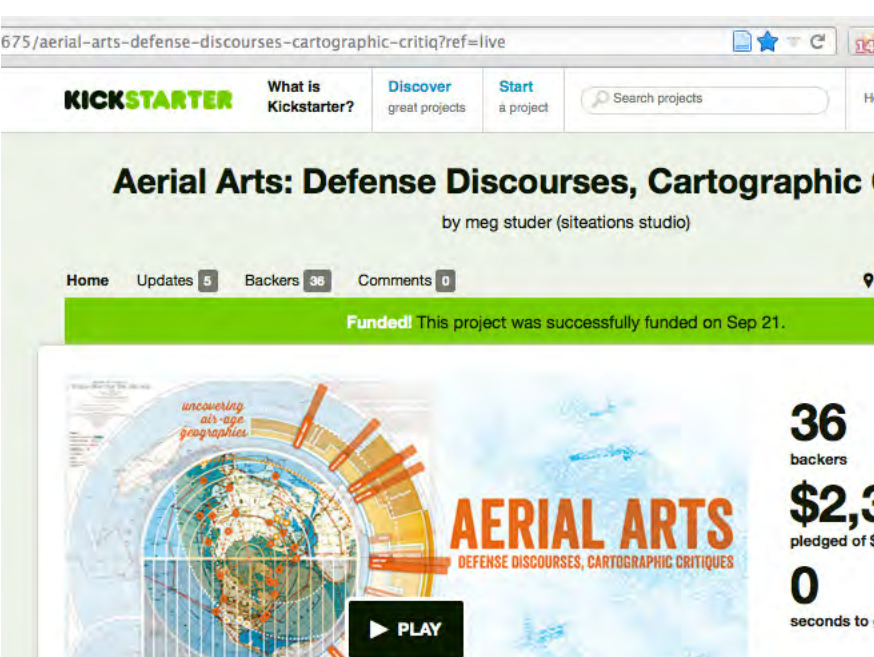
Enrique Ramirez, from Princeton, and Sonja Duemplemann, from Harvard, on the paranoia of reconnaissance photos and camouflaging camouflage;

Laura Kurgan, director of the Spatial information lab at Columbia and Bradley Samuels, a partner at Situ Studio, on the politics and forensic practice of remote sensing;

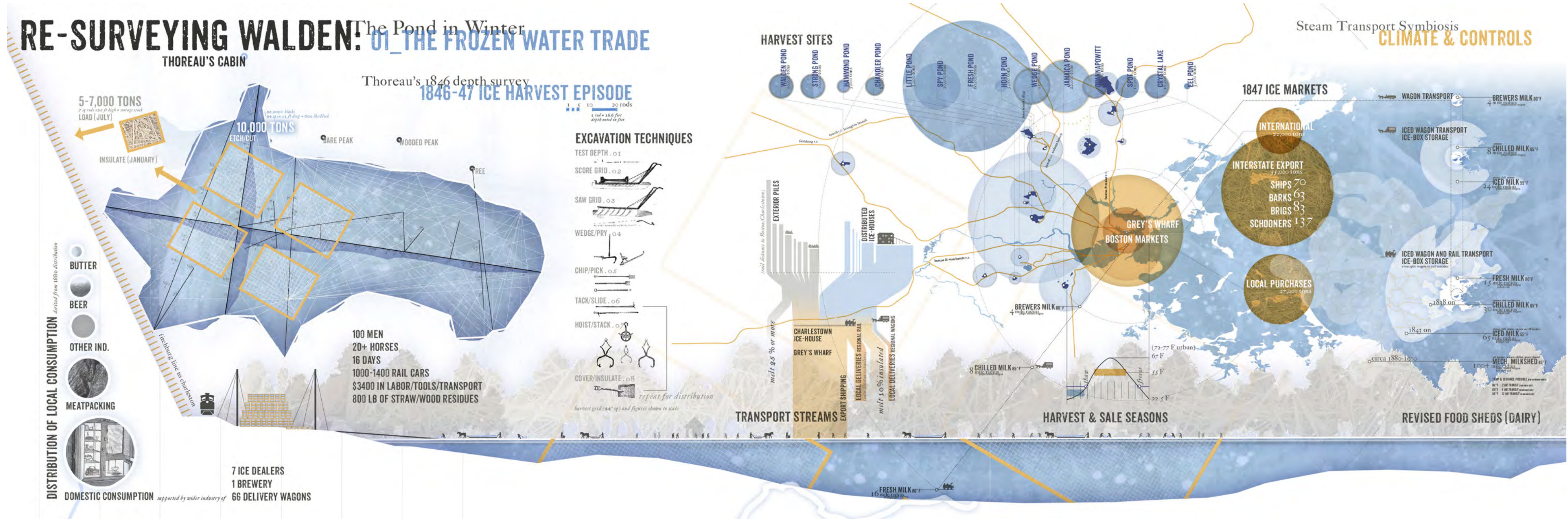
and Annette Fierro, from Penn Design, on post-blitz urbanism in London.

Plus, Nicola Twilley, director of Studio-X NYC, ran with the aerial emphasis and hosted a great roundtable on urban air, discussing everything from suspended particulate to air rights (bottom right).

I also gained a healthy array of fundraising and marketing skills: running a kickstarter funding drive, constructing email campaigns, making quick, responsive landing-sites, and aiding Studio-X with publicity measures.



Refrigerated rail and domestic ice delivery reorganized urban access to dairy, meat, fish, and lager, shifting foodsheds, from a four mile sourcing radius to over a hundred during the 1840s. From Maine to Philadelphia and across the upper midwest, local and regional ice harvests underpinned urban growth, preserving foods and making new markets possible. Thus, beyond chilled drinks, these boards register the impacts of ice in the radical reconfiguration of Boston's 'refrigerated' milk-sheds and the sanitary reforms of the 1850s, based on new access and storage standards for perishable food.



Thus, insulated ice shipments, with less melt and more final product, became an even better ballast to offset Boston's flourishing import trade. As a backhaul, ice subsidized the northern import of plantation sugar, tobacco, and cotton, and, by extension, enabled more traditional forms of northern industrialization and urbanization. As first-leg freight, ice shipments supported East Indies and Liverpool cotton trade as well as Argentinian supplies (meat, etc.) for the Gold Rush in San Francisco.



WALDEN

Thoreau's editorial accounting and its' underlying, forgotten networks provide an alternate perspective on refrigeration and invite us to explore, with fresh eyes, contemporary forms of climatic consumption and sustainability.



These landscape projects present a mix of my work, from independent and academic charettes to my position as a designer and project manager at Stoss Landscape Urbanism (noted by *). I tend to generate form from the integration of typological variation, material processes and social scenarios. My design graphics balance diagrammatic, iconic explanation and 3-D component articulation with evocative, synthetic renderings.

51

FEEDBACK

PROSPECT PARK(ING)

55

WWI FORMS

EPHEMERAL FRONTS*

61

POISON

CAUTIOUS CONSUMPTION

MERKSEM RE-MIX*

LAAGLAND

67

HARVARD COMMON SPACES*

PLAZA

73

AQUA-CULTURE*

PROCESSING

79

DOCUMENT SETS*

PREVIEW‡

85

*Pdf and print half-scale construction document sets are available for interviews or by request. Please email if interested in further materials.

PROSPECT PARK(ING)

FEEDBACK

Prospect Park(ing) offers an alterante vision of sustainable, recreation ecologies and social space.

Context maps trace the site's ideal situation as neglected, exploitable niche in both the megachurch and consumer marketplace. Waste-water becomes a critical component, turning car-driven development from curse to constraint, while seeking to critique the idealized, isolation of romantic nature.

Symbiotic structuring devices thus combine development incentives and forms. The code manipulates interstitial space, generating feedback between built magnets and ephemeral program. The subtractions (waste water transpiration swales) guide formal development, generating more programmatic occupation and ecological diversity. The remaining soil is then tied into adjacent Pennypack Park, funneling audiences there for mutual redevelopment potential.

DATE 2006, U Penn studio work

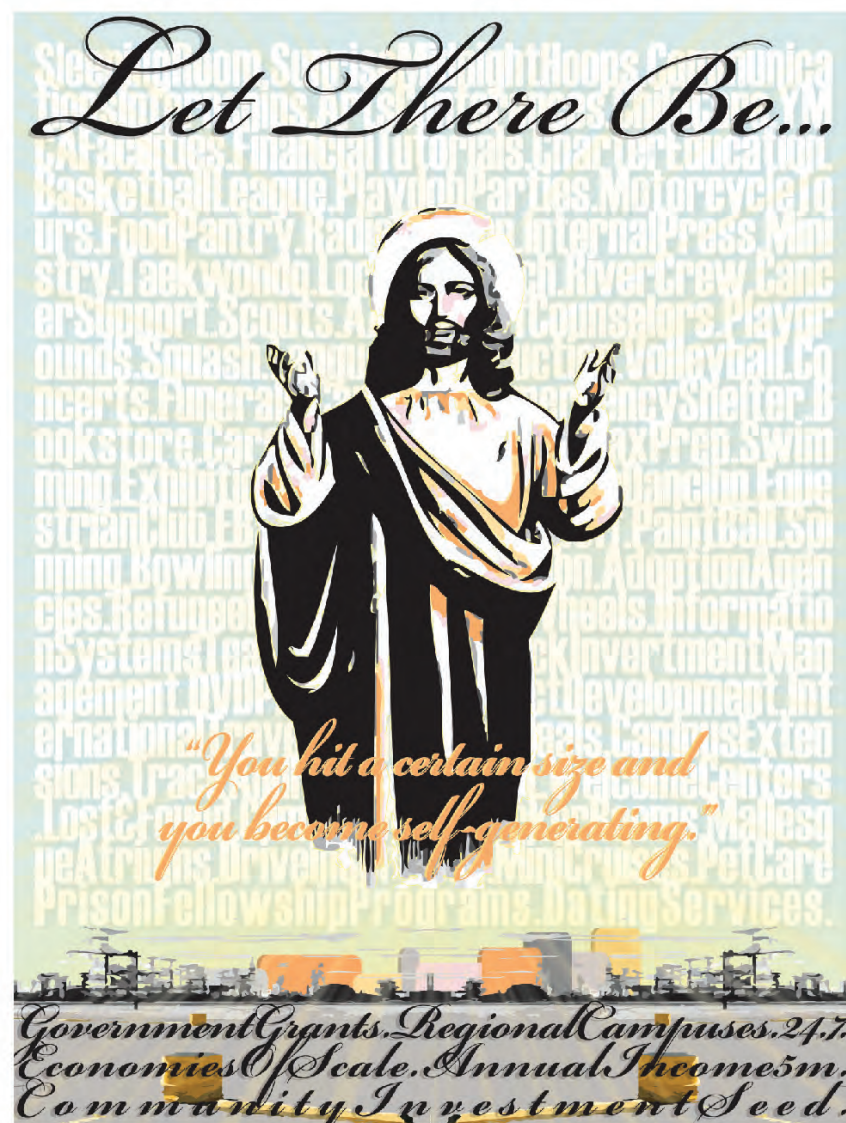
ROLE designer

EXPOSURE

- L502 Marcinkoski

TOOLS/DATA

- ai
- psd
- mixed: water volume & species transpiration calculations

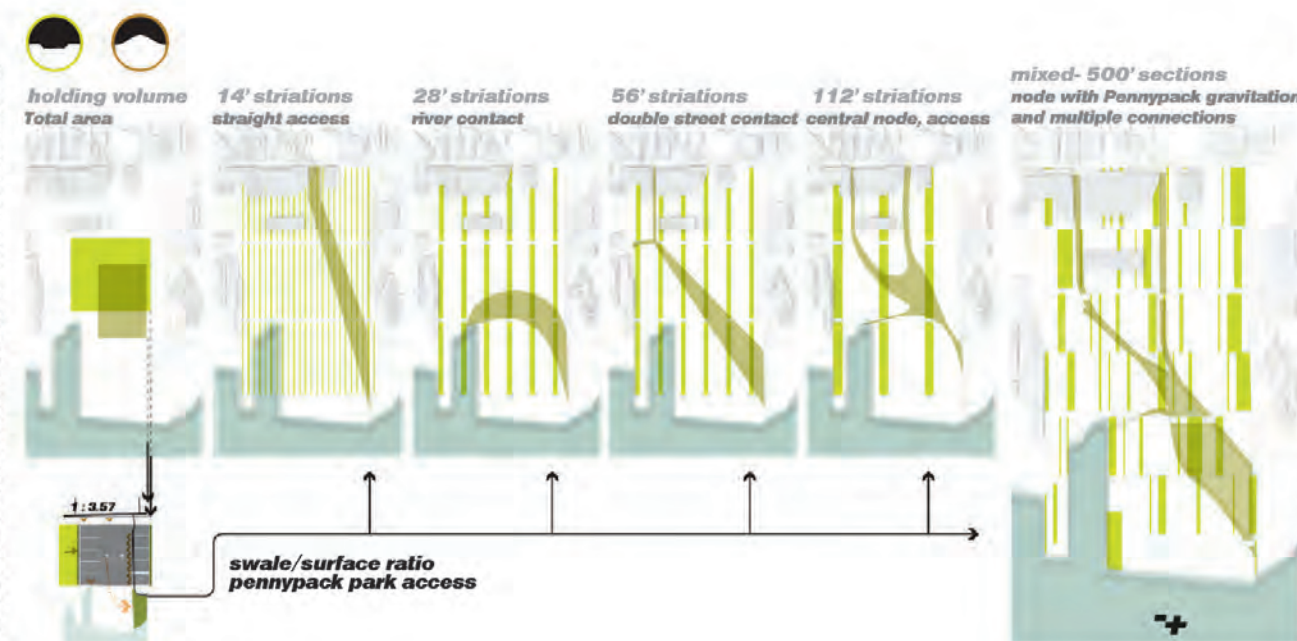


MEGACHURCH AS DRIVE: CATALYTIC DEVELOPER, ATTRACTOR



PARKING AS CONSTRAINT: CLEANING SURFACE WATER

- WASTEWATER STRIATIONS: BY PARKING PARAMETERS



RESIDUAL REMEDIATED FILL: PEDESTRIAN CONNECTIONS

DEVELOPMENT CODE



51

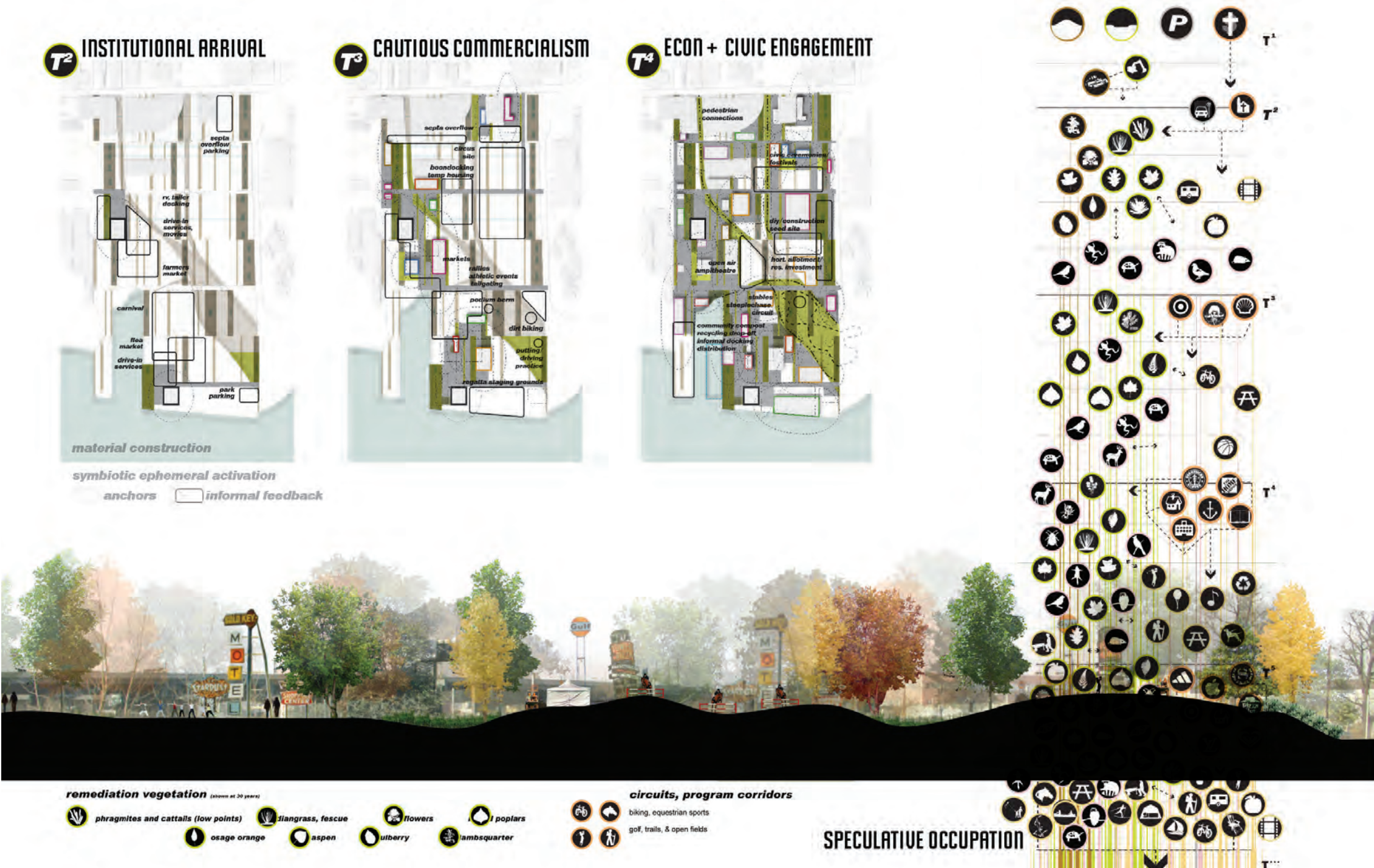
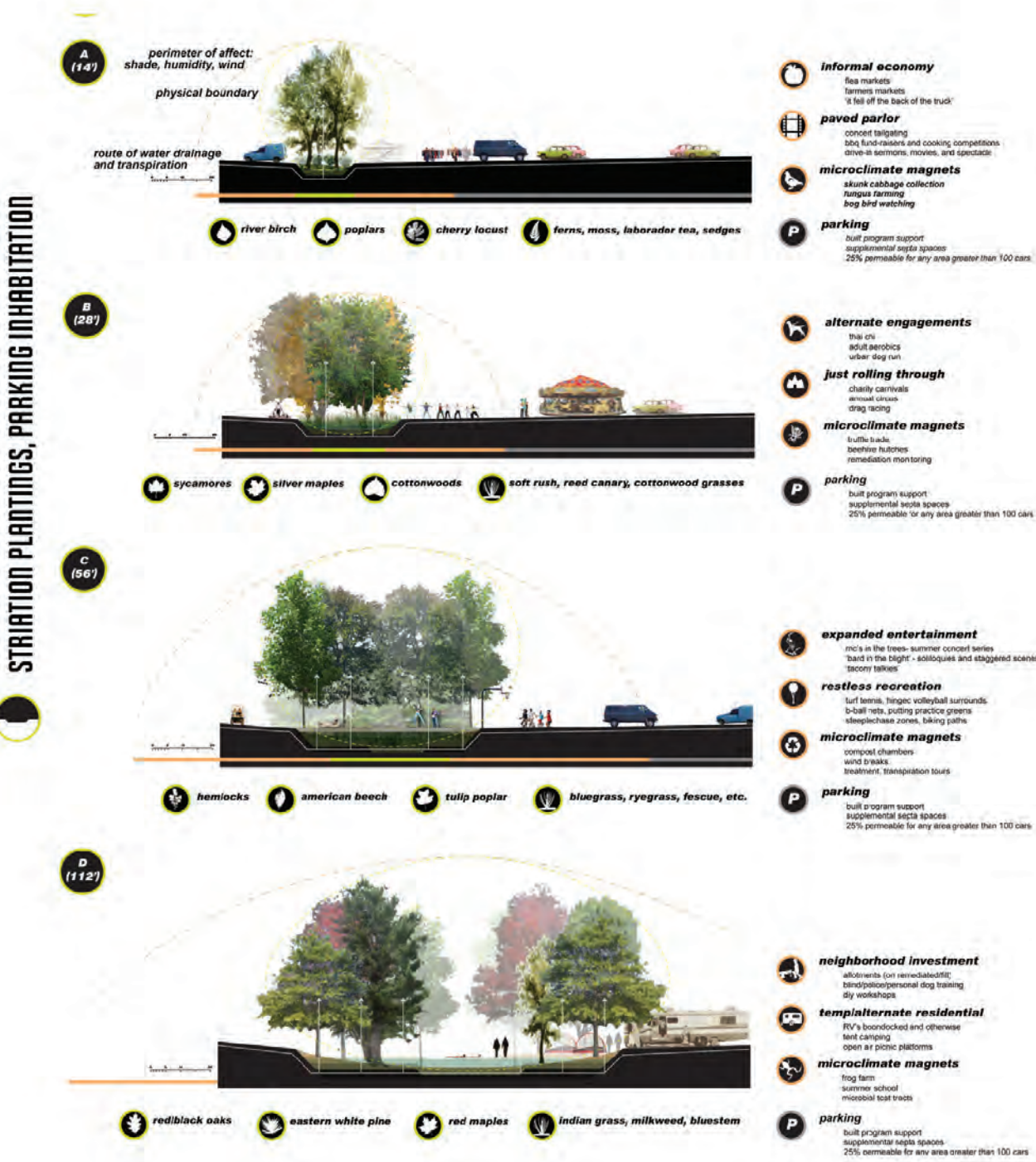
FEEDBACK

The plans play out one scenario, showing the feedback between built, ephemeral, and ecological attractions. The voids (be they 'green' or paved) foster multiplicitous programs, publics, and continuous, atomistic development that could regenerate indefinitely as different social/institutional occupations.

Citing contemporary branding, the iconic graphics explore the oft repressed relations and mutual ecological participation of everyday urban animals, human 'lifestyle,' and adaptive planting. It seeks the 'public' in the diversity and multiplicity of the ubiquitous.

Closer examination of the prototypical waste-water striations reveals a specialization of diverse planting schemes, each keyed to the wet/dry run-off spectrum. Fauna and programmatic development are then created by differential access/internal occupation and microclimate effects.

Evoking affective spatial qualities aside conceptual juxtaposition, the meeting of Venturi's vegas strip with picturesque parkland captures the project's tapping of contradictory popular demands. Its' spaces become an index of the systematic exploitation of x-urban organizations for critical cultural projects and development potentials.



War and its aftermath have had significant physical and ecological impacts on the Westhoek landscape; from the flatlands through the bombarded fields and farmlands. These altered conditions spawned new ecologies and new occupations.

This Stoss project makes the territories of war legible, if fleetingly; crafting evolving itineraries of remembrance. Re-orienting paths along the war's parallel fronts, the park's organization echoes the way the war played out.

In the north, interpretative moments recall islands formed during the war-time flooding and, in the south, itineraries re-trace the shifting fronts, approaching the hilltop encampments craved-out by shelling and mining. With seasons and cycles, the proposed landscape installations foreground the precedents, histories, and ecologies of the Flanders Fields.

DATE 2010, Stoss Team Entry

ROLE designer

EXPOSURE

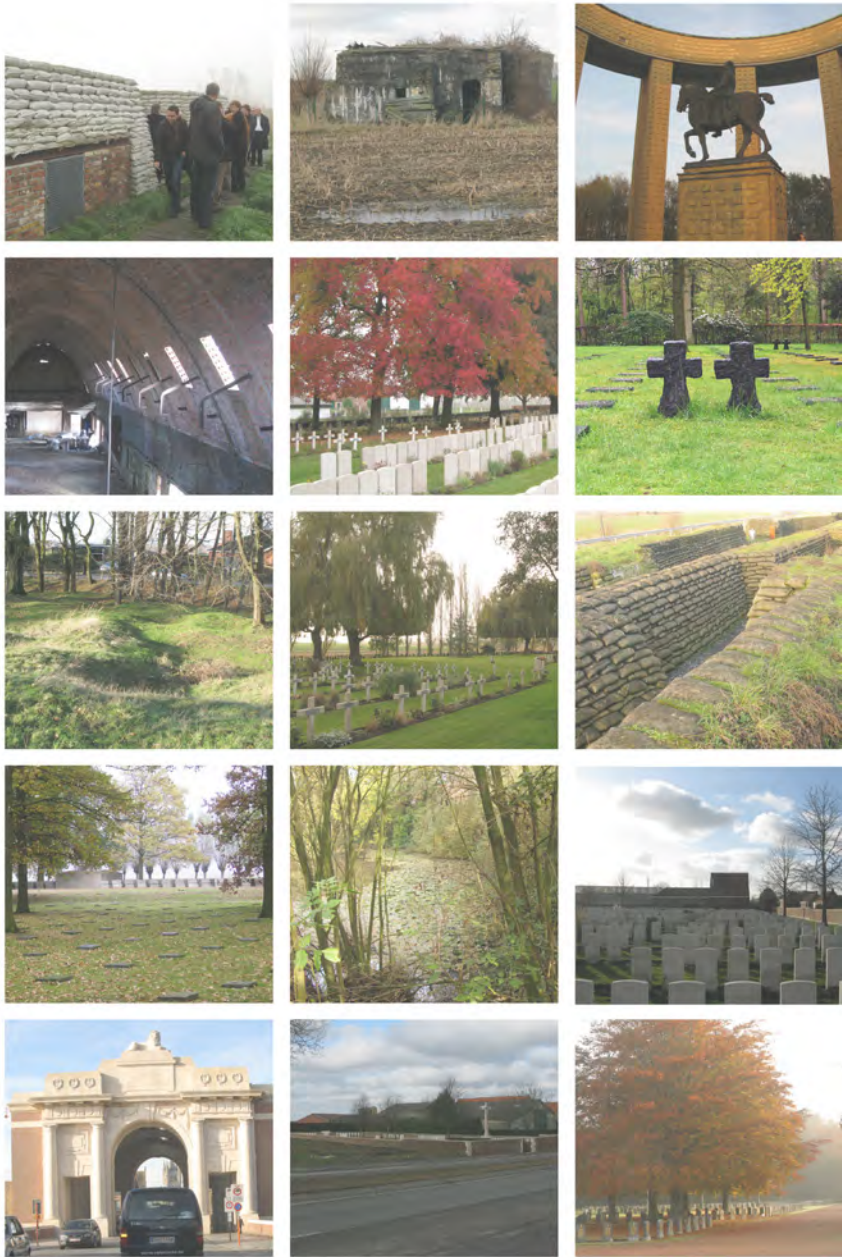
- Herrinerings Shortlisted
- BSA 2012 Planning Award

WIDER TEAM

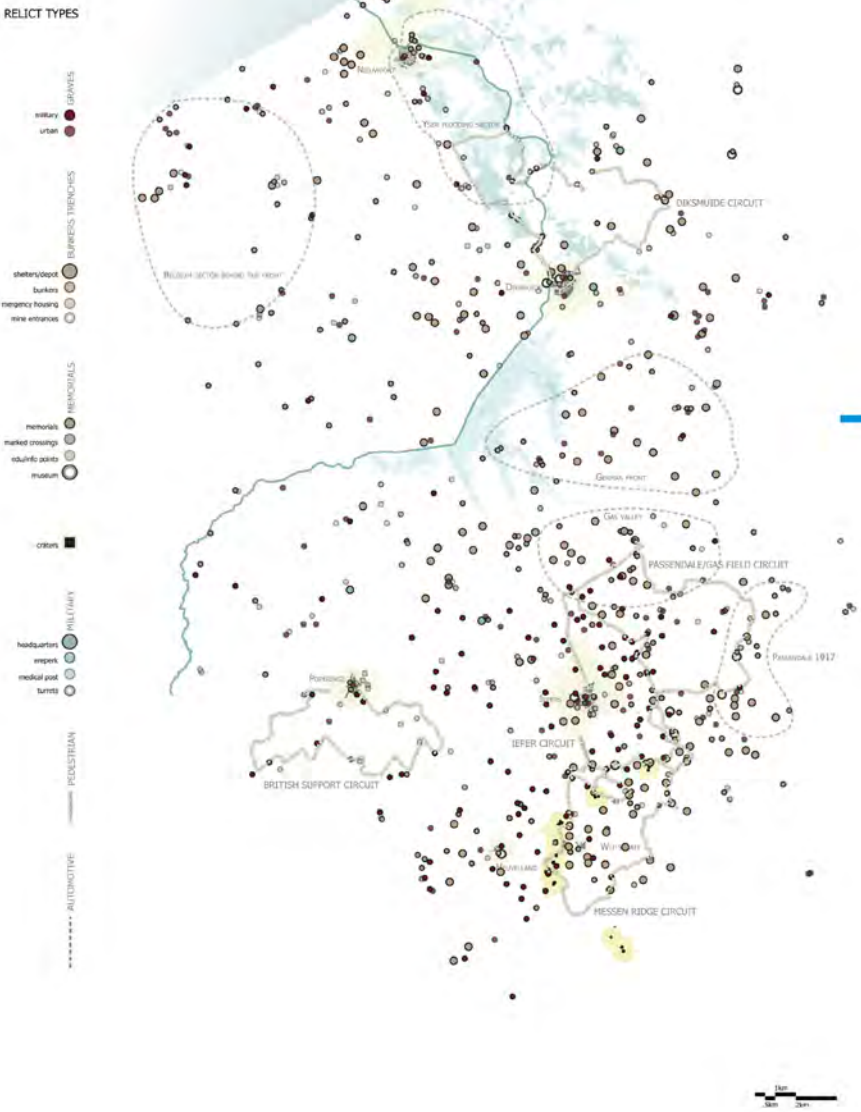
- manager- Scott Bishop
- design team-Jill Desimini, Andrew Tenbrink, Eric Prince, Kimberly Garza, etc.

TOOLS/DATA

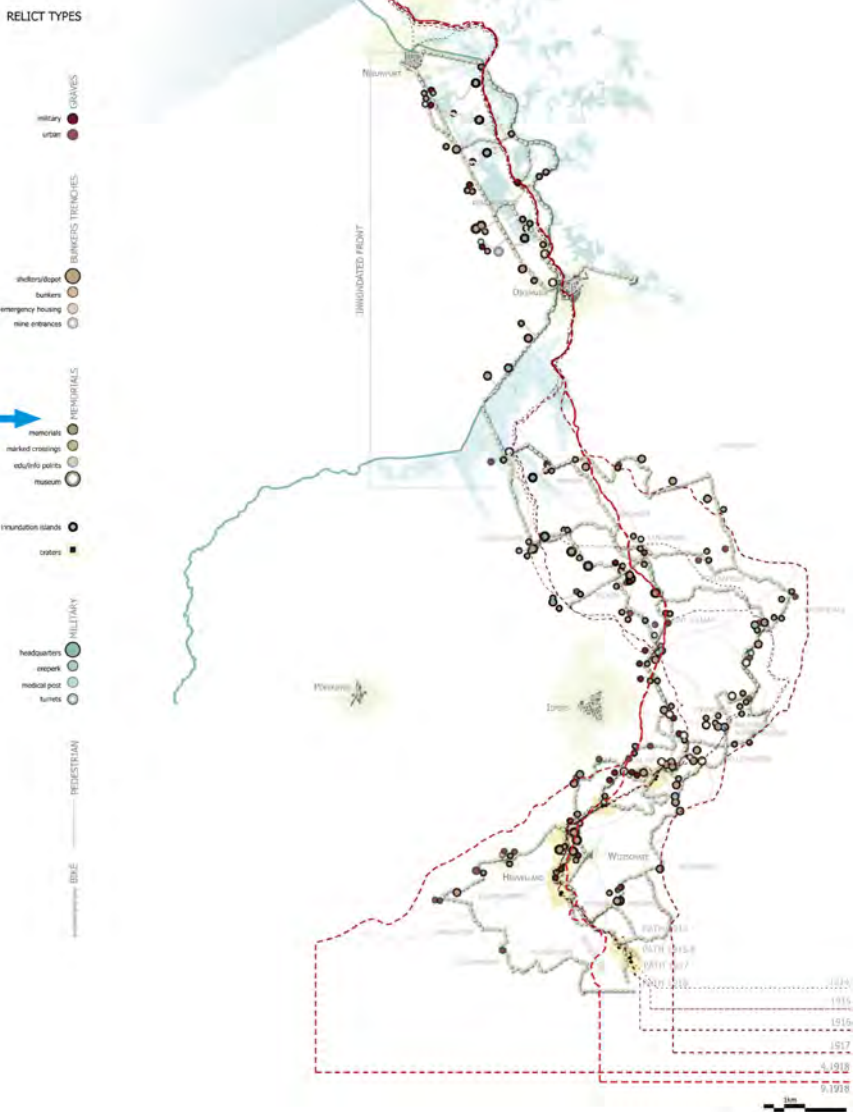
- gis, ai, rhino, psd
- mixed: memorial/state gis, historic texts & photos



EXISTING ITINERARIES . CIRCUITS + SCATTERED RELICS



PROPOSED ITINERARIES . PARALLEL FRONTS



EPHEMERAL FRONTS

WWI FORMS

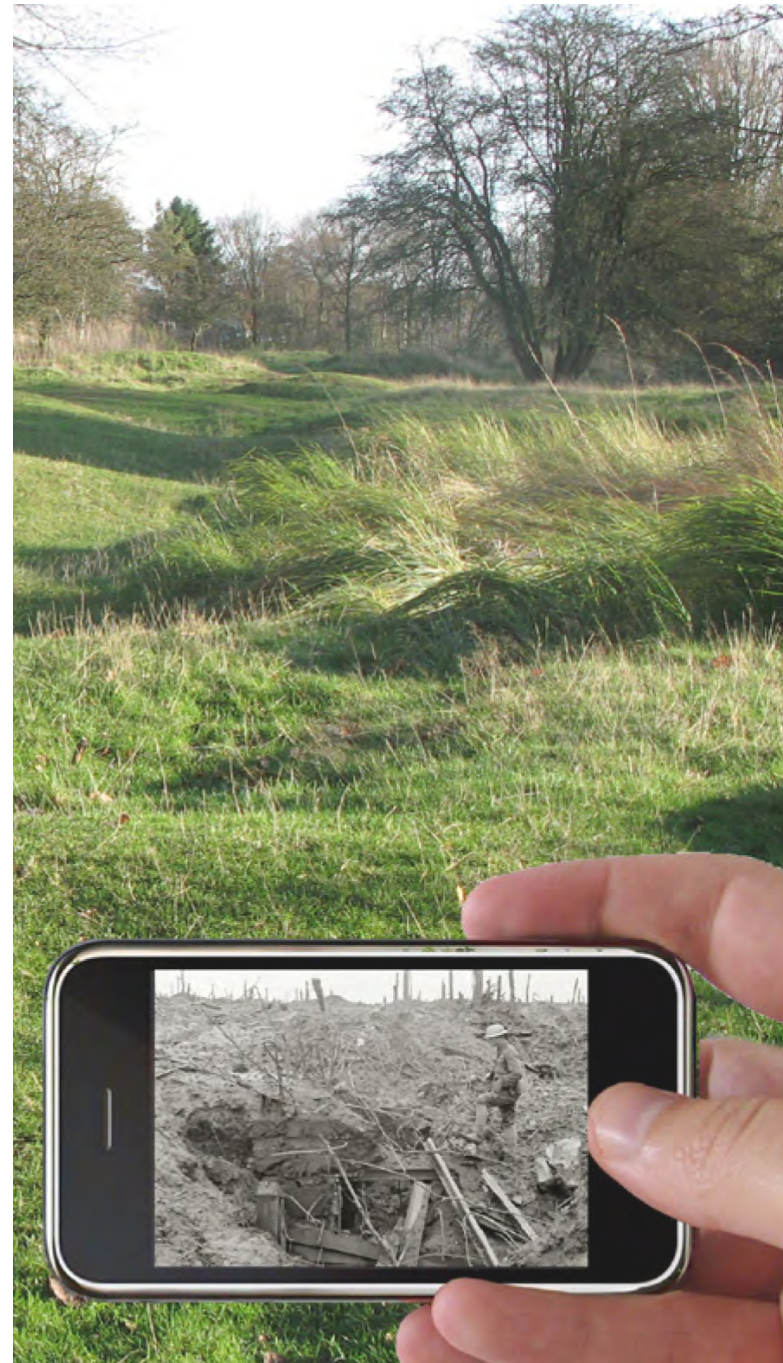
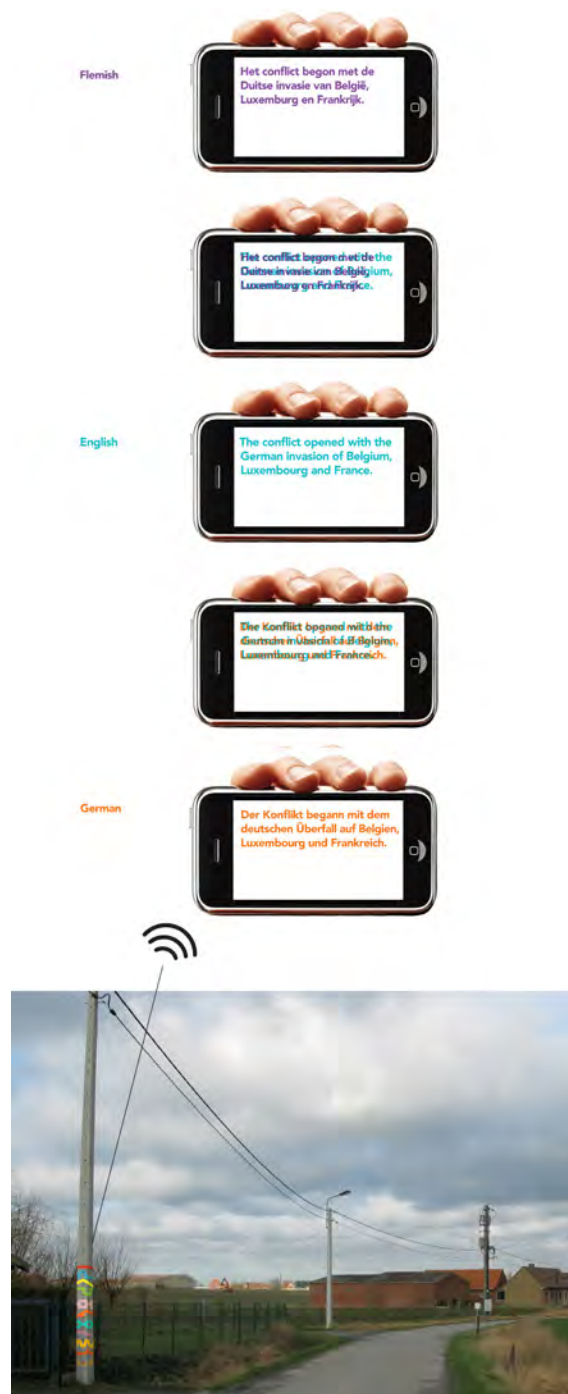
Throughout, the site is a multivalent, multi-lingual experience.

Non-visible, site-and-user-specific networks of information layer upon the existing physical landscape.

Strategies include message delivery to mobile devices as audio and text, proximity sensing, using mobile gps and equivalent technologies to deliver information as visitors traverse landmark borders and messages that respond dynamically to the native language of park visitor's mobile devices.

In terms of specific, spatial techniques and itineraries, in the north, bermed pathways follow the wartime rails. They play off the diking techniques utilized across contemporary plodders, guiding visitors through the northern territory.

By-passes occur opposite new boardwalks and existing ruins/remnants from the war. They help to reduce congestion at points of interest, and their lower elevation affords a protected view out, into former enemy territory. Viewing areas and rest stops are positioned to look out over the former flood-lands, towards island groves or other places of note.

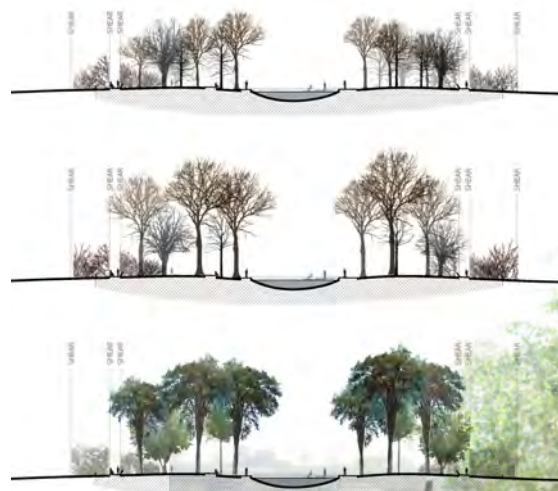


In the south, volunteer groves that have sprouted around crater-sites will be doubly enhanced and overplanted.

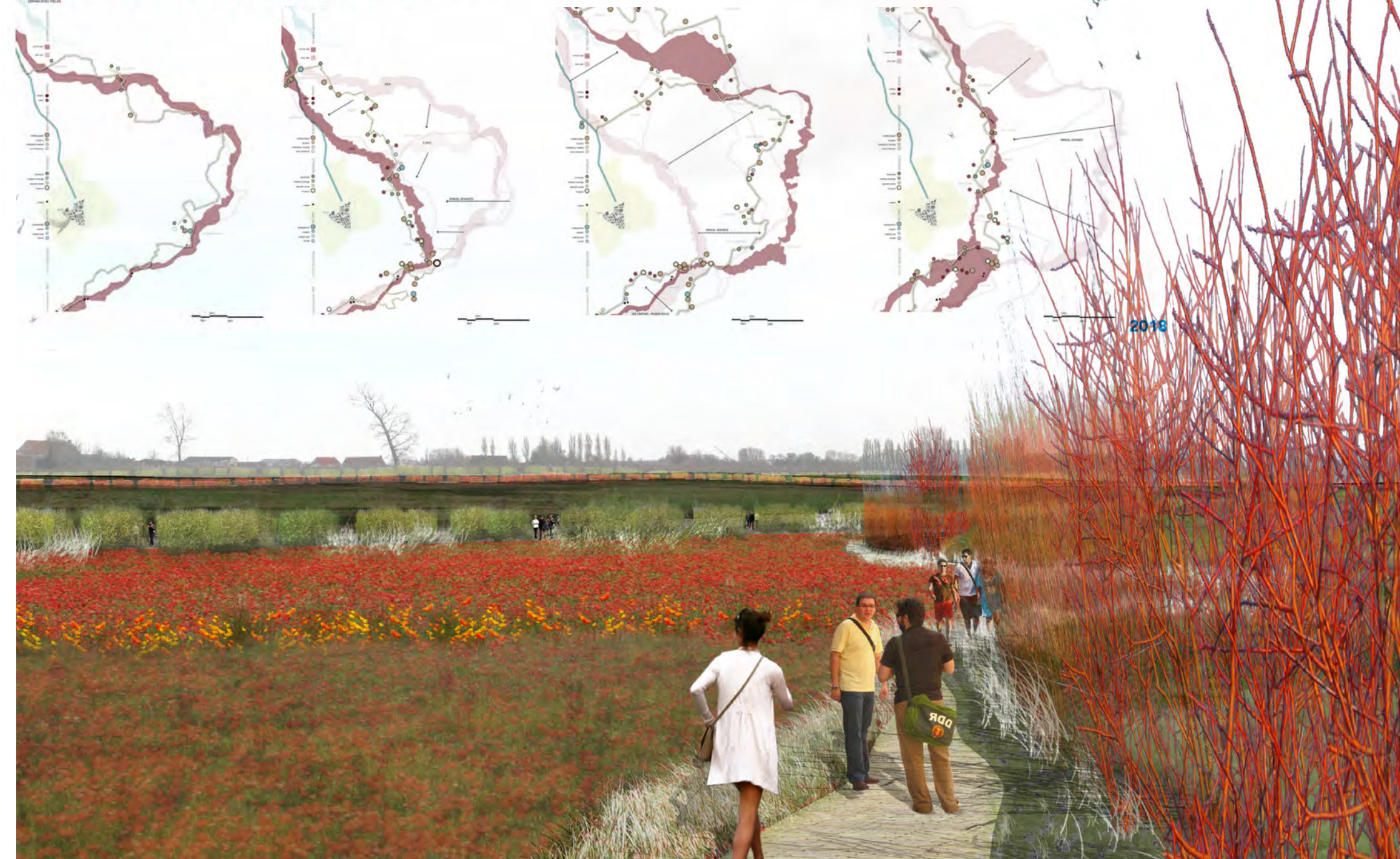
At the edge of the craters, native tilia species will be planted and self-limb as they reach quickly for the sky, forming a ring along the edge of the blast-pools. Within the outer scrub ring, native elms (the namesake of leper) will be planted, die back, and re-generate as the plants wage their own battle with outside forces. Local roses and bramble will then be sheared along the outer edge, forming a clear identifier and intimate interior for the crater sites.

And between, timed to the centennial anniversary of allied and axis positions, floral fields are ephemeral over-plantings of agricultural crop-lands. They bring to light, if only temporarily, the territories of war.

In the spring, the no-man's-land (between allied and axis fronts) are rendered in the bold reds of flanders poppies. These pre-crop plantings give way to linear perimeter crops during the summer and harvest seasons, keyed to farmers' specific crops. In the winter, outside the no-man's-lands, chalk-lines and plowed winter wheat patterns trace former trench locations and layouts.



FRONT-LINE ROTATION STRATEGY ALONG THE IEPER SALIENT



The Massachusetts Military Reserve has been slowly decommissioned, evolving from a full army training campus to limited air-force and national guard usage. Despite facing full closure, it still hosts a number of contaminated ranges. These have been the point source for groundwater pollution on and far beyond the base's boundaries at the western edge of Cape Cod.

Cautious Consumption proposes to tap existing regional wastes for remediation. A local depuration center, for cleaning contaminated shellfish, becomes the source for chitin-carbohydrates (meat can be sold, toxins distilled for science). Injected into remediation wells, the shells act as fodder for the bacterial digestion of water contaminants. The remediation footprints and distillation facility can thus be used to grow and process diabetic pharmaceuticals, operating in the feedback and transition between the fisheries economy and suburban developmental side-effects.

DATE 2007, U Penn studio work

ROLE designer

EXPOSURE

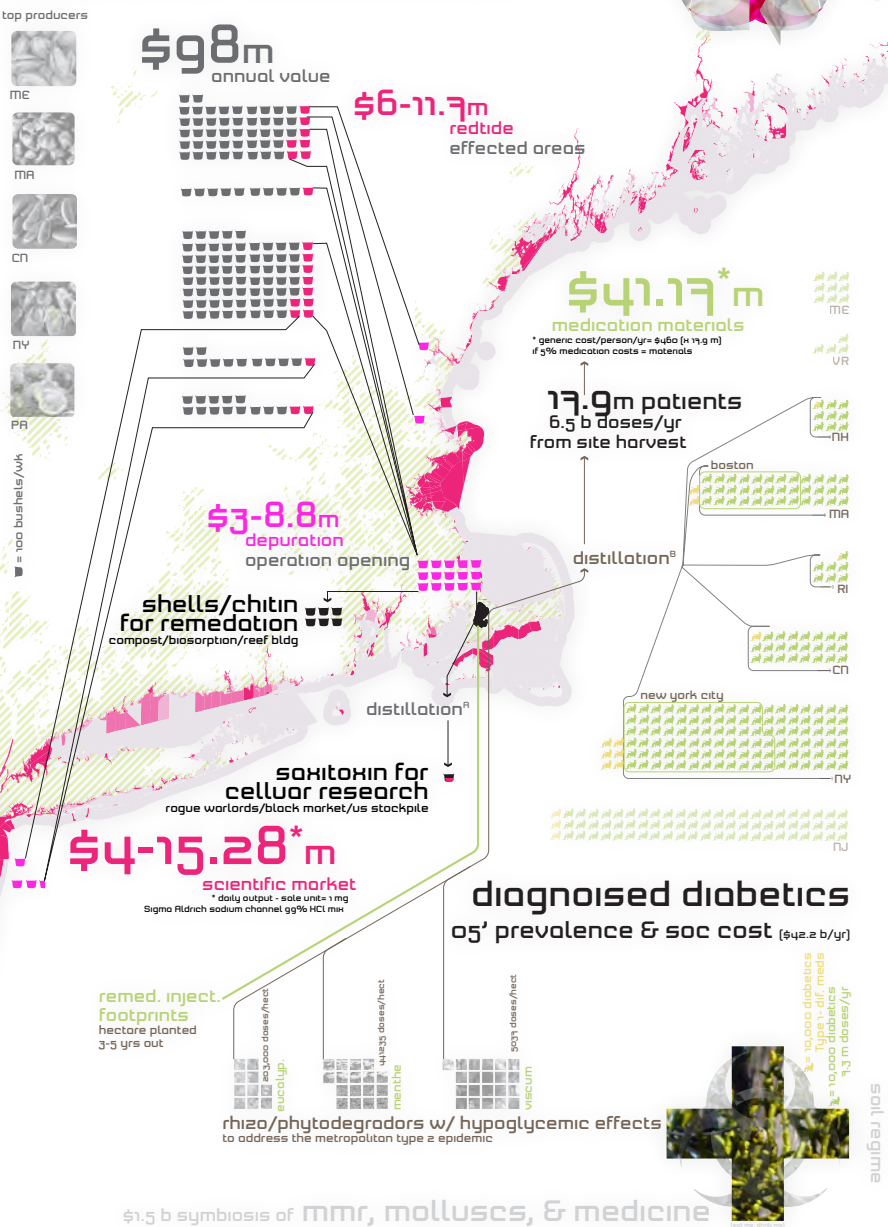
- L701 Reed

TOOLS/DATA

- gis
- ai
- psd
- rhino (laser, cnc, other)
- mixed: noaa/state fisheries, cdc diabetes records, epa/ army contamination data & remediation tech transfer

Cautious Consumption

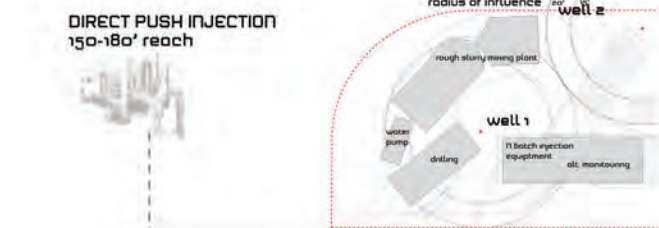
n.e. shellfish catch & contamination



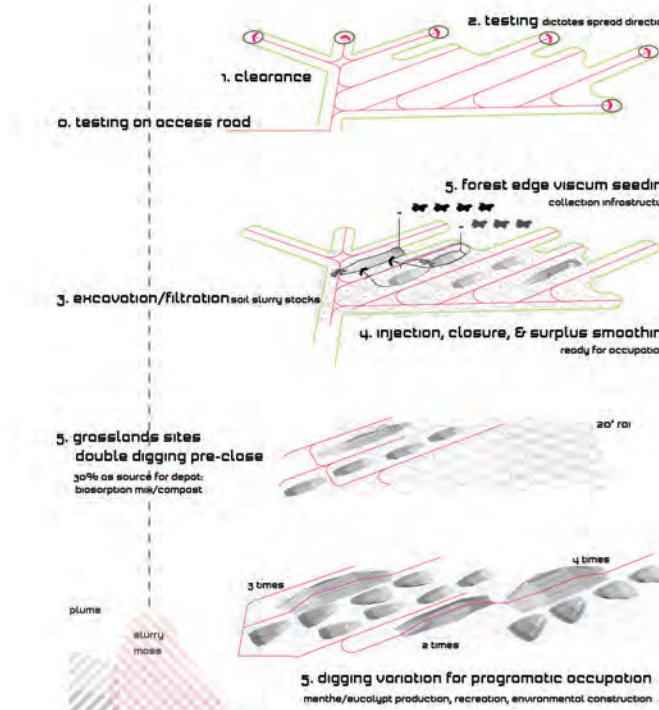
REMEDATION INTEGRATION



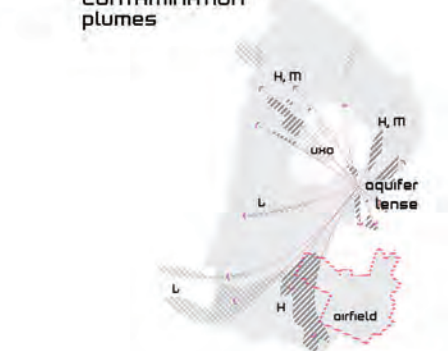
SLURRY WALLS FOR BACTERIAL METABOLISM



WORKING/CLEARANCE CORRIDOR- 2 ROW WELLS



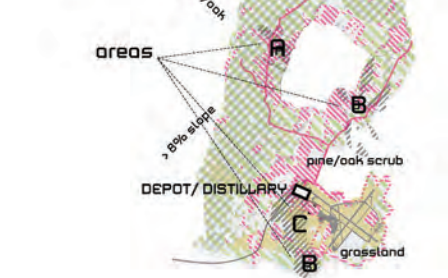
SITE STRATEGY



ACCESS ROUTES program potential

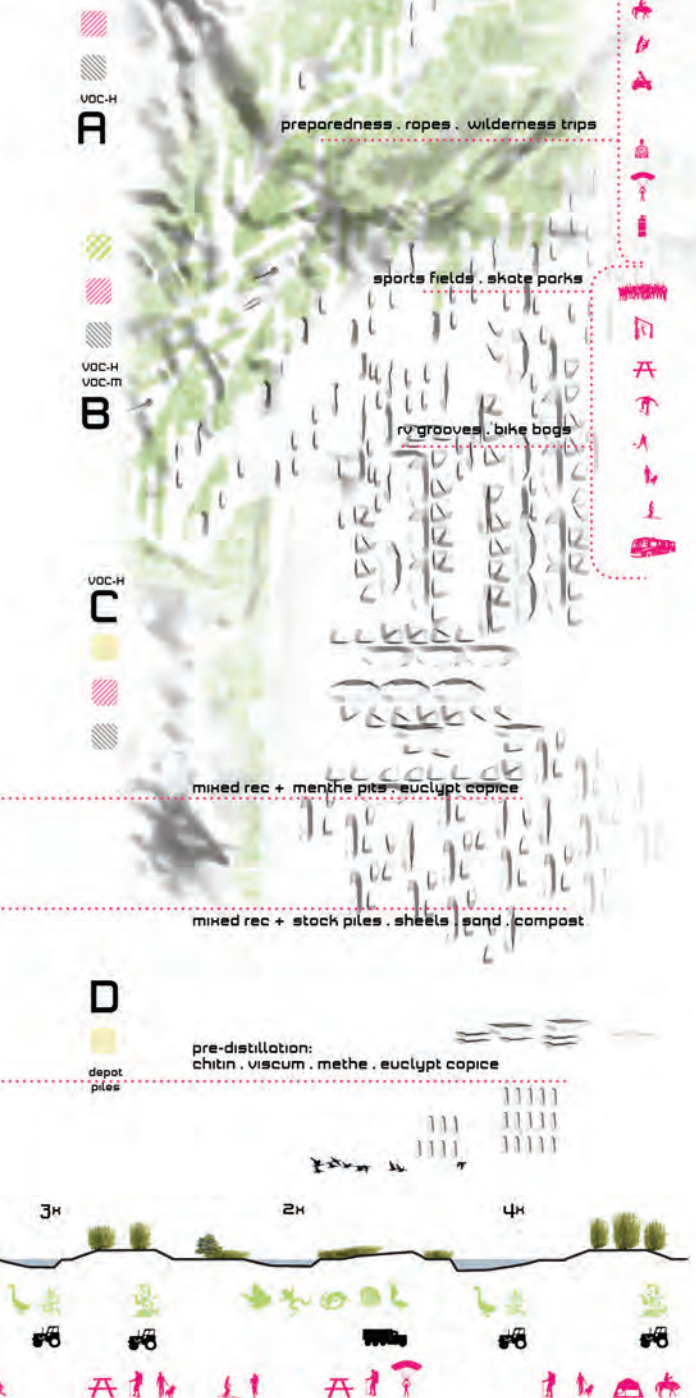


SLOPE & COVER remed. variation



eco-pharma:
access:
program ops:

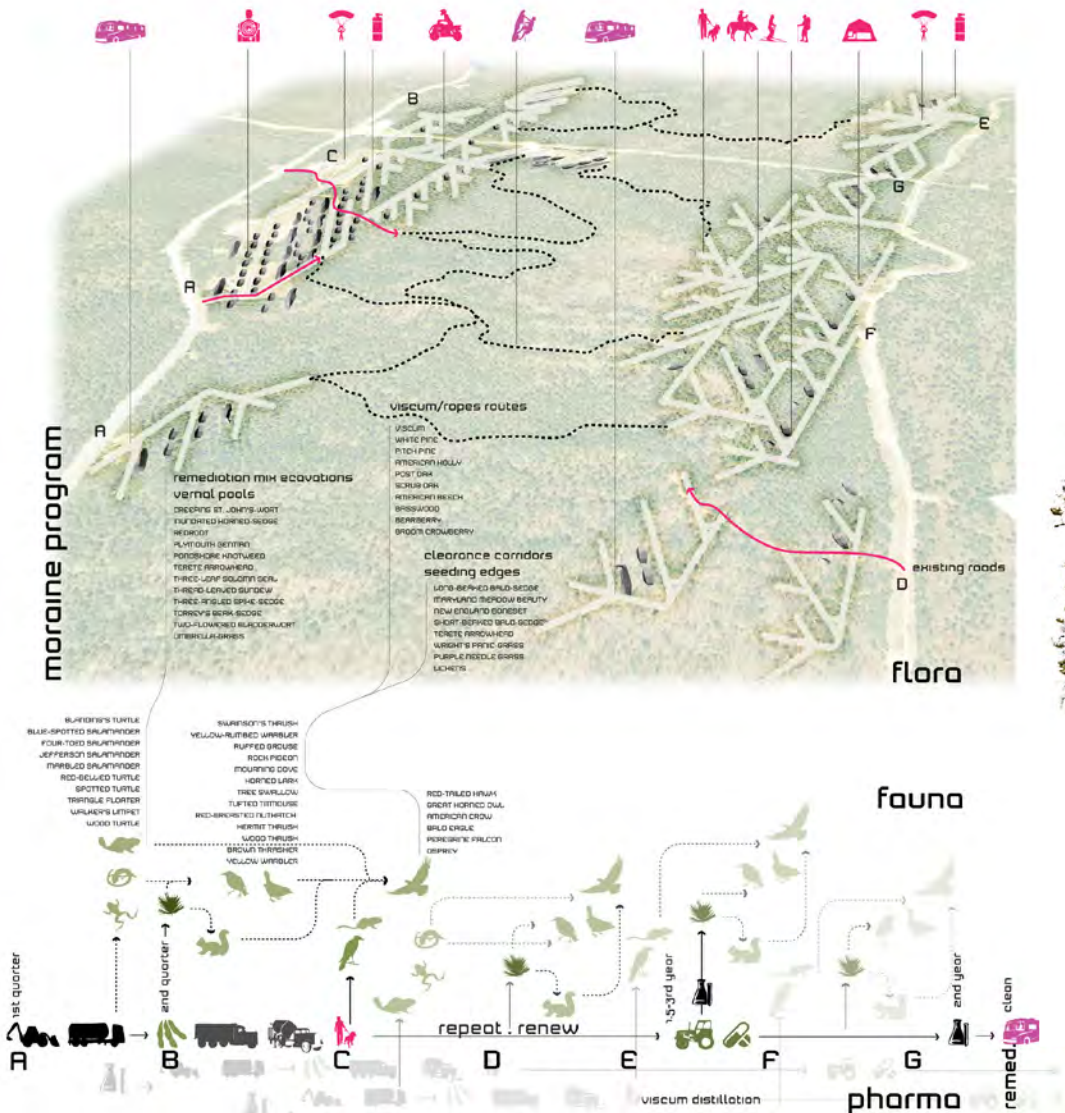
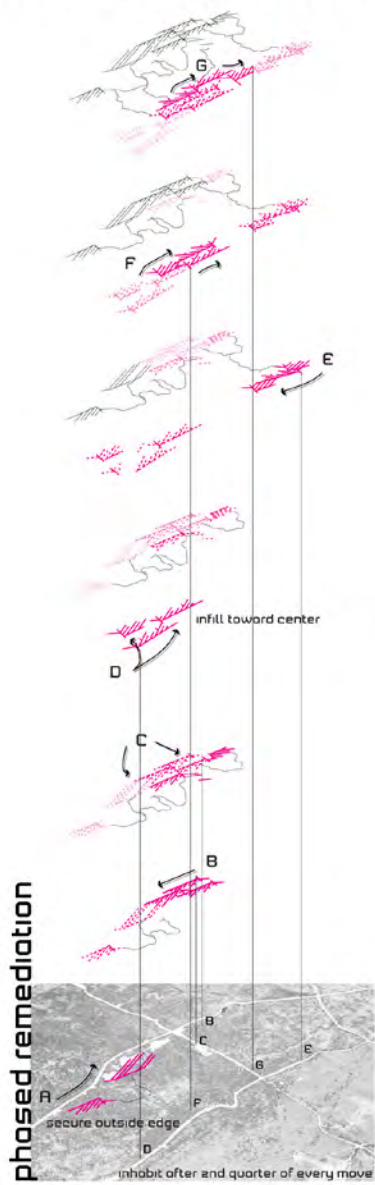
TOPOGRAPHIC DEPLOYMENT



The placement and order of remediation is roughly based on terrain, ease of access, and degree of contamination. Thus while several different plume and point sources are addressed (A-D of topographic deployment) each larger well cluster is built up from several phases of remediation. Staggered installation can thus work from higher to lower contamination, from less to more remote access while enabling tandem openings for recreation and pharmaceutical cultivation.

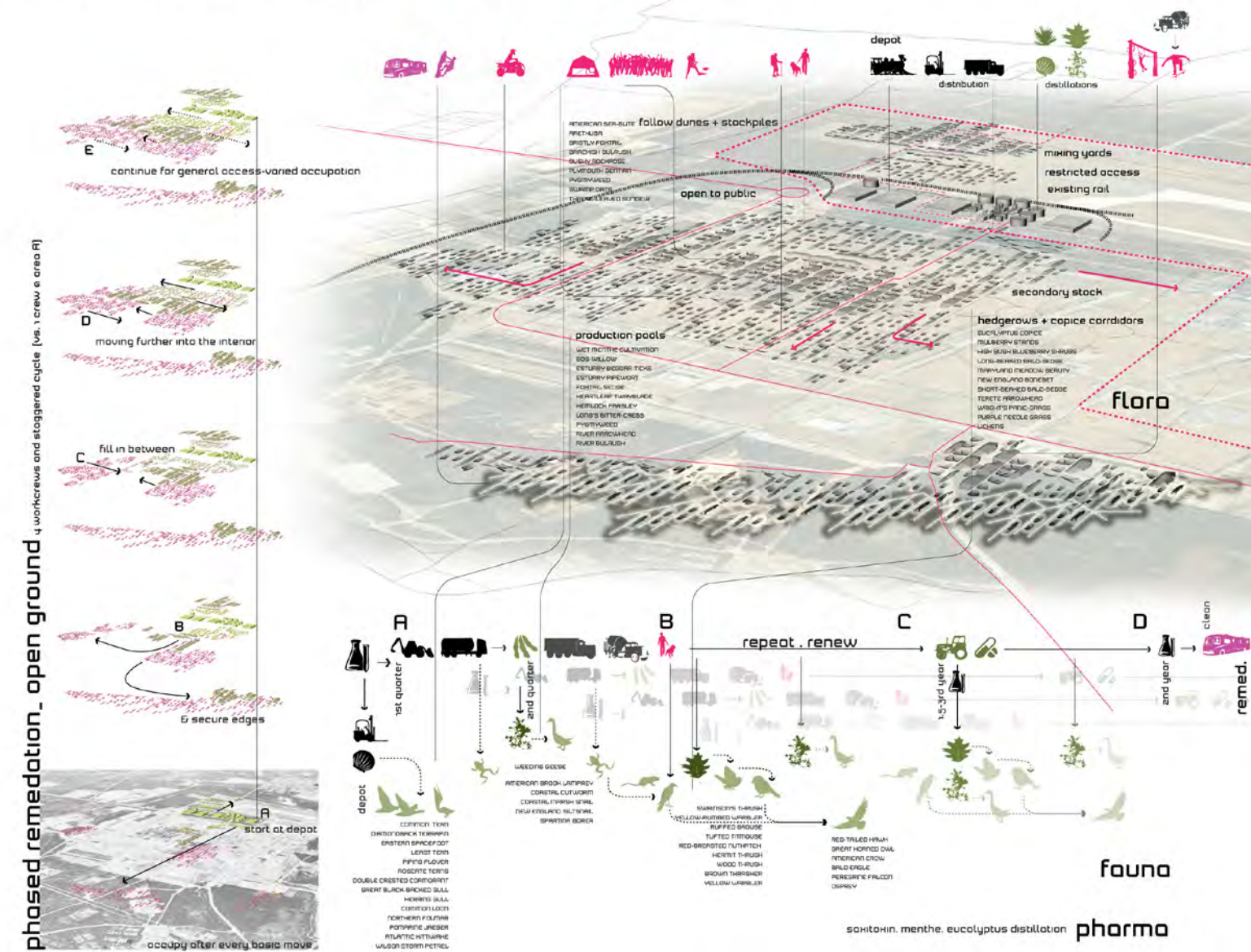
Much of the remediation footprint and interim programming strategy is generated through two aspects of the injection processs: First, creating wells near contamination plumes in the hills requires roads and vehicular access. Selective clearance, initial installation and monitoring routes provide nested, labyrinthian trails (right) ideal for weekend warrior recreation and thresholds ecologies. Playing between the two, a series of mistletoe infestations can be cultivated and harvested in the pine forests. Arborial platforms and links can be utilized for adventure groups when not engaged in pharma harvesting.

A_canopy infiltrations



Second, the remediation slurry requires not only shells, but sand, abundantly available across the base. Shallow excavation pits can thus be easily dug between the recommended well radii. On the rocky hills, these areas become protected vernal pools and wildlife attractions, while on the low flats near the distillation plant, they can be used for wet-crop growth of pharmaceutical mint. Processed shells and excess sand can also be batched near the depuration and distillation depot, attracting a whole array of traditional shore birds and associated fauna for a novel preserve and breeding ground for endangered area species.

C & D_production park & distillation depot



MERKSEM RE-MIX

LAAGLAND

Merksem is a suburb at the edge of Antwerp. The site—largely leftover spaces on the edge of twentieth-century transportation infrastructures—is vast and fragmented, yet it already hosts a rich combination of uses and activities: sport, allotments, working fields, habitat. These activities, however, are not structured to address questions of overall function and accessibility, nor do they create a meaningful civic experience.

This Stoss projection proposes a new type of productive park for Merksem, an important new civic and ecological link in Antwerp's Green Ring. Working the earth and working the body are the two primary goals for the park, and they expand upon the popularity of sporting fields and allotment gardens that are scattered across the site. Building on the canals, the park extends these program tendencies to integrate and intensify habitats, flooding, and create a connected, re-mixed civic space.

DATE 2010, Stoss Team Entry

ROLE project manager, designer

EXPOSURE

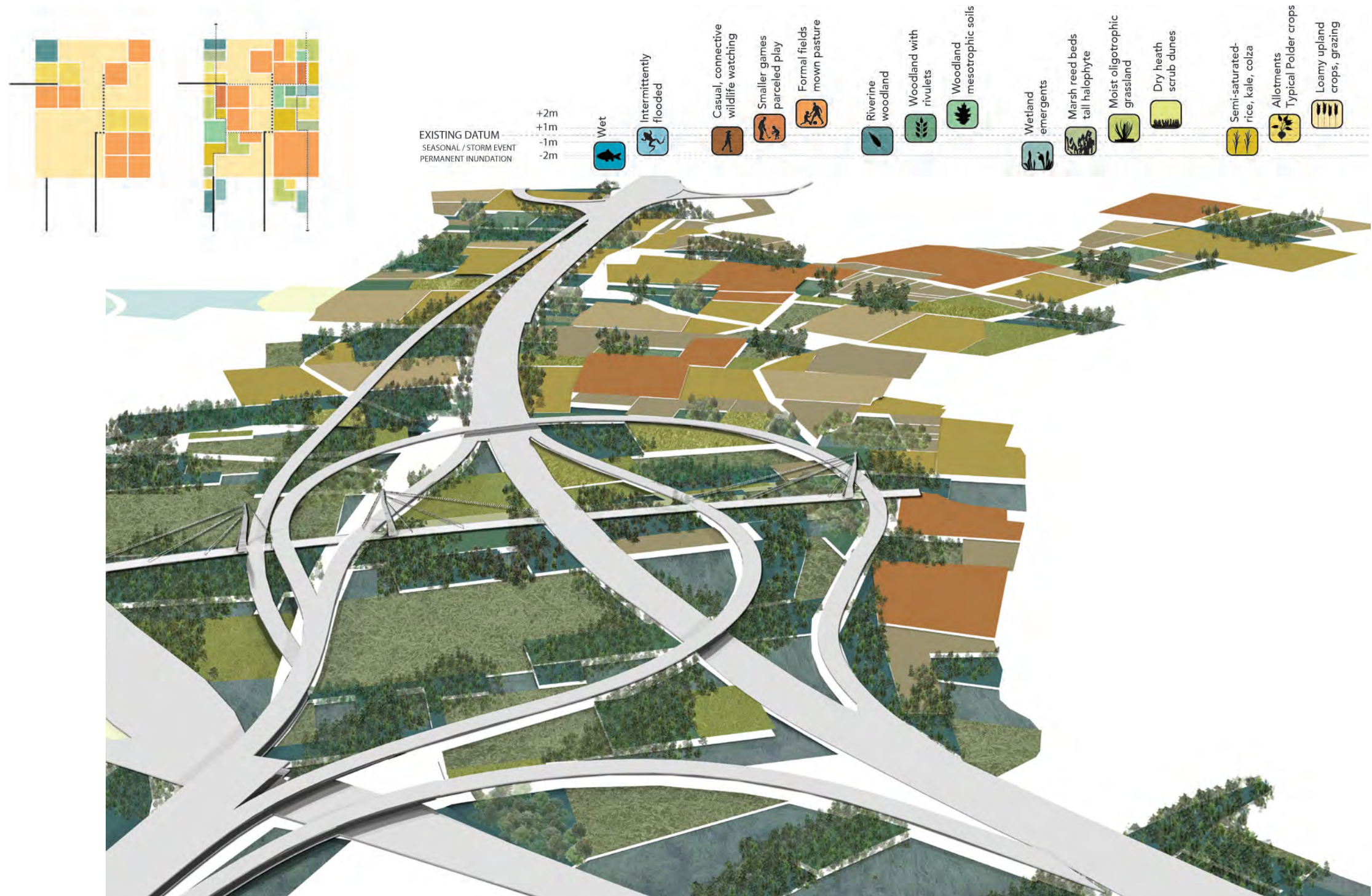
- Competition Shortlist

WIDER TEAM

- designers- Margaret Graham

TOOLS/DATA

- gis, ai, rhino, psd
- mixed: city gis, historic maps & site photos



LAAGLAND

Laagland starts with water, in terms of both its functionality and its potential to catalyze new ecological and social life.

The park re-contours the ground so that it may better accept fluctuating levels of stormwater from the site and from adjacent highways and building parcels. This strategy creates a full gradient of wet to dry and low to high conditions.

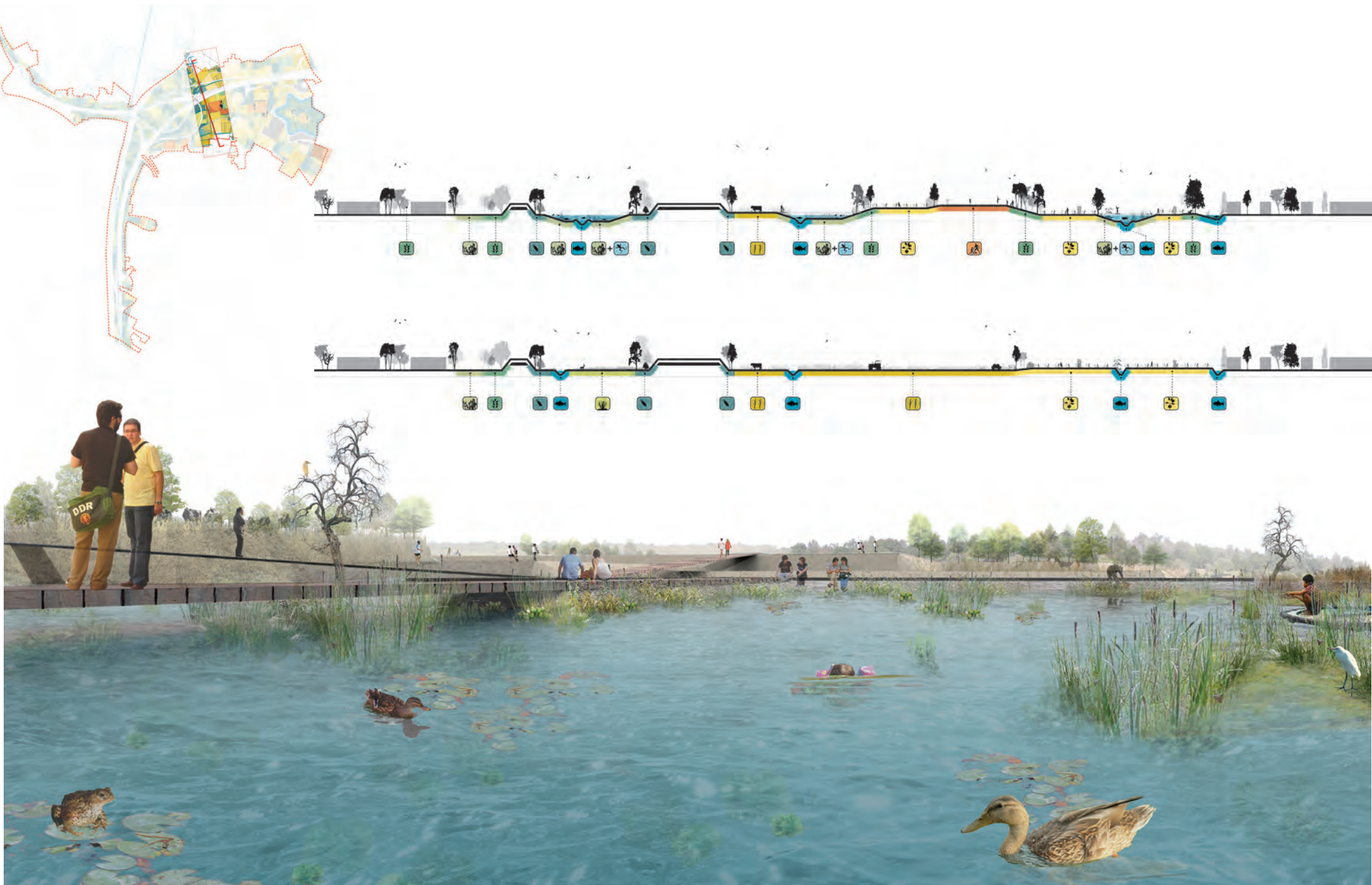
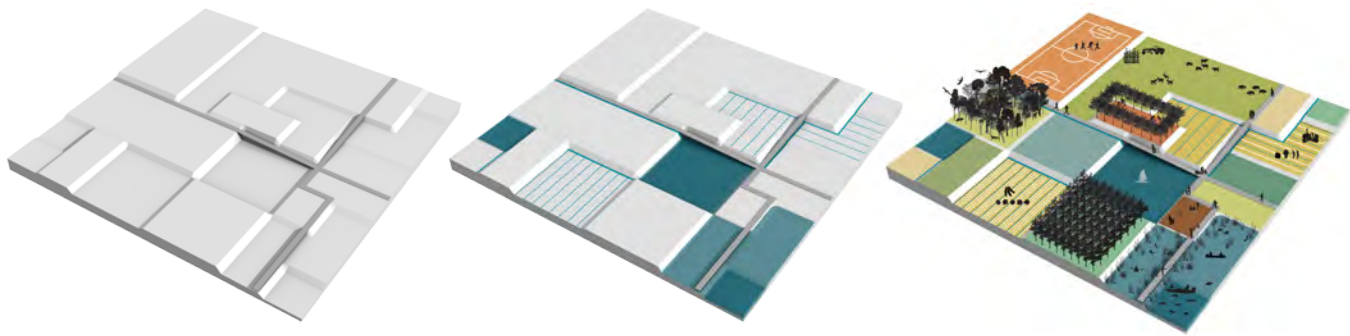
These terraced fields are rendered dynamic by the different ways they are occupied and by the different ways water acts on them over the course of the day and of the year. Fluctuating water levels and varying intensities of use and activity (both on a single terrace and on aggregations of adjacent terraces) create a new type of dynamic park for the city, finely tuned to both environmental and social oscillations.



Plant succession strategies also allow for the building up and emergence of new habitat areas over time. Initial plantings of native elms (which will die back over time and never mature) will provide necessary shade for the establishments of oaks and other upland species.

Field rotation strategies also address issue of soil compaction (from intense human use) and nutrient depletion (from farming and gardening). Over the long-term, different activities that occupy the same terrace elevation can rotate with another, alternately activating and de-activating the park plots.

The vision for Laagland emphasizes the programmatic and ecological potential of hybridizing water management, sport plateaus, habitat corridors, community agriculture, and pedestrian and vehicular circulation.



The Plaza is a new gathering space for the University and local communities, part of the larger 'Common Spaces' initiative at Harvard.

It sits atop a vehicular tunnel, between Harvard's historic Yard, Memorial Hall, and Science Center. An incredibly active threshold zone, the Plaza's selective articulation—edge plantings and clustered seating—direct the multiple vectors of students, bikers, and operations equipment that cross the space daily. The layout allows the hosting of massive gatherings, covered ceremonies, and impromptu crowds.

As seen in these initial surface studies and program plans, the design of the Plaza evolved around several questions, all tied to the shallow, intensive structure of the site: How could we active the space with minimal means, both physical and programmatic? How could we tap underlying infrastructure to enliven the space with sustainable affects and information?

DATE 2011- Under Construction
Stoss project

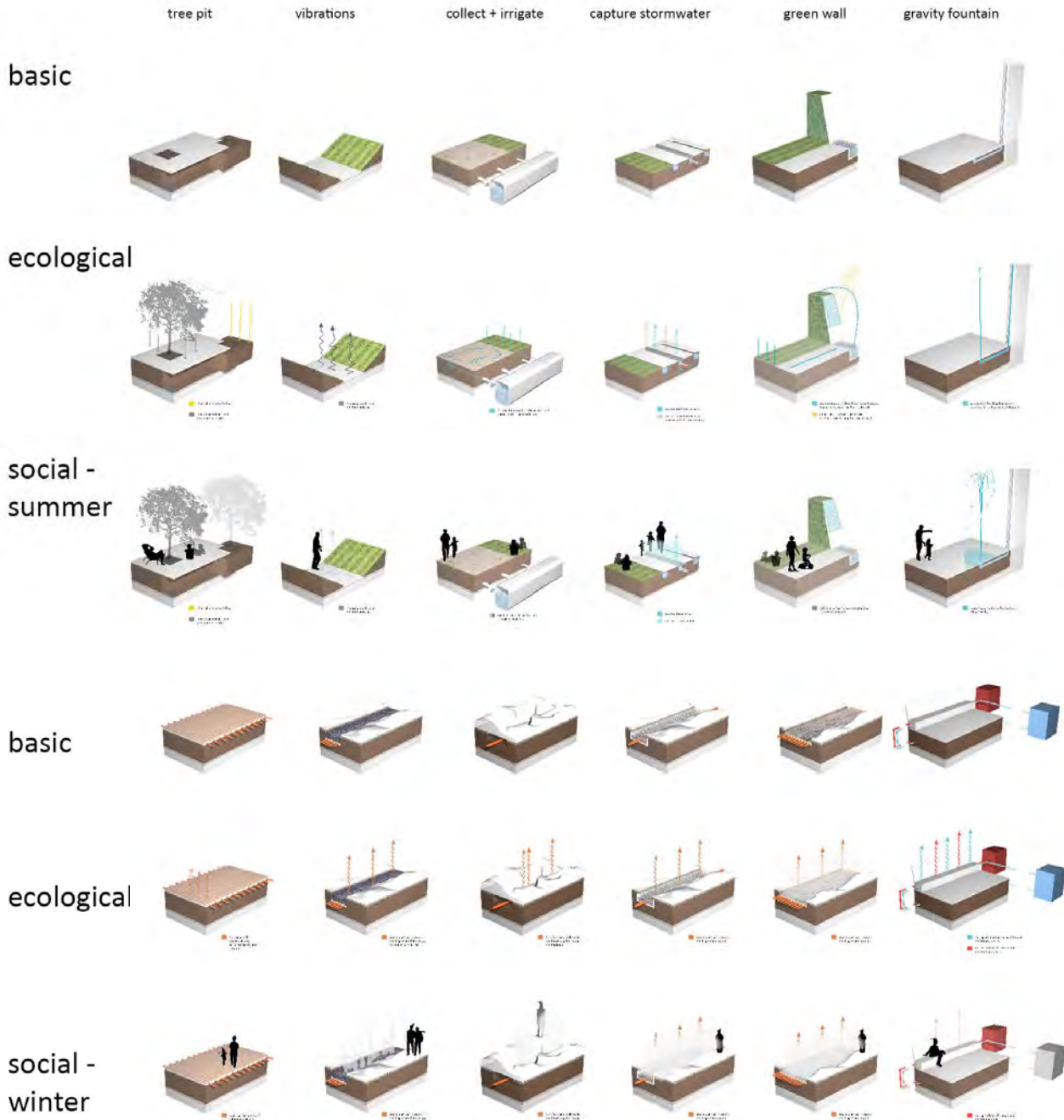
ROLE designer, drafting team (SD-
CD 80%)

WIDER TEAM

- managers- Scott Bishop, Cathy Braasch
- design/drafting team-Fiona Luhrman, Nick Buerhens, Ruth Siegel, Jill Allen, Marguerite Graham, Emily Schlickman, Thomas Clark

TOOLS/DATA

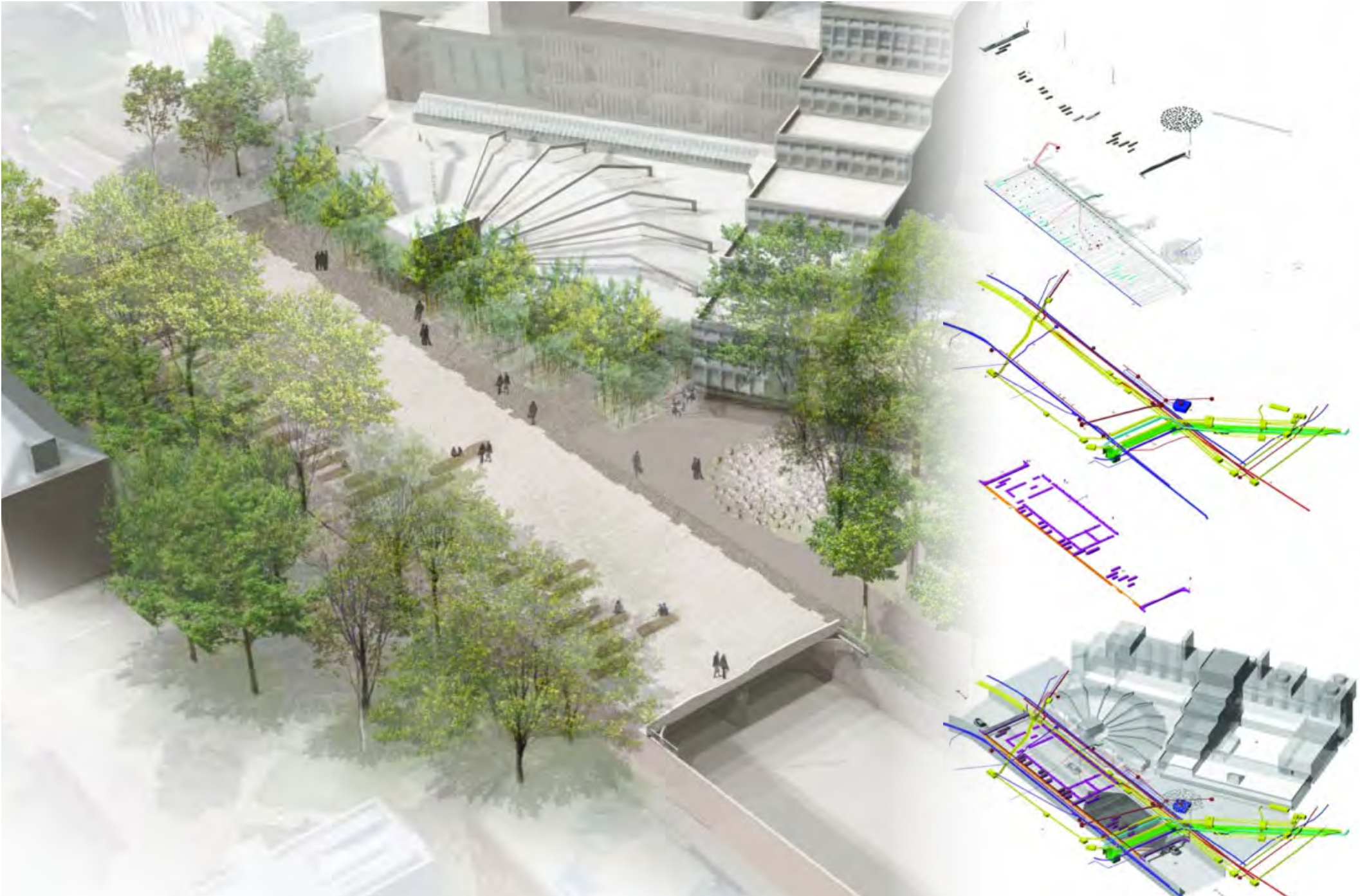
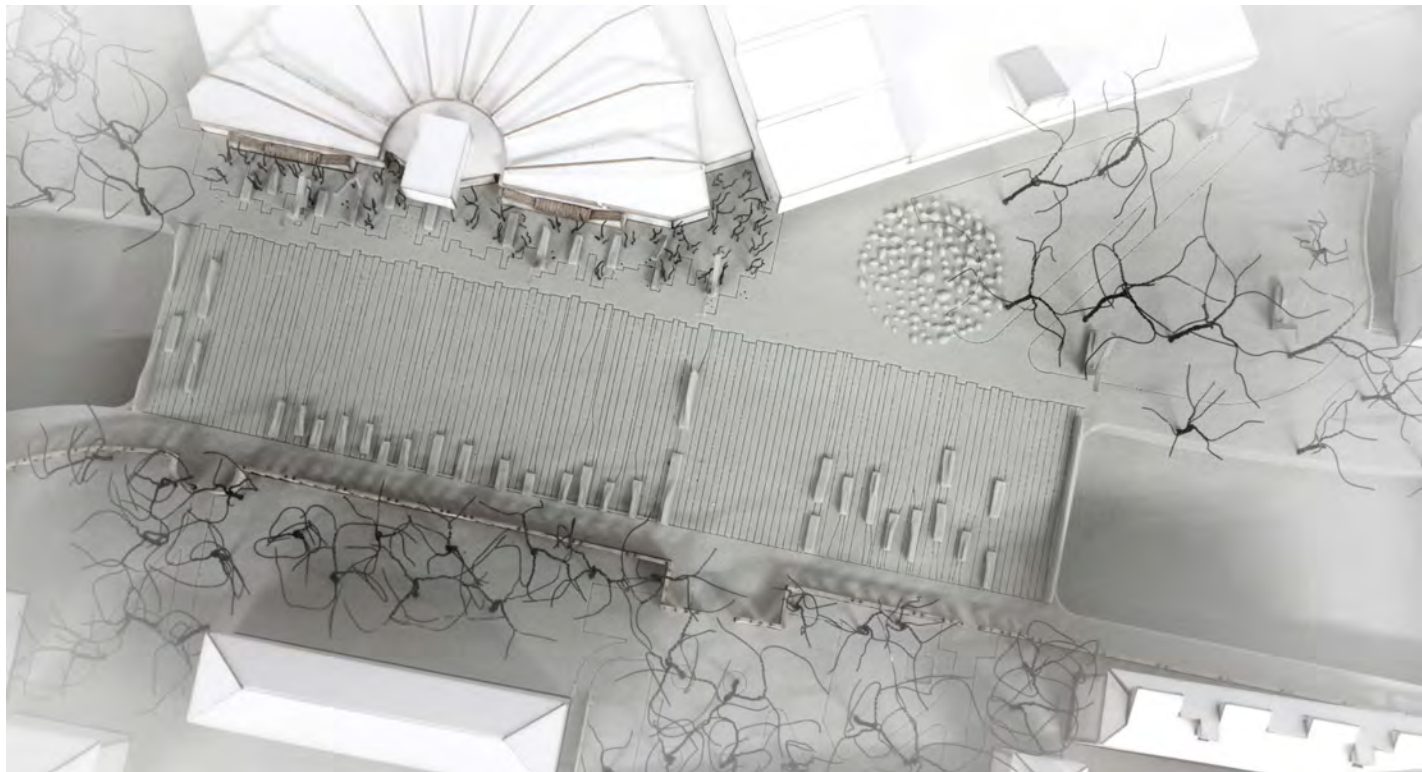
- ai, rhino (laser, cnc), psd, cad
- mixed: city/university data



In the final design, now in construction, the orthogonal geometry of the plaza's design enables maximum flexibility for a diverse array of programming. The linear infrastructure defines the space, linking across and into the adjacent lawn by Memorial Hall, and playfully juxtaposing the diagonal circulation patterns without impeding the major pedestrian routes.

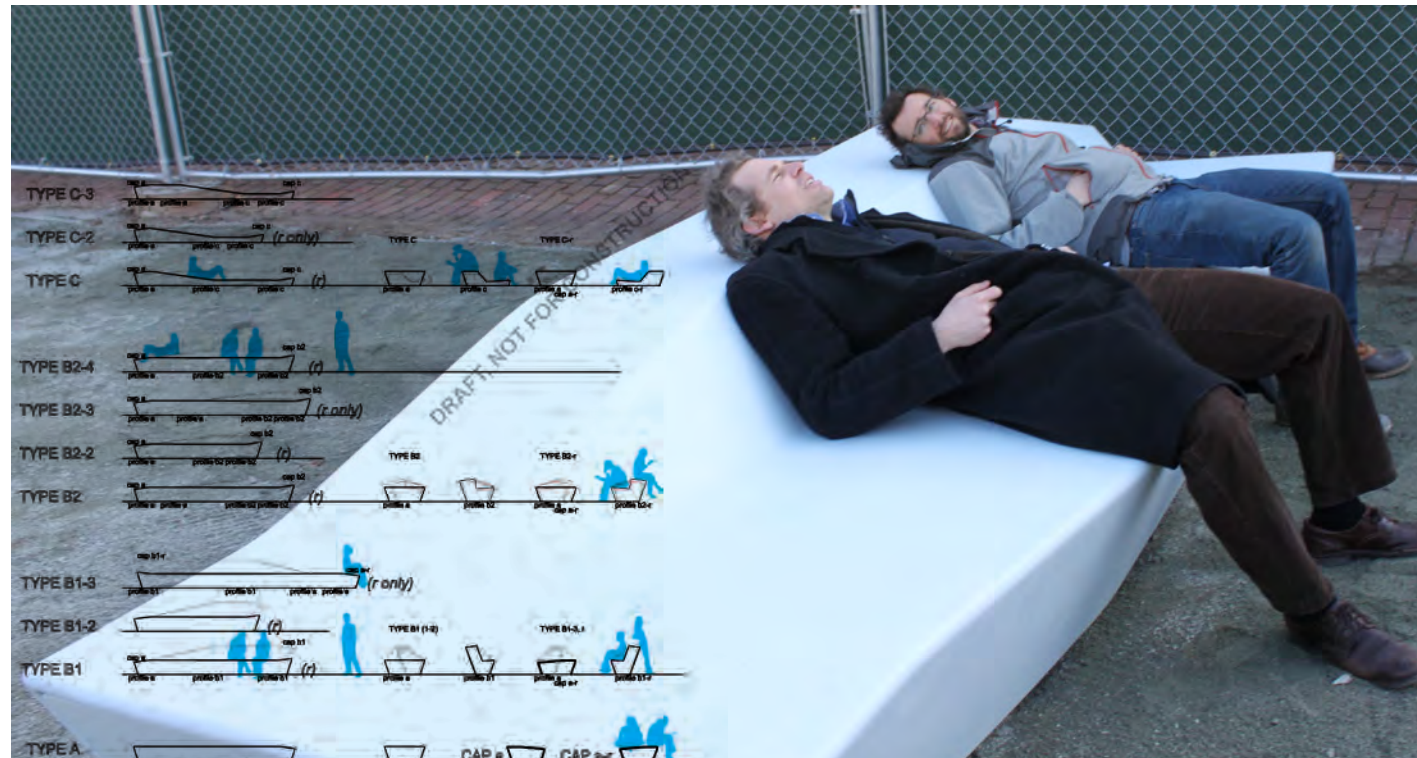
The east end will become a robust gathering spot with staggered benches oriented adjacent to the main paths of circulation between the Science Center, Memorial Hall and the Harvard Yard. The east edge has ample breadth for several food vendors. The west side of the plaza will continue this emphasis on flexible surface design, accommodating a majority of the large scale events within the open plaza area, including the farmer's market, outdoor concerts, and commencement day activities. Permanent foundations allow for a variety of tent configurations, reflective of the changing programmatic needs. Outdoor film screenings can occur with projection on a temporary screen that plugs into the tent foundations. Temporary stages can also be assembled to accommodate a variety of program uses.

Sustainability is central, but is considered in multiple ways. Recycled materials, stormwater infiltration, and an education program reinforce the University's sustainability mission.



During the design process, a series of interim programs and prototype tests were initiated. To build social momentum, interim programs, from ice skating to musical events, increased publicity for the project while simultaneously cultivating a civic audience for the future plaza.

On the formal side, several different paving materials as well as bench forms and prototypes were laid out on the Plaza to assess social use, ergonomic fit, construction weathering and lighting impacts. Paver mock-ups included multiple aggregate blends and paving types to capture the visual effect and texture of the field, to anticipate its distinctiveness and slowing effect on traffic. Three phases of bench prototypes were constructed, each testing different corian surface colors and attachment structures, internal electric systems, and finally, equivalent wooden surface systems. In each phase, profile refinements, physical comfort and tactility were considered and incorporated into further details.



AQUA-CULTURE

WATER

Taiwan is currently facing two major hydrological issues: one of water quantity and one of water quality. Despite abundant rainfall, a lack of reservoirs and inadequate wastewater facilities contribute to general contamination.

This Stoss project integrates water cleansing within the contemporary Taiwanese city, Taichung. The sculpted terrain of pools, paths, and cultural nodes weaves together the recreational, cultural, and ecological uses of the park. With simple cut and fill, a constructed valley runs from the Gangwei River to Xiashibei River, providing aquatic program anchors and cleansing water. The forest stretches from the pools to the higher elevations, providing shade, habitat, and areas of sheltered program. The circulation and infrastructure network provides access and widens to create cultural nodes and recreation spaces.

DATE 2011, Stoss Team Entry

ROLE manager, designer

EXPOSURE

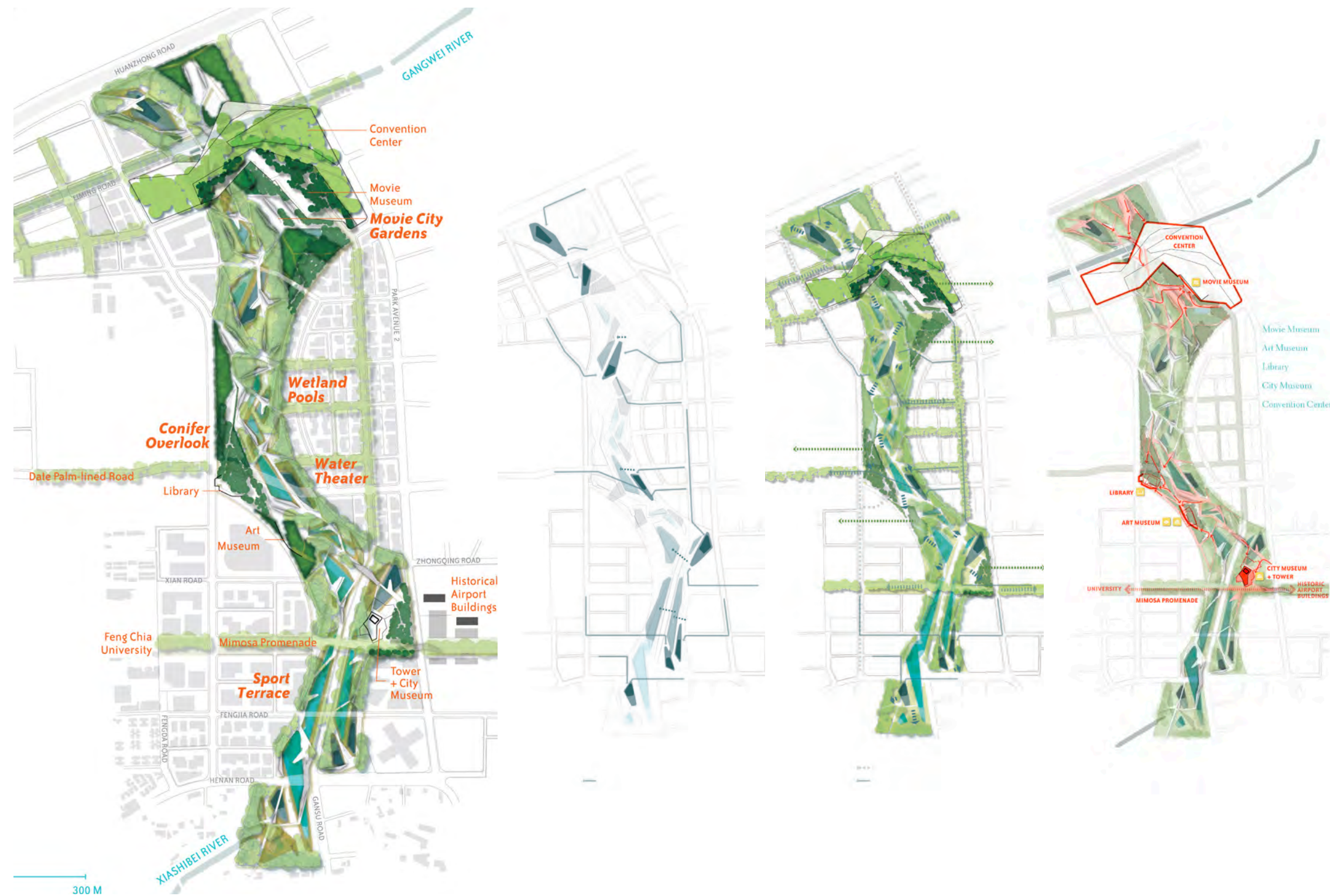
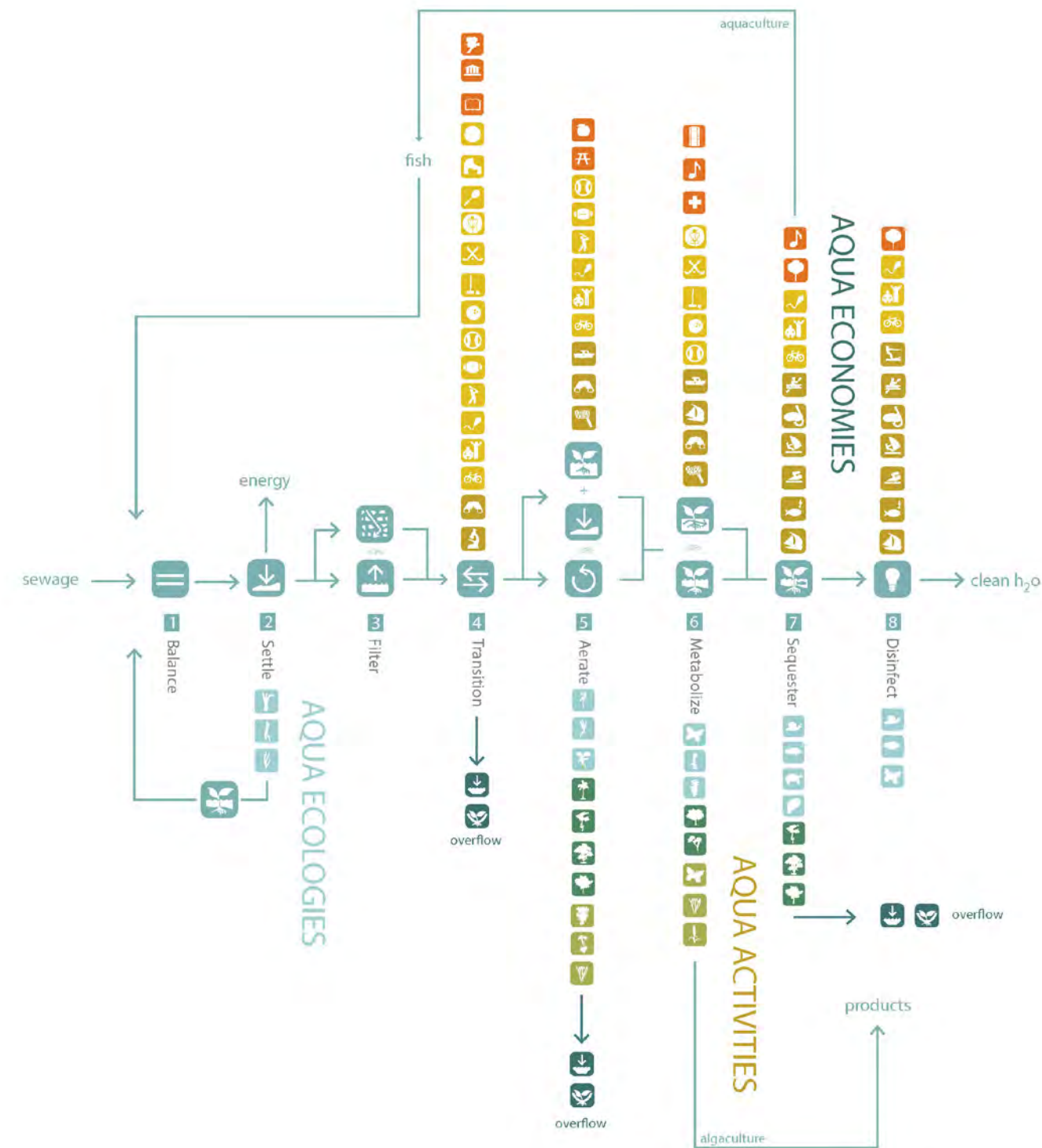
- Competition Shortlist/Finalist
- BSA 2012 Honor Award

WIDER TEAM

- Jill Allen, Fiona Luhrman, Emily Schlickman, Thomas Clark, Iggy So, Andi Adler

TOOLS/DATA

- gis, ai, rhino (laser, cnc), psd
- mixed: city/state gis, taiwan water & resource data, water processing calculations



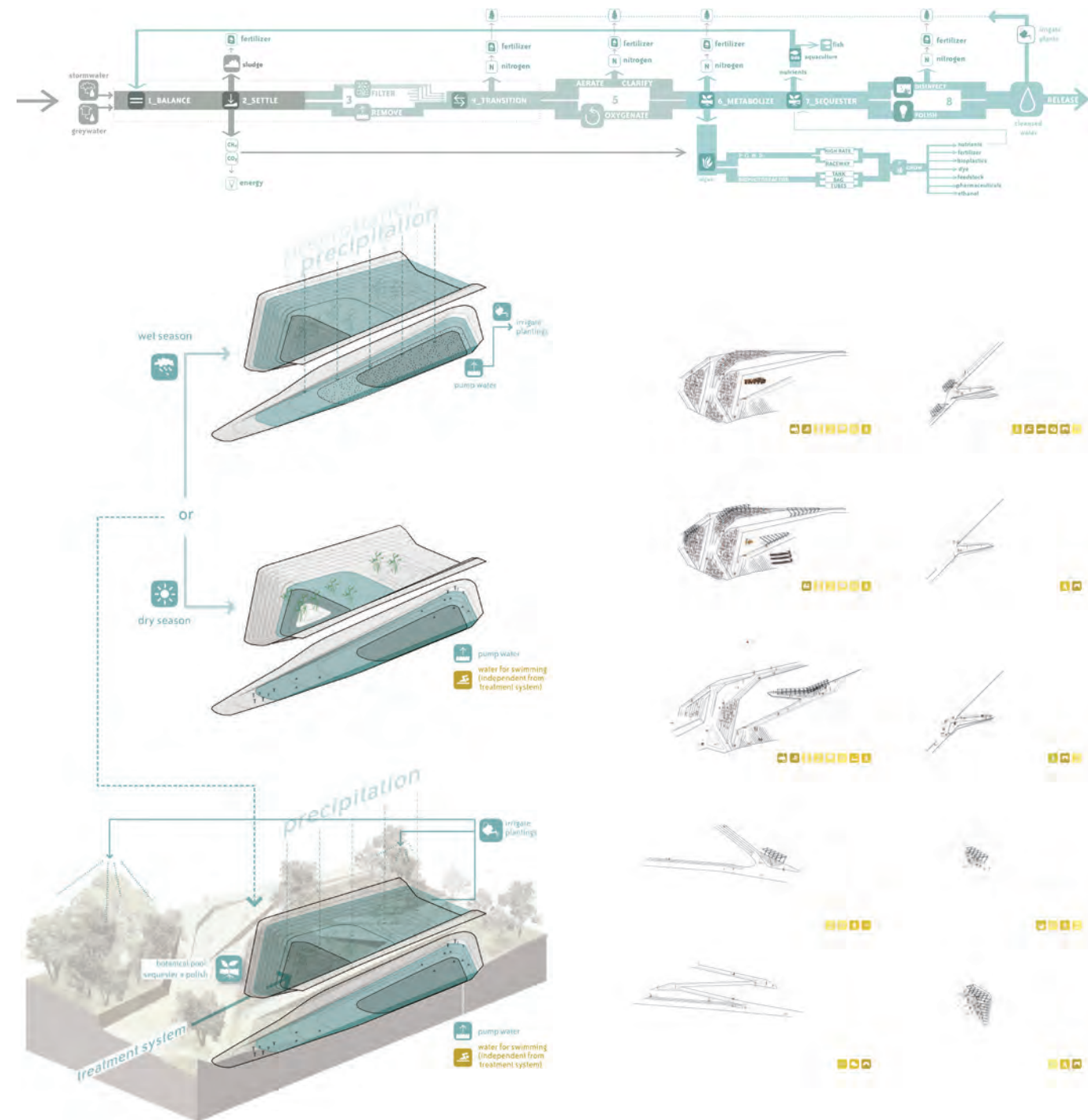
AQUA-CULTURE

WATER

The Living Machine at the heart of the park uses biological metabolism and digestion to cleanse water in a safe, ecologically rich setting. An adaptive, evolving entity, the park's topography of basin and hills forms a flexible gradient of wet and dry spaces. Inundated in monsoons, the pools are calibrated for increased usage, greywater, and a growing Gateway District.

Combined pedestrian and auto circuits cross the park, offering various programmatic possibilities, fluctuating between dappled canopy enclosure and structured shelters for a wide range of gatherings and activities.

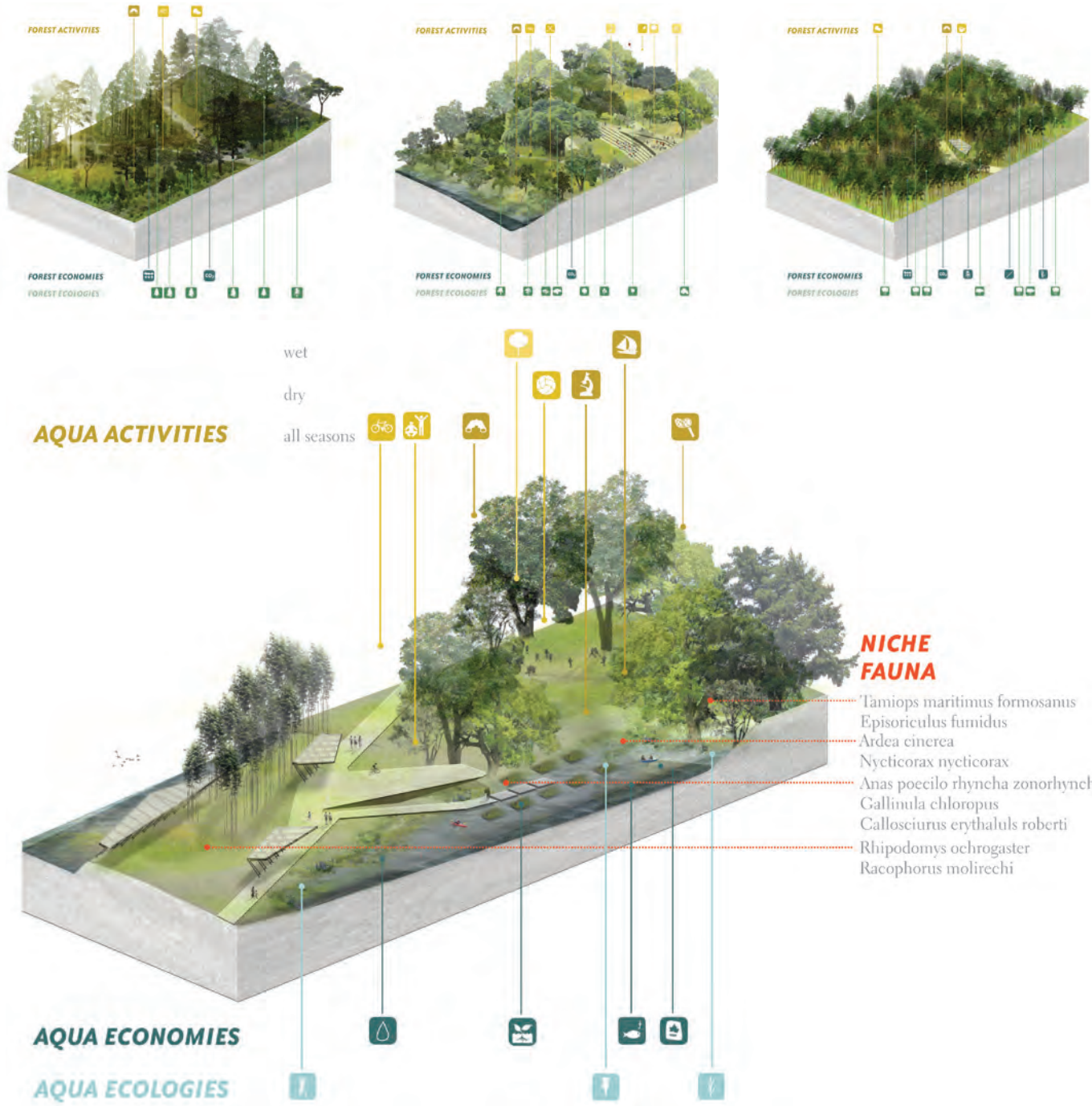
The forest zones of the park broadly cover the area, mitigating Taichung's sometimes-harsh climate and tying together sustainable cultural and program points. Built up conifer hillsides house on-site institutions including the Taichung City Cultural Center, the Taiwan Tower, the Museum of Taichung, and the Taichung Movie City's studios and Museum. By embedding a significant portion of these institutions into the earth and integrating treatment water with their cooling, plumbing and supplementary solar heating systems, the park serves as a model for sustainable building technologies.



Pools and forest come together for an array of programmatic opportunities. Broadleaf transplants create an established landscape immediately, with clearings for sports fields, staging areas, and at the edge of pools, piers and pavilions. Conifer stands create a one-of-a-kind landscape and profitable nursery with moments for collection, education, and interpretation. Bamboo areas create visual screens, forming intimate areas.

More than structure programs or support city systems, the park performs as an ecological and economical producer. The dense vegetation is a carbon sink, (sequestering 400 metric tons of carbon annually) and source of revenue, providing nursery stock for both common and rare plant varieties. Pools and forests form a refuge for endangered plant species and local wildlife, habitat for a range from microbes, mollusks, milkfish, sika deer, grass lizard and Taipei tree frogs.

In all, the planting, pool and circulation network creates a range of social and habitat intensity, weaving ecological opportunities and eidetic moments throughout the park.



SELECT DOCUMENT SETS

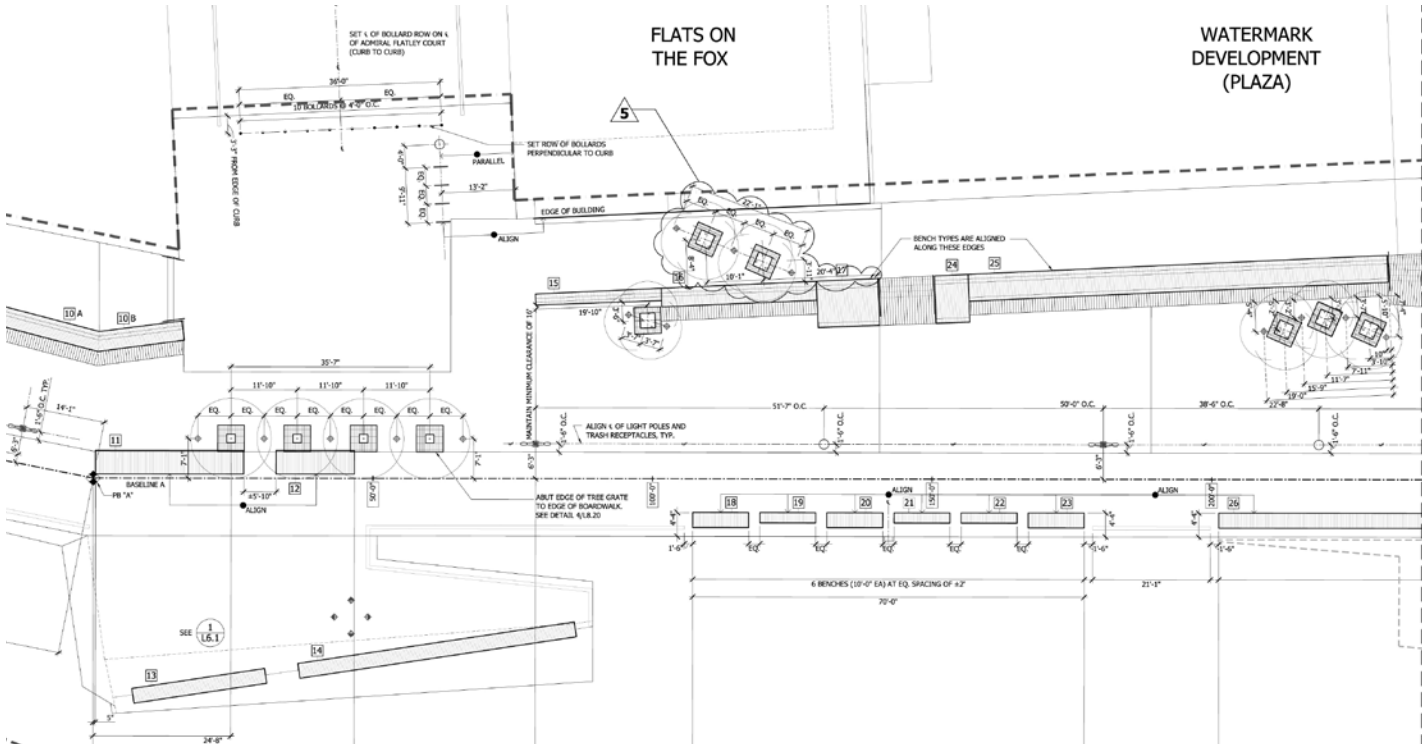
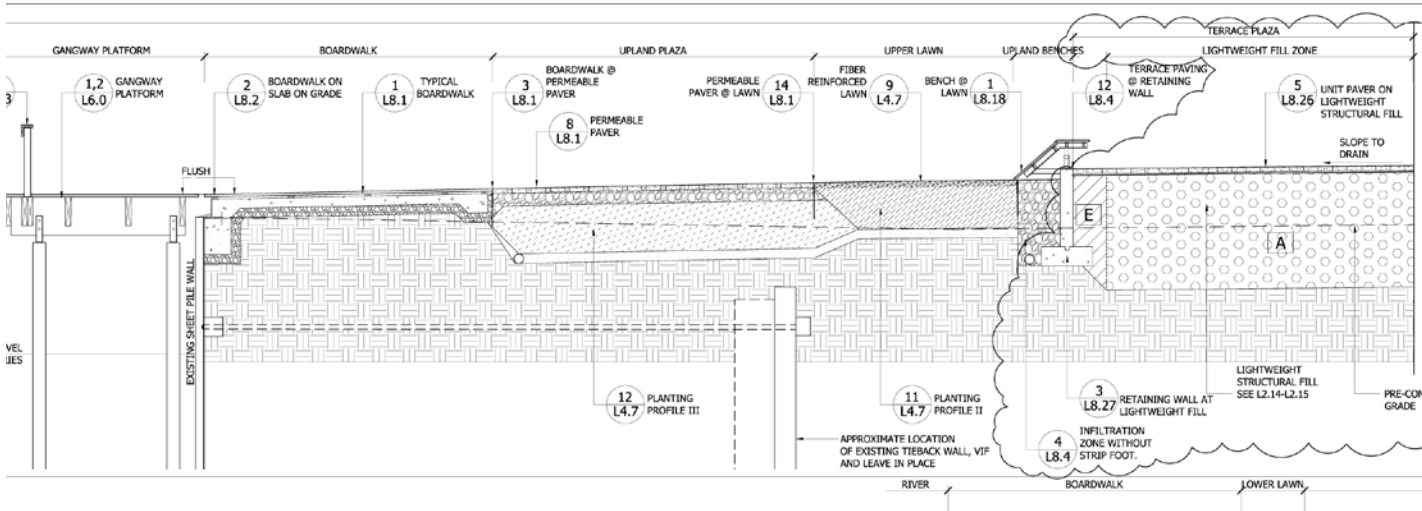
In addition to managing competition teams, I've worked on a variety of construction document sets during my time in architecture and landscape firms. Below are three recent projects suggesting my detailing experience on a range of projects, scales, and types of DD-100% CD/bulletins .

CITYDECK, GREEN BAY

My contribution to the CityDeck project included drawing corrections and revisions (5 subphases) for the initial construction of the boardwalk and the first Fox River overlook (right). Changes ranged from altered soil profiles, decking layouts and bench placement/articulation to additional rails and donor signage.

- DATE 2009-10, Stoss project
- ROLE designer, drafting team (CD revisions, phase 1)
- EXPOSURE
- LAM 2011 Feature
 - (Source Books in Landscape Architecture) P.A. Press
- LARGER INTERNAL TEAM
- project manager- Scott Bishop
 - designers- Eva Nemacova, Steve Carlucci, Adrian Fehrmann

- TOOLS/DATA
- rhino/cad
 - mixed: city/army corp site data



**ISABELLA STEWART
GARDNER MUSEUM,
BOSTON**

My contribution to the Isabella Gardener Museum project included general design revisions and a set of 80-100% CDs. The design—lush, serial forms and general boundary obfuscation (at paving, between interior and exterior)—paid homage to the impulses and affective display of Victorian (botanical) collection. The enclosed urban site set parameters for the seemingly 'informal' placement strategy, from the constraints of drainage and finite planting soil (+ ph), to diurnal exposure. The construction set was thus developed in tandem with engineered soils, layered drainage, electric, paving and planting systems.

DATE 2010, Stoss/Renzo Piano project

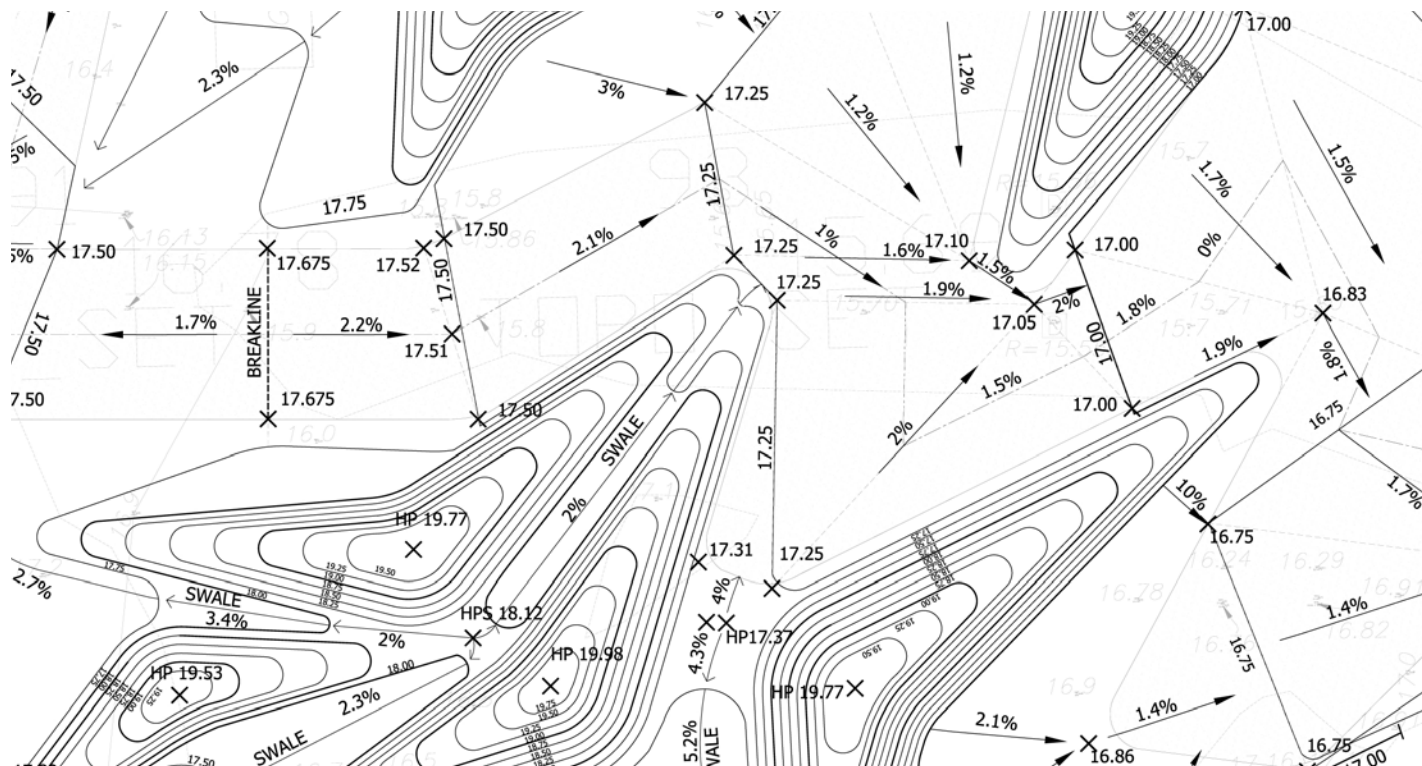
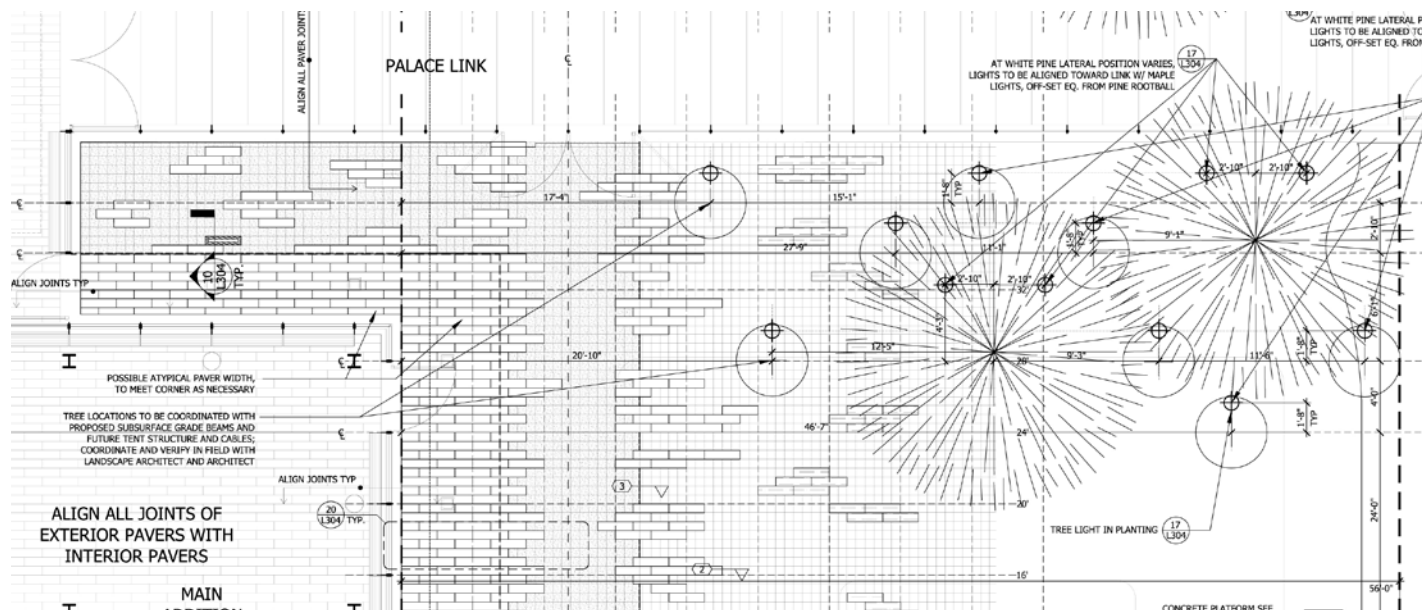
ROLE designer, drafting team (DD-CD 2)

LARGER INTERNAL TEAM

- project manager- Jill Desimini / Scott Bishop
- designers- Eva Nemacova

TOOLS/DATA

- rhino/cad
- mixed: Piano/Site data



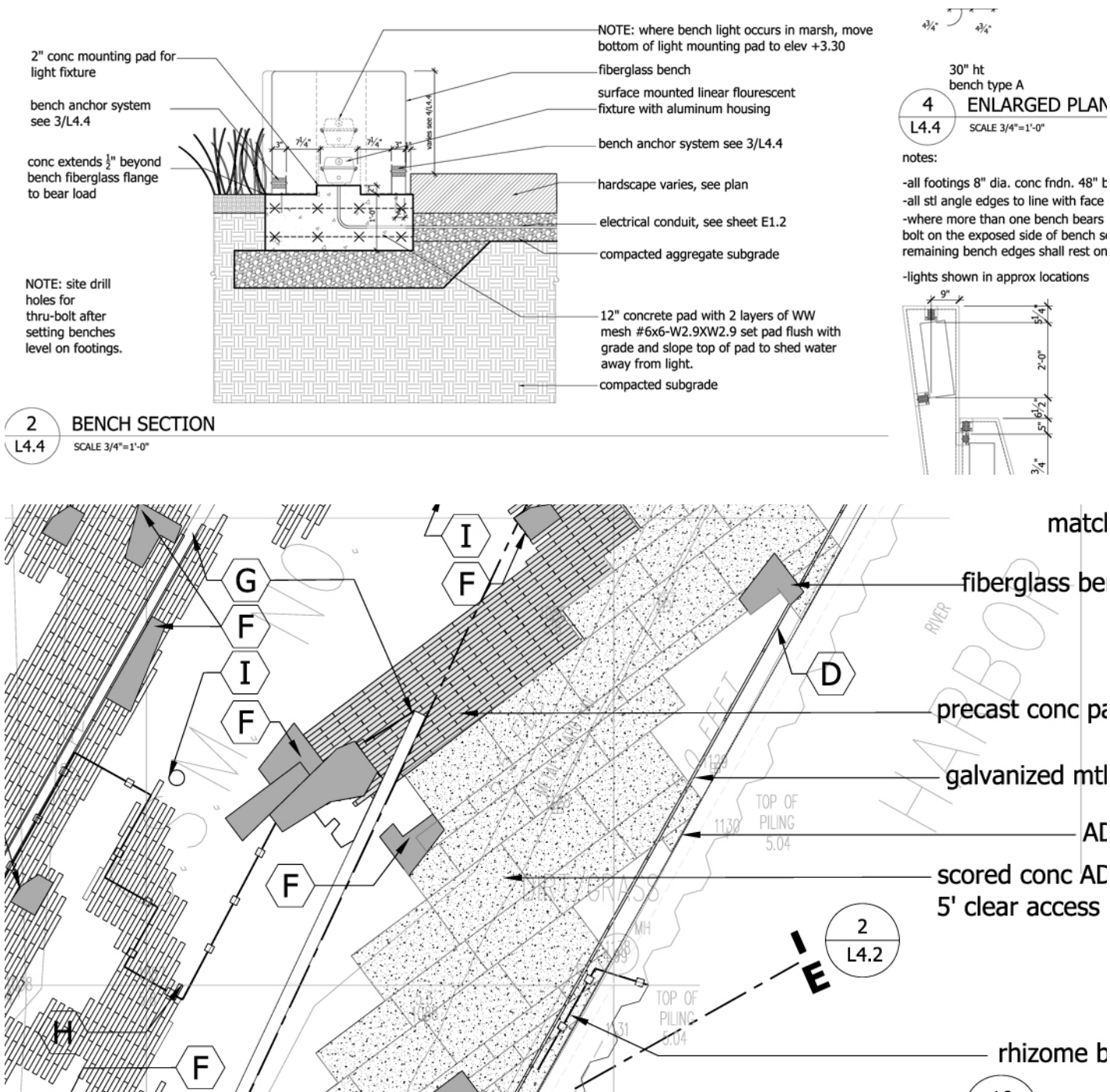
ERIE PLAZA, MILWAUKEE

My contribution to the Erie Plaza project included drawing corrections and revisions. The complete revision of paving and path surfacing, due to budget concerns, necessitated nearly complete revision of all plans (layout, materials, planting, etc.). Smaller issues included ADA rail access, minor planting additions, and construction details for benches and electrical equipment.

OTHER SETS

In addition, I have documentation experience from developer-driven site planning, design/build, and preservation projects (misc. offices, campus facilities, lofts, and museums).

- DATE 2009, Stoss project
- ROLE designer, drafting team (CD set, phase 2)
- EXPOSURE
 - Mayor's Design Award
- LARGER INTERNAL TEAM
 - project manager- Scott Bishop
 - designers- Adrian Fehrmann
- TOOLS/DATA
 - rhino/cad
 - mixed: city/army corp site data



These graphic samples present a mix of my media explorations and experimentation in information design and communication. Along with, 3-D modeling and traditional formal articulation, medium-specific approaches to data and 4-D processes are evident in my on-going forays into interaction and animated story-telling.

MODELS & MANIFESTOS
SAMPLES

SHORTS & INTERACTIONS
TESTS

PROJECT ANIMATIONS
PROPOSALS

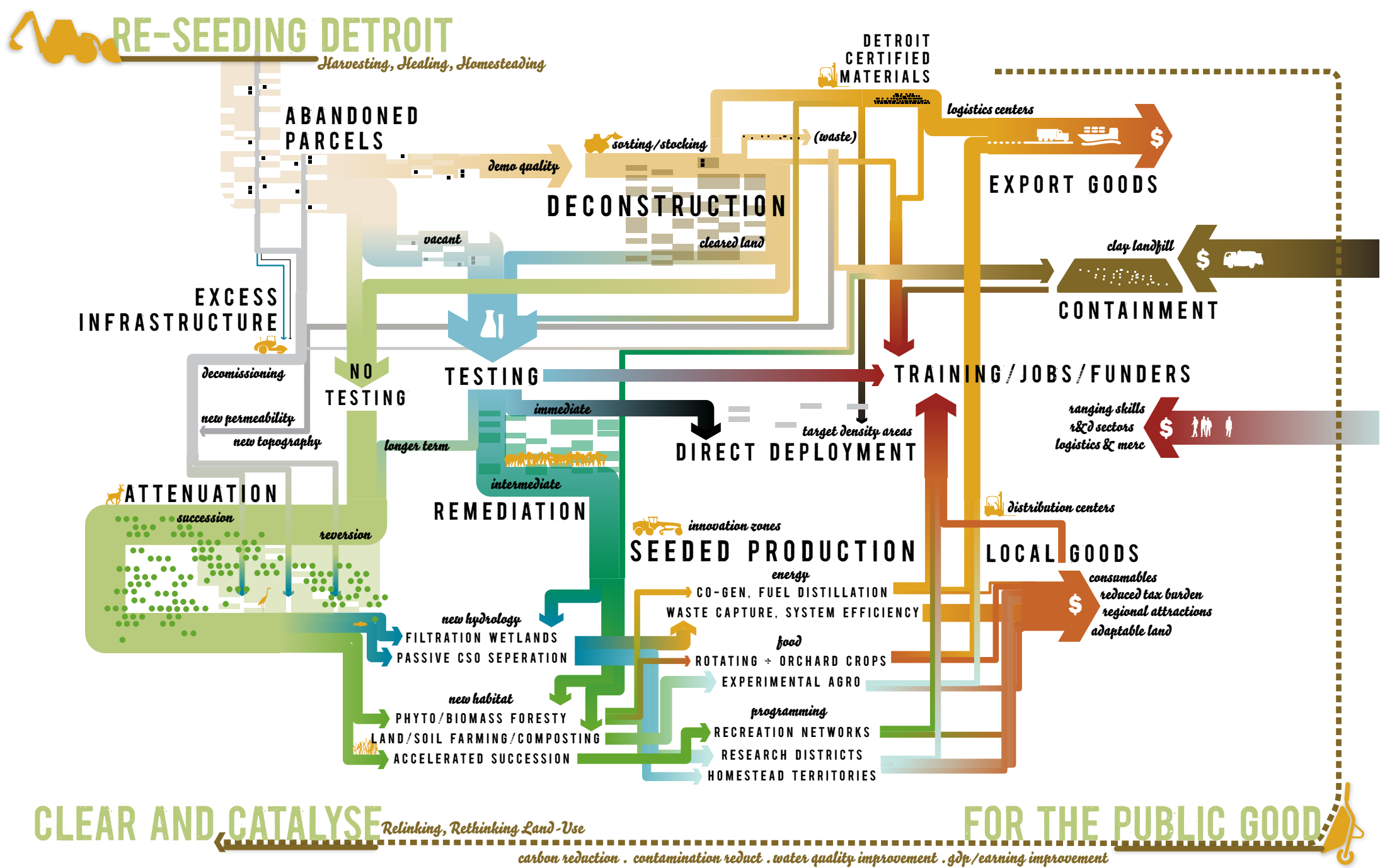
Each of the following infographics was set forth as a manifesto, visualizing the problematics addressed by particular design solutions and/or course contents. Full project proposals are available on request.

READING TIME

This course examines key moments in the history of literary theory and explores the definition, value, and function of literature. Readings extend from classical rhetoric to deconstruction. The ad combines Bourdieu, Marx, Freud, and Benjamin against a background of concordances of Lacan.

DETROIT WORKS WEB

The Detroit Works plan re-conceptualizes the abandoned parcels of Detroit for interim activity and novel economic streams. Aside intensive gis analysis of abandoned, vacant, empty and foreclosed properties, this flow chart imagines de-construction scenarios and opportunities, addressing community groups, the informal demolition industry, and potential non-profit partners.

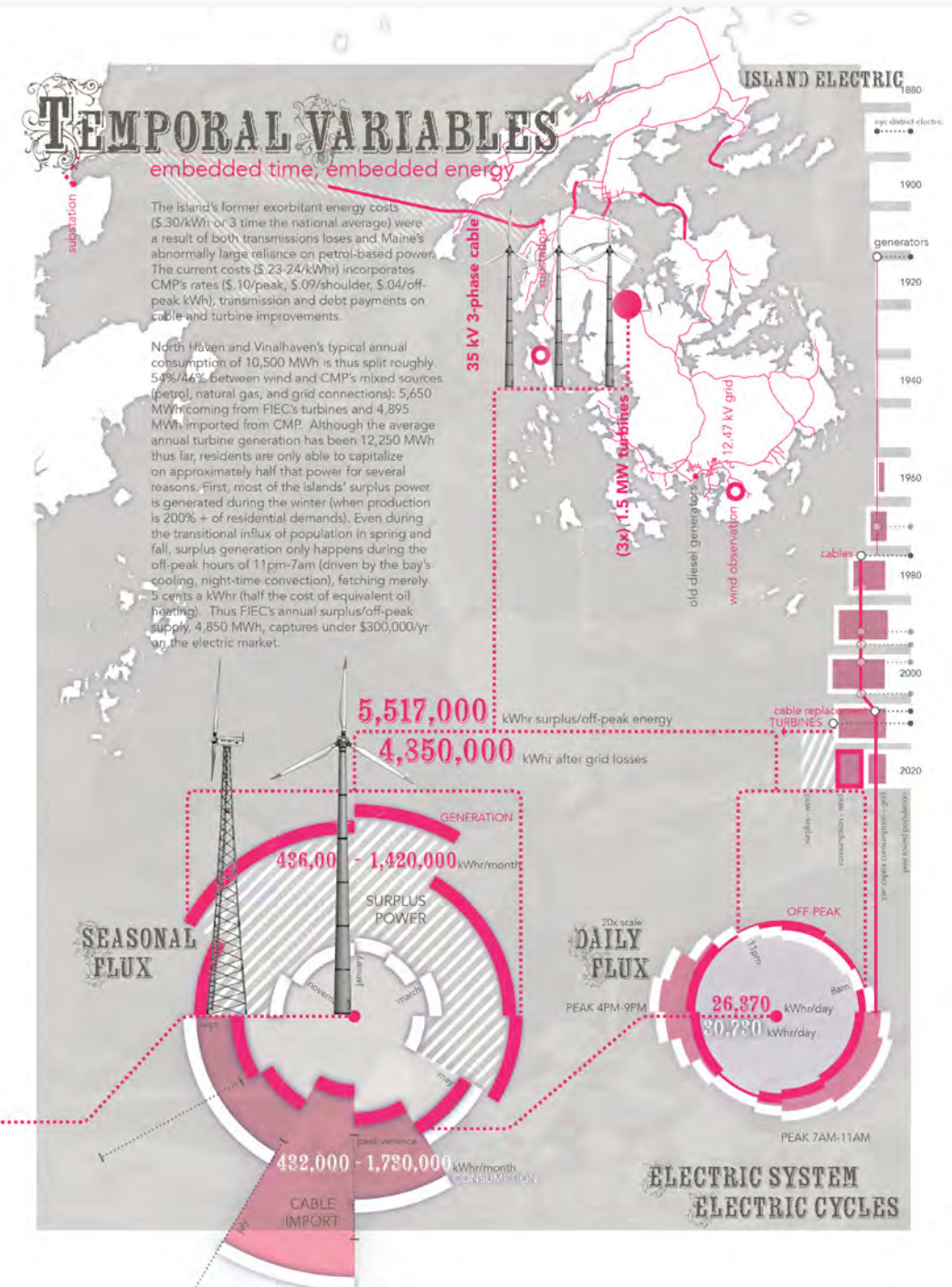
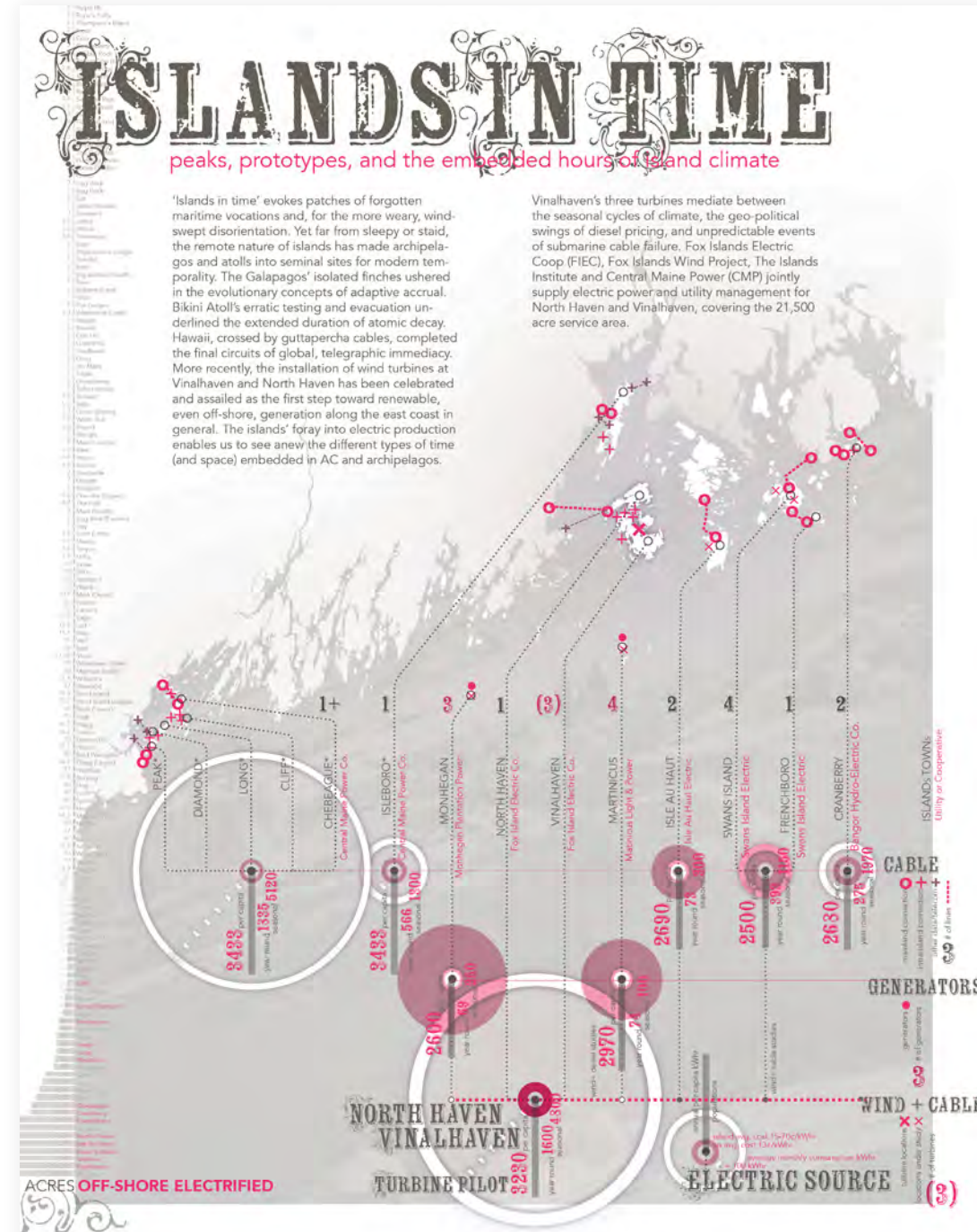
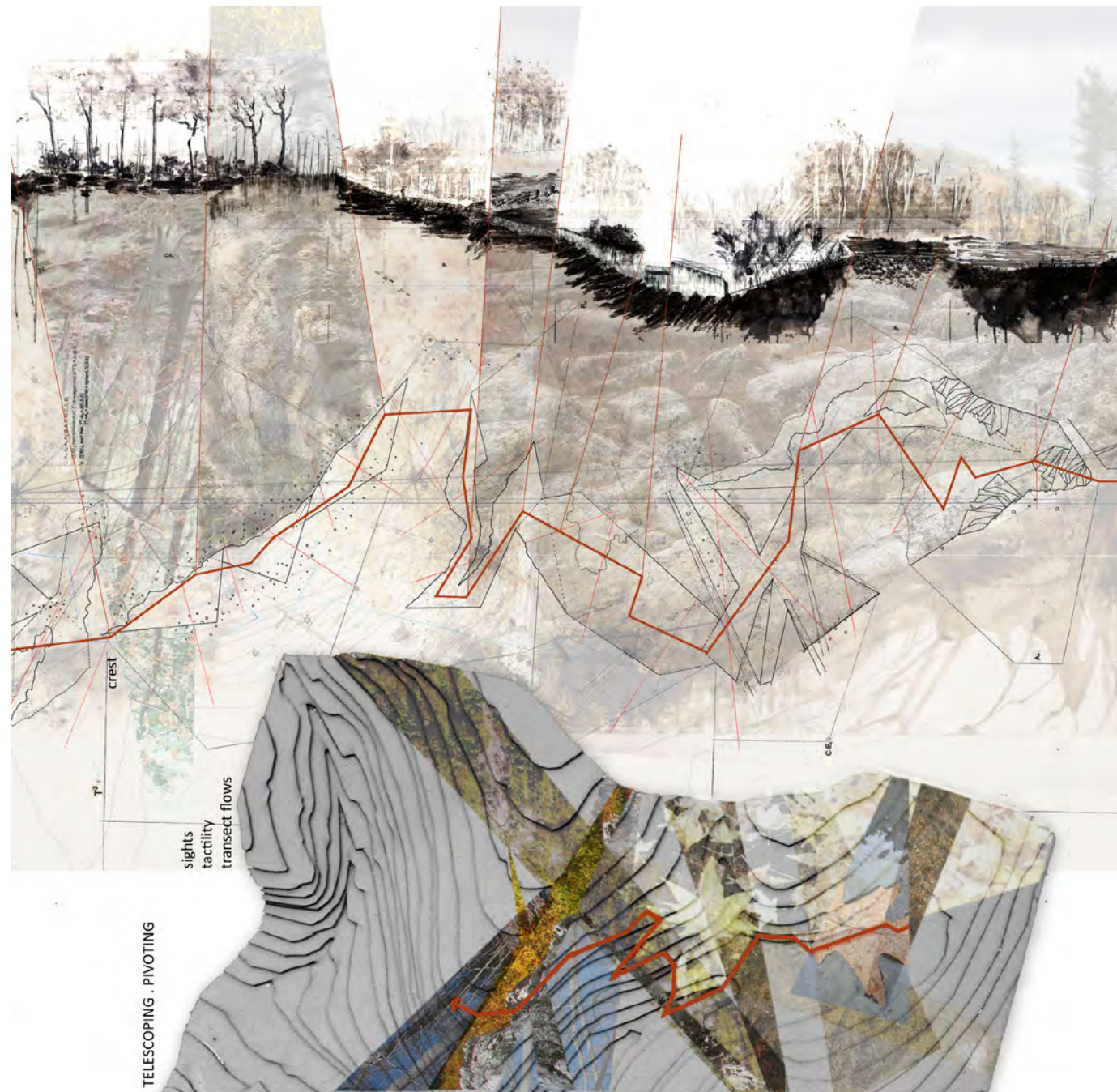


FOREST FIGURED

Focused on forest seepages, this project maps indexical materials, tracing out a path to observe/interact with such subterranean flows. The mix-media presentation (model, washes, photos, triangulation surveys and section sketches) cultivates immersive tactility aside abstract indicators and trajectories.

ISLANDS IN TIME

Responding to the Design Inquiry prompt 'Fast-Forward,' this project explores electric temporalities. These initial diagrams situate the relative costs and electric infrastructure across Maine's inhabited islands (left). They then diagram out the history of Vinalhaven's power production and the local variables of wind-power for generation, sale and alternate, public off-peak appropriations (right). The full project publication is forthcoming by Design Inquiry (2013).

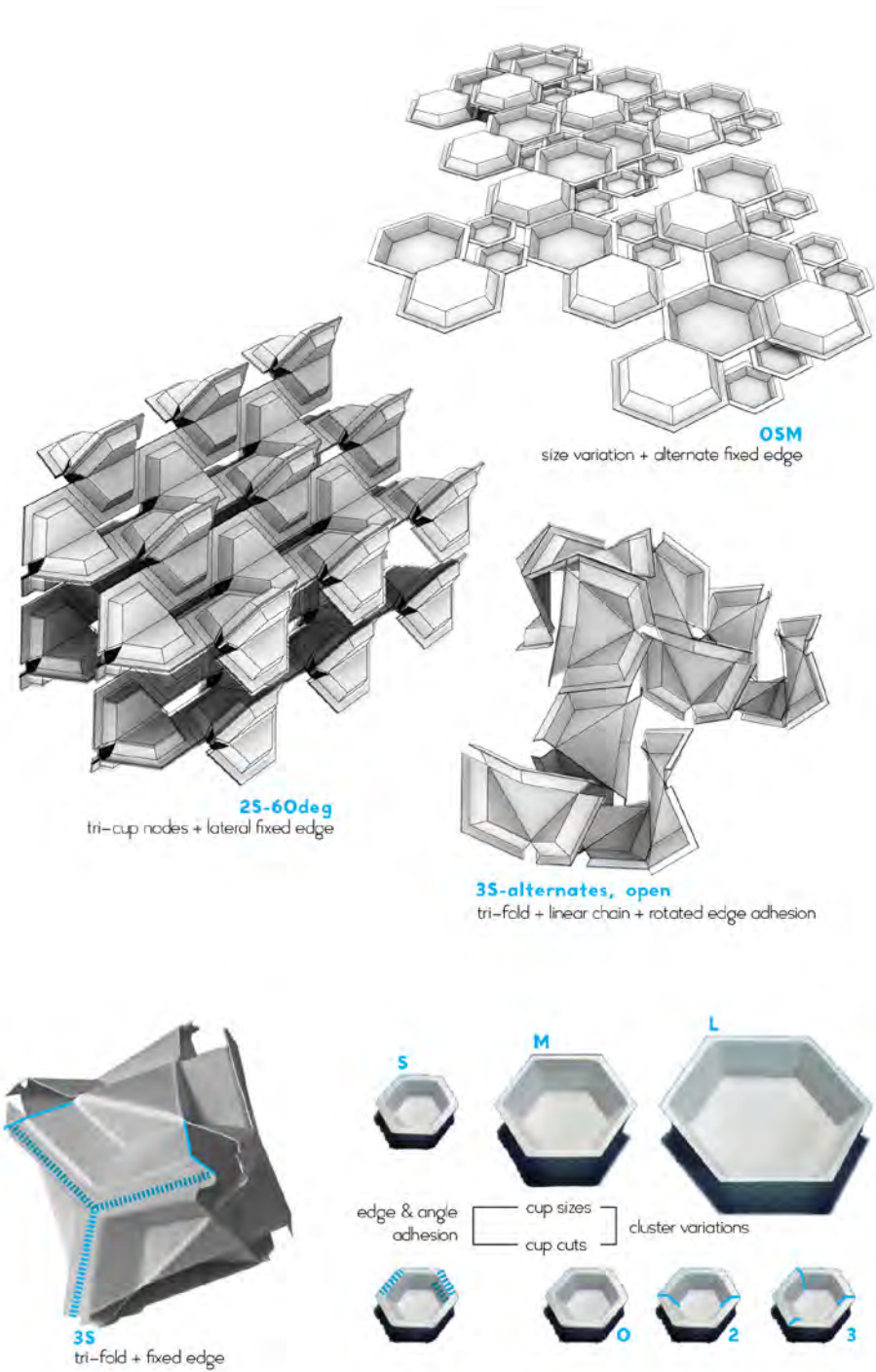
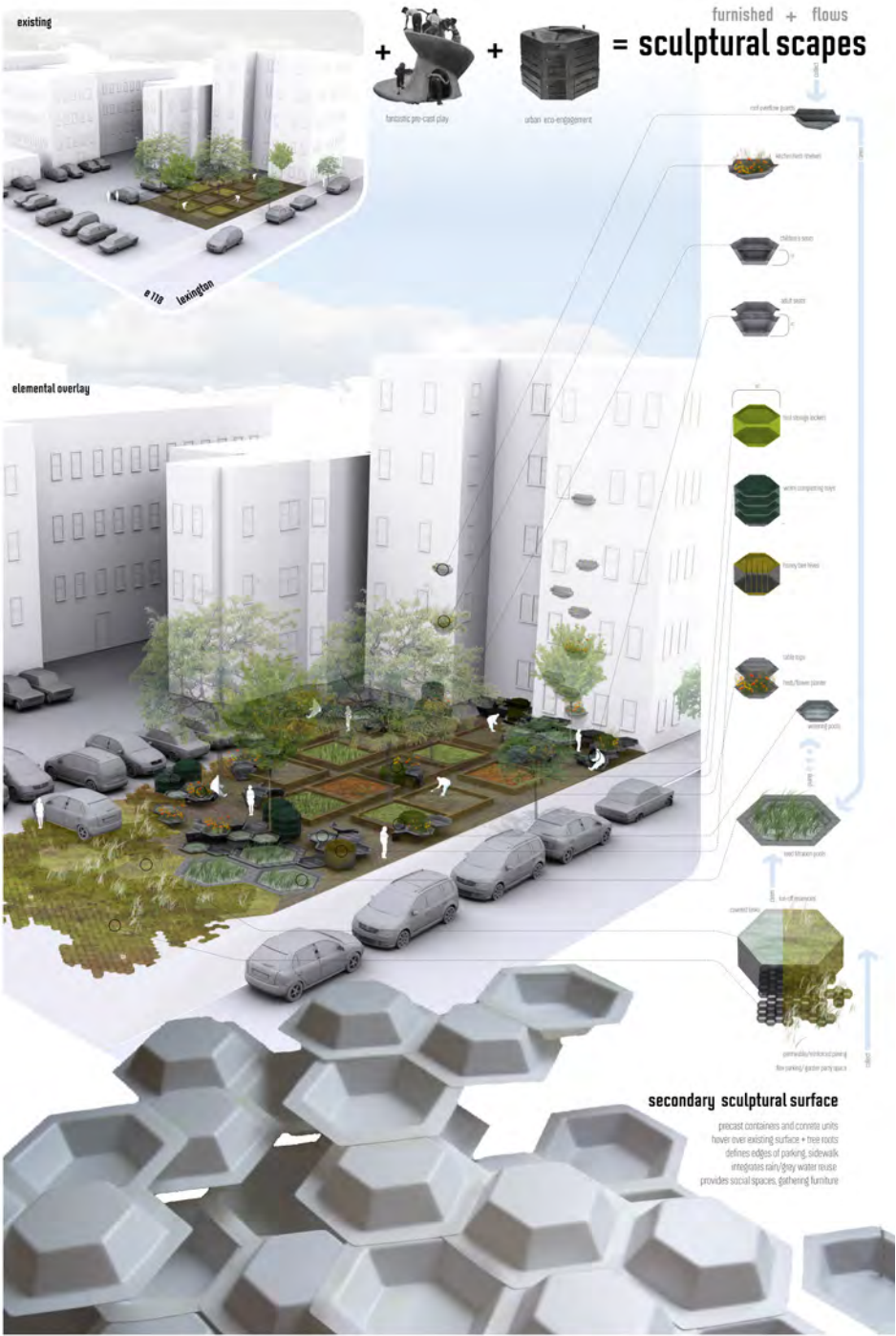


SLOPE SERIES

These study models examine the alternate slope-step-occupation opportunities between two plazas. ADA constraints triggered the initial tests, while mediating between green restraining slopes, direct passing paths, and directed ampitheatre seating zones. Together—path and slope, hard and soft—come together to channel water to planted zones and foster informal gathering.

ITERABLE ANALOGS

This community garden proposal (“A Lot of Possibilities”) plays with the stock forms of compost bins and rain-water retention reinforcement. Using styrene weighting trays and rhino mdoels, iterative assembly generates an array of alternate forms—some for seating and work tables, others as play armatures—to be added to the initial site infrastructure, supplementing water collection and soil creation as funds allow.



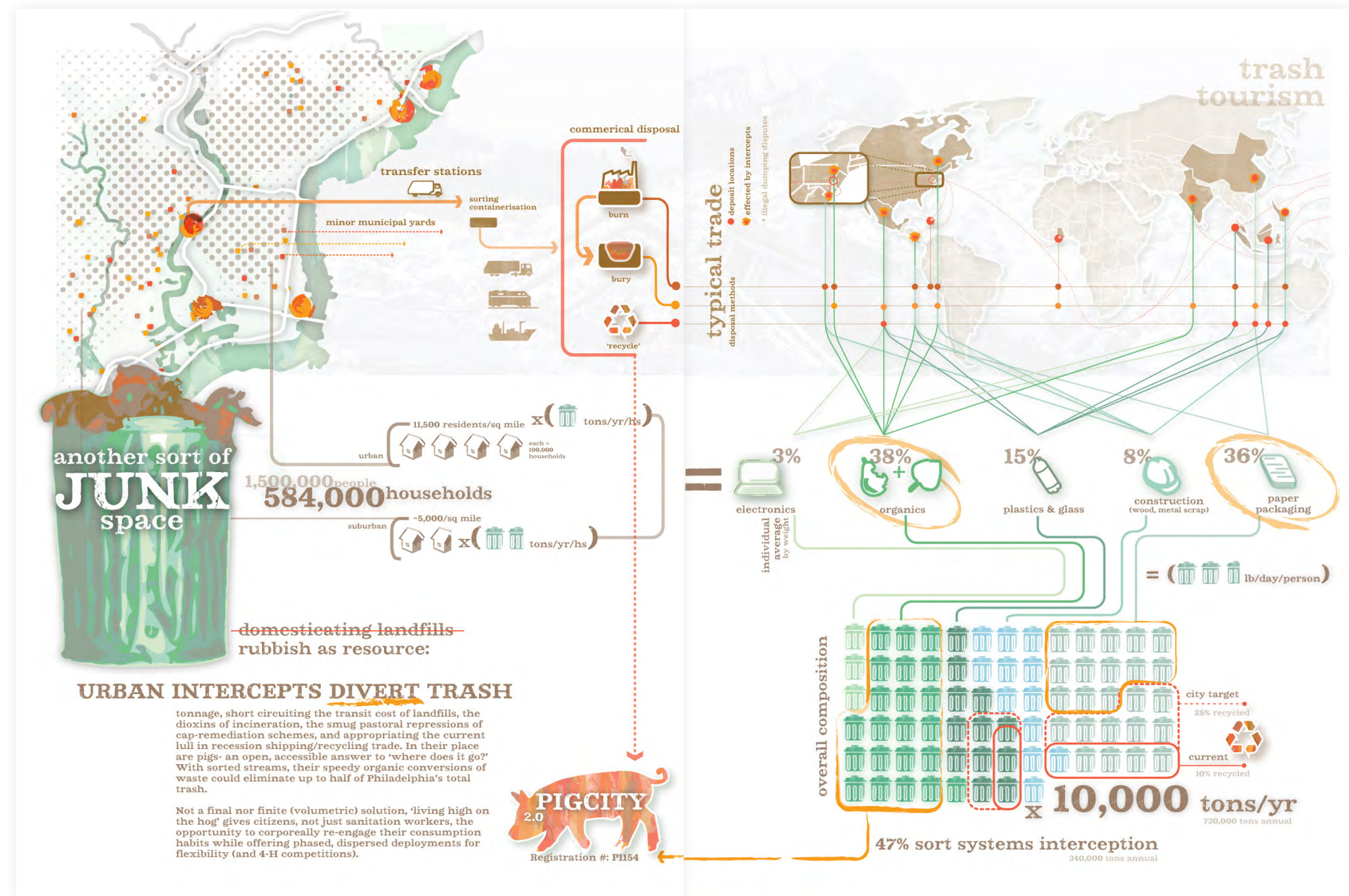
FORMING LIMITS, TESTS

At full scale, simpler constraints have a large role in production. For these lamps, learning fine concrete casting and poly(methyl methacrylate)-molding techniques was a process in itself. But, the larger goal was to experiment with the limits of planar transformation.

Simple slices and shims tranform the veneer (on the right) into a pocketed-field, with concentrated, sculptural fenestration. The waste discs are gathered for an alternate applique (left).

PIG CITY 2.0

Pigs (and industrial ag in general) have long functioned as doppelgangers (to humans) within modern architecture and urbanism. This proposal situates pigs as active interception agents in a scenario of waste consumption and energy generation. The infographic lays out the logistical opportunities by charting Philadelphia waste volumes, types, and disposal routines.

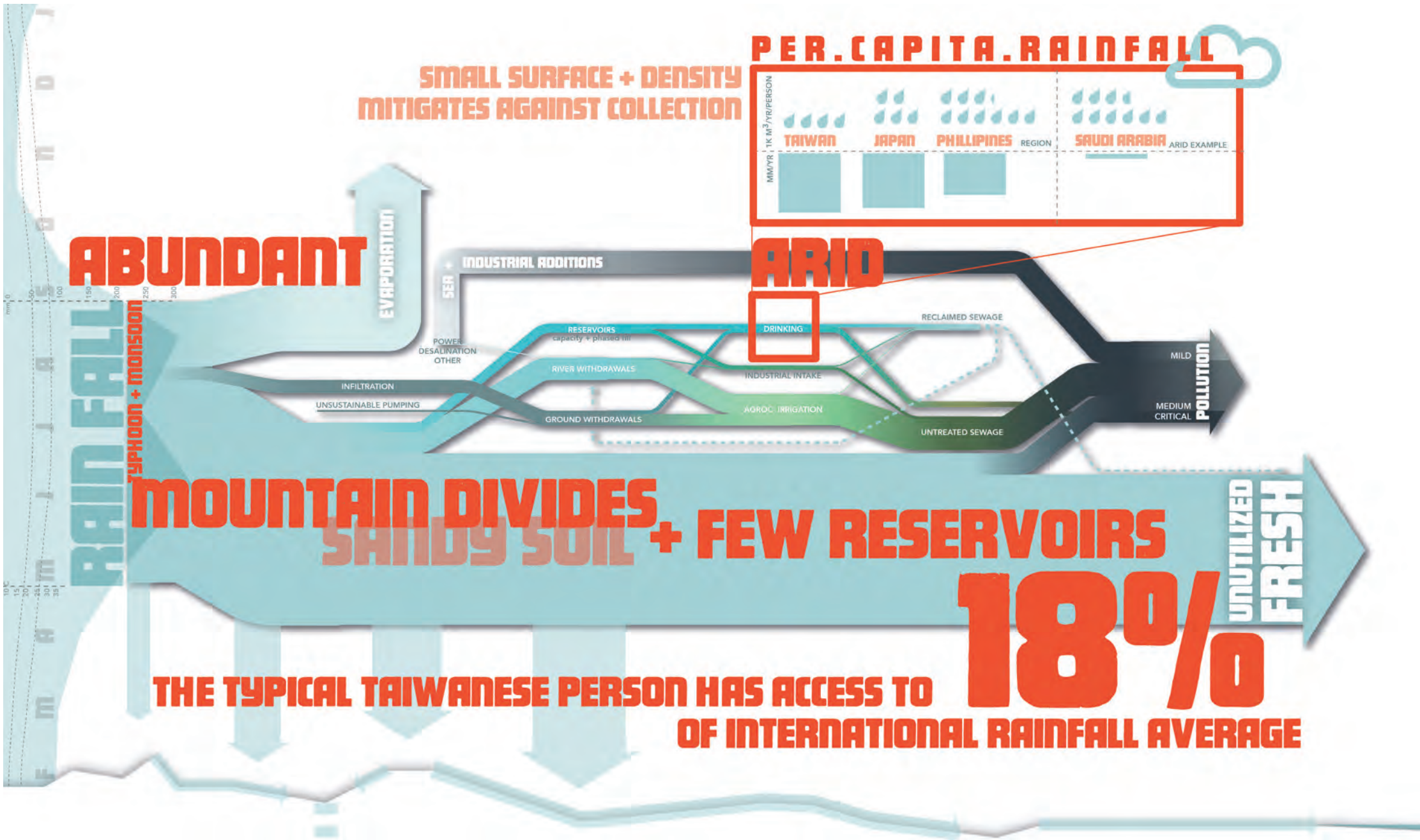
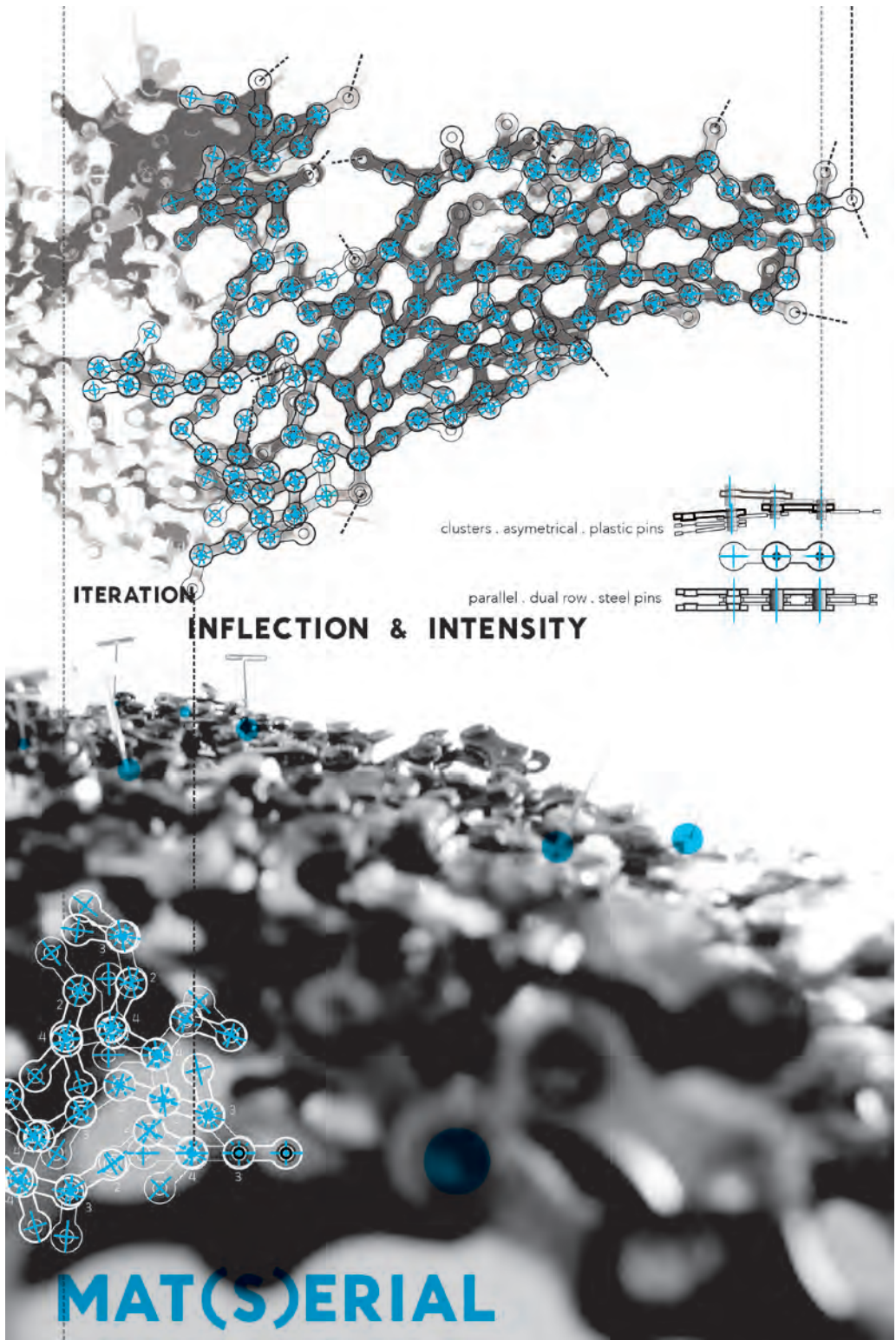


MAT(S)ERIAL STUDIES

Working as analogs, this radii-system study—a mesh overlay for terrain models, maps, and irregular surfaces—approximates remediation well spacing, anticipating phasing and obstacle integration. More than just representation, the array of materials—used bike chain, rhino mock-ups, milling, and plastic pins—enables spatial speculation; the unforeseen, synthetic behaviors suggest new site/ social operations and analogs. Post was completed to advertise the mat(s)erial studio course.

TAICHUNG CONTRADICTIONS

Part of the initial ‘Aqua-Cultures’ proposal, this flow diagram situates a water cleansing and conservation strategy as a response to the more general loss and pollution of Taiwan’s abundant rainfalls. The background data was gathered from Taiwan Water Corporation statistics and Taiwan Water Resources Agency (Ministry of Economic Affairs).

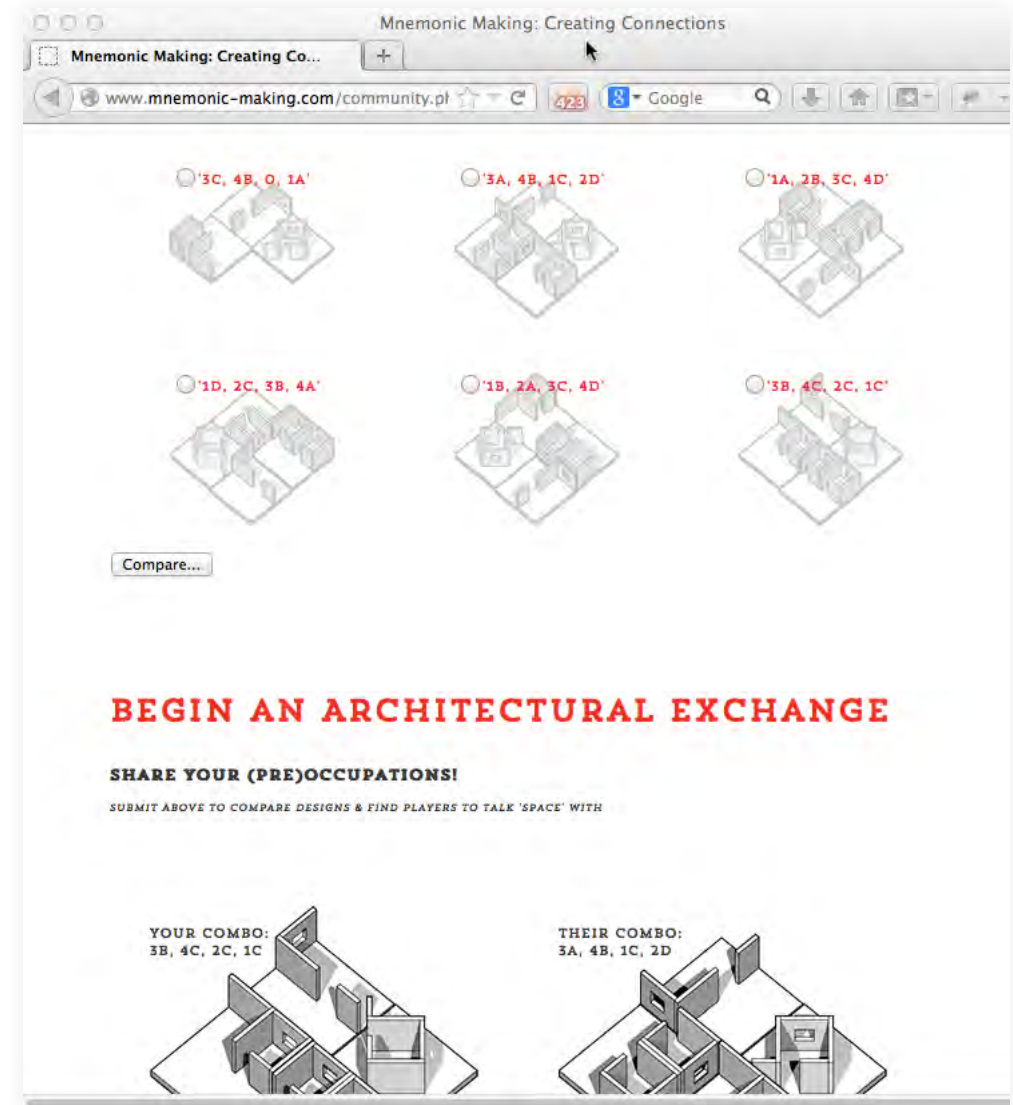
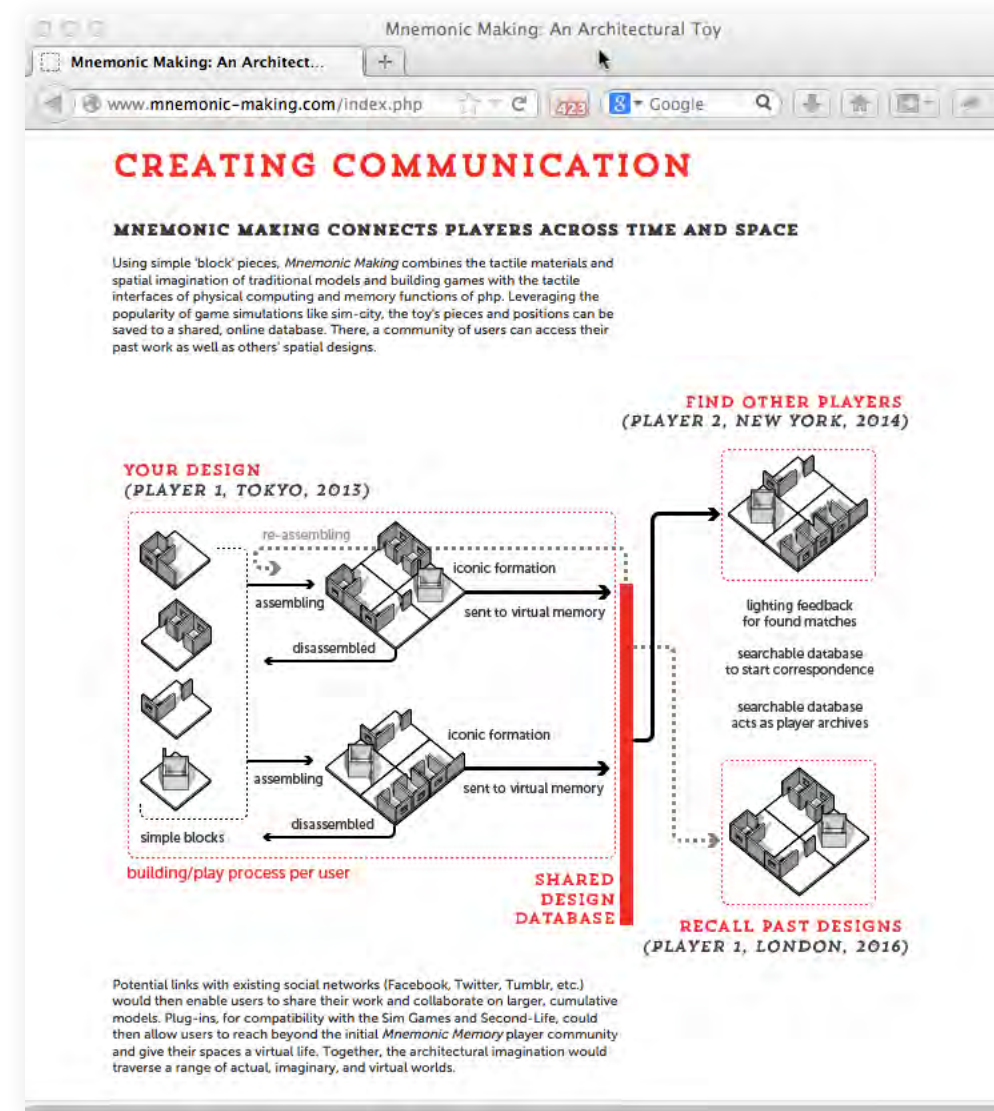
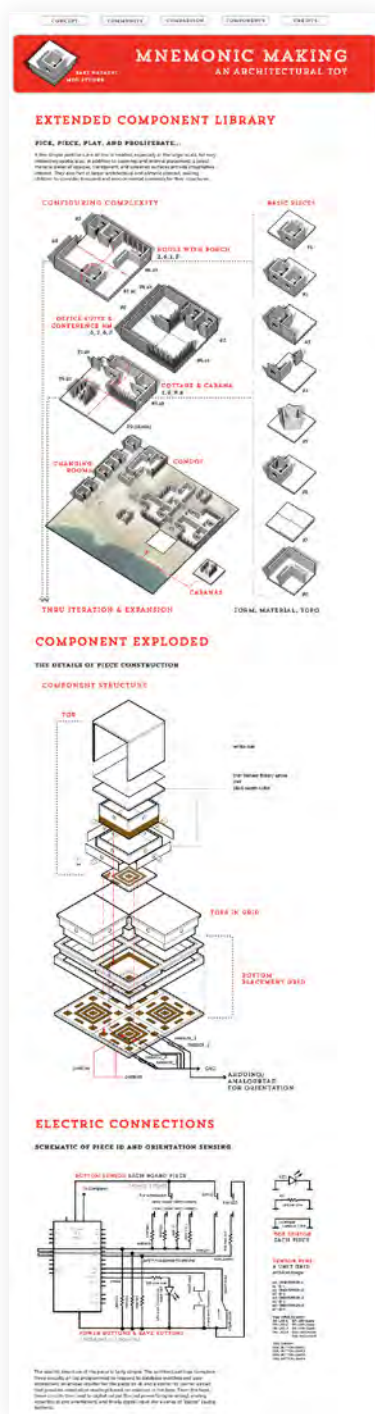
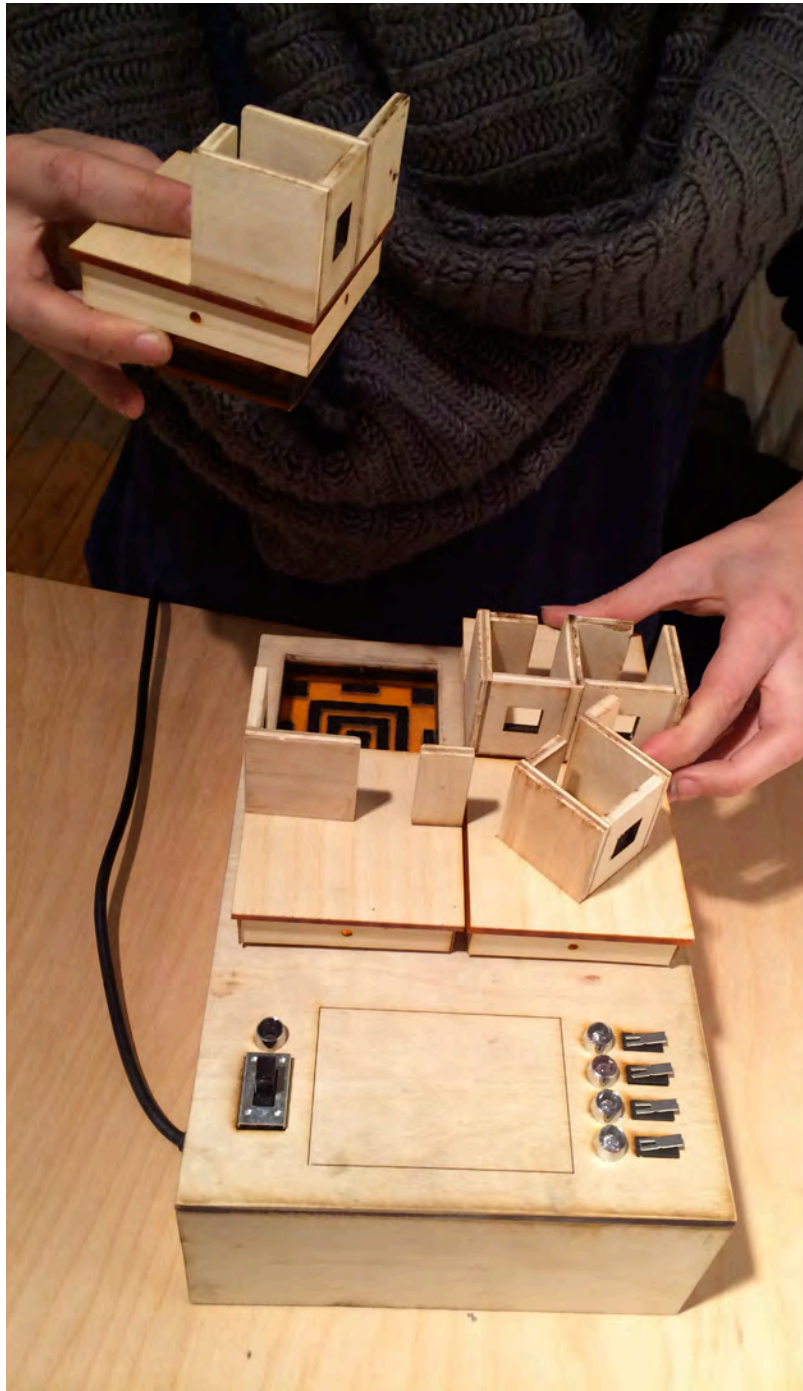


MNEMONIC MAKING

This architectural toy combines the tactile materials and spatial imagination of traditional modelling with the electronic interface and database functions of physical computing and php. Designed for sim-enthusiasts as well as community outreach and engagement, the toy enables a community of users to build, save, and share others' spatial designs on-line, across time, and in miniaturised real space.

Technically speaking, the prototype combines php, html, css, arduino, and processing. The pieces use simple circuit completion and built-in resistors to identify unique IDs, piece orientation, and different analog pins to identify each spatial positions on the grid. LEDs are triggered by the different records/matching values saved by processing and queried by php. Future iterations, utilizing wireless signals, will enable players to assemble larger, layered, and irregular configuration for web and firm feedback.

The prototype, programming, and web interface were completed in collaboration with Saki Hayashi. Conceptual interest derived from architectural attempts to think through iteration and computation: Cedric Price's programming games, Archizoom's No-Stop iterations, and war-gaming from Bel Geddes to Debord.



The following sequences provide a sampling of the animation and coding software I've used for graphic transitions, landscape phasing, and interactive infographic creation. Full project videos are available on request. Samples can be seen at vimeo.com/siteations

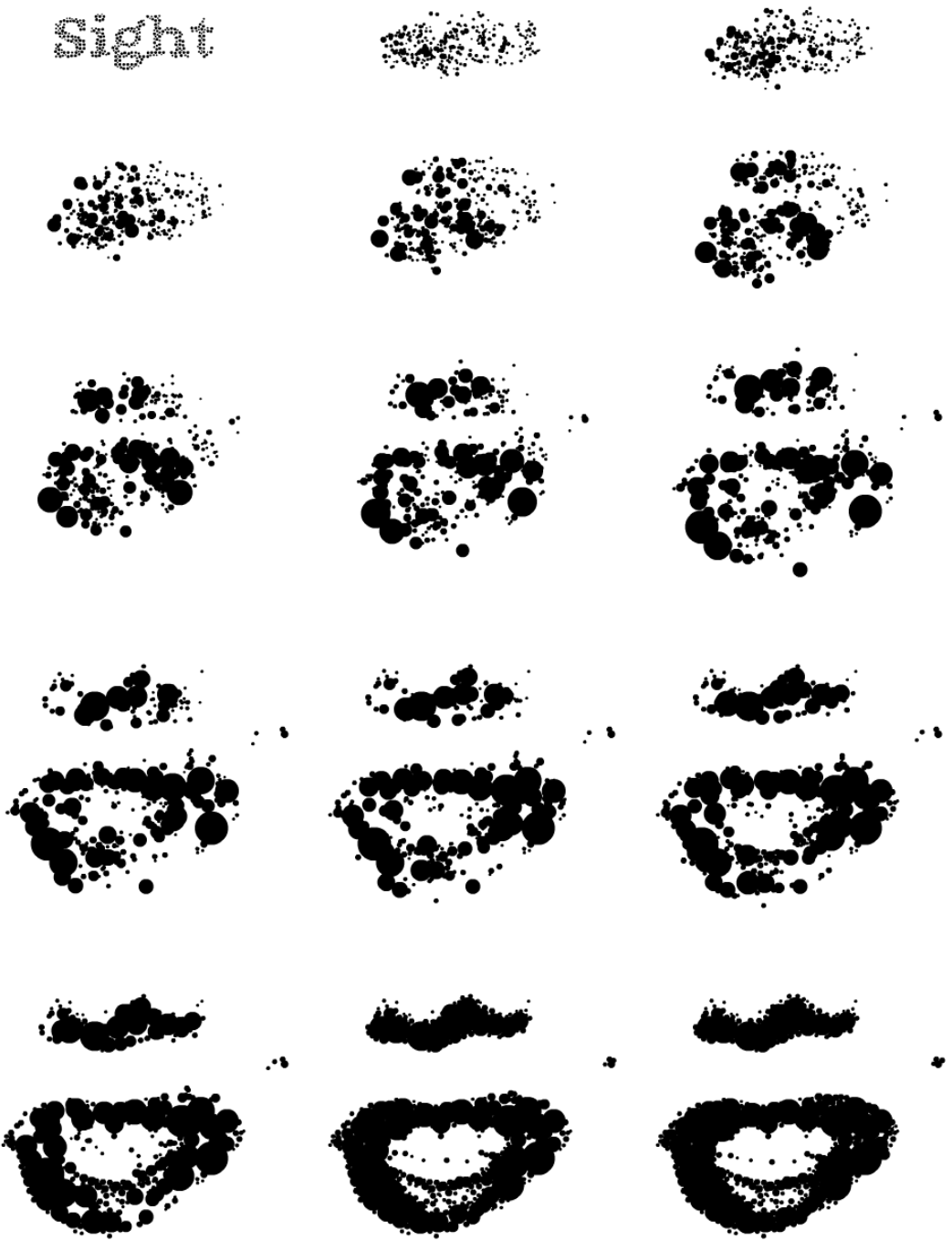
MARILYN POP TRANSITION

A simple combo of illustrator dots and flash shape transforms offers up a half-tone Marilyn, a fraction of the familiar Warhol crop. The transition highlights the relationship between sparse, media means and saturated, over-loaded (over-determined) cultural significance.

C-CYCLES: TREE TERRITORIES

In this interaction, a simple timeline allows readers to browse the history of streets, street trees, and municipal r.o.w. responsibilities. A foil to “Enabling Emptiness,” this series will explore the unexpected organic cycles of the city. It is built from archival research, gis (later boards), illustrator, and flash.

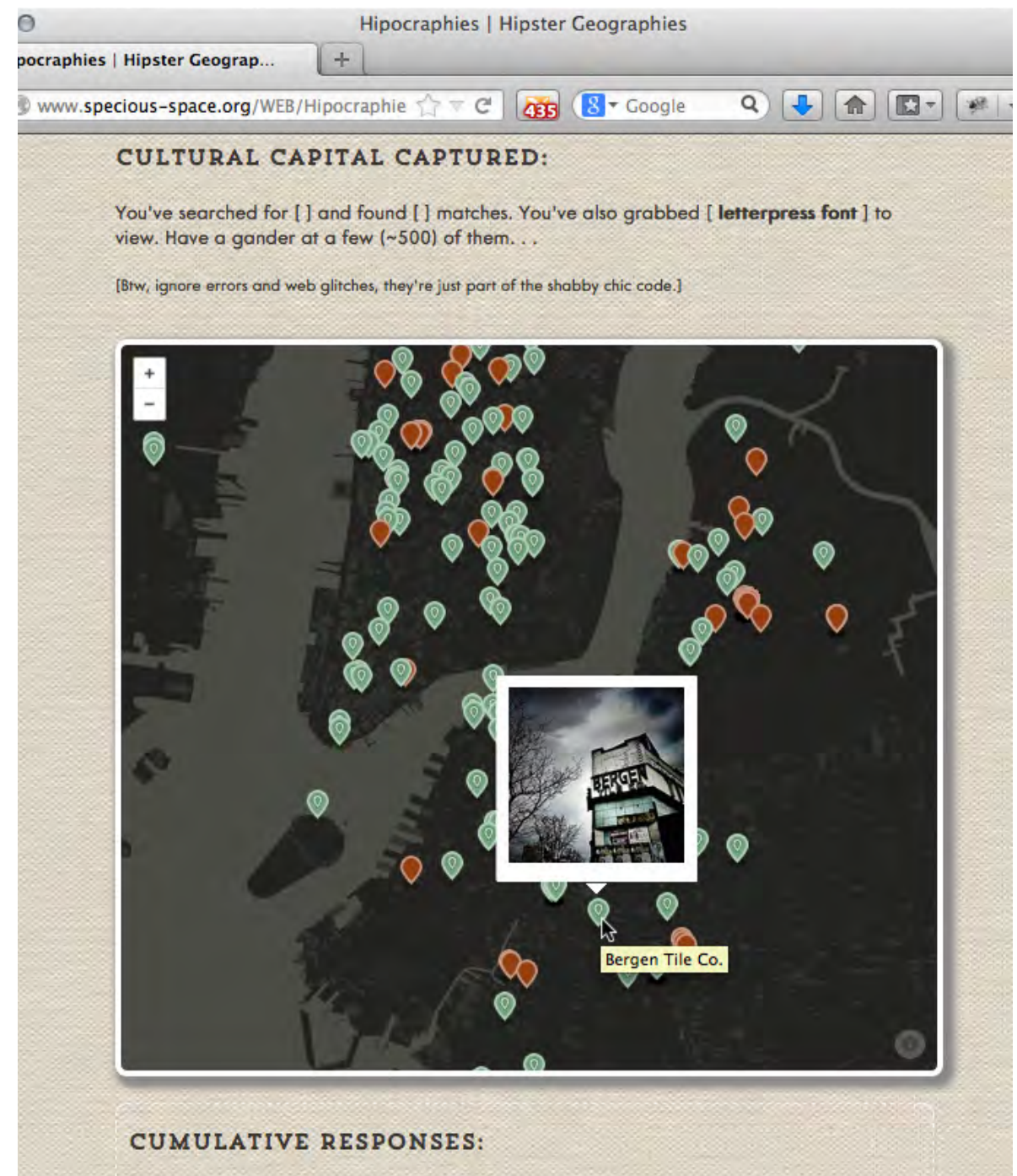
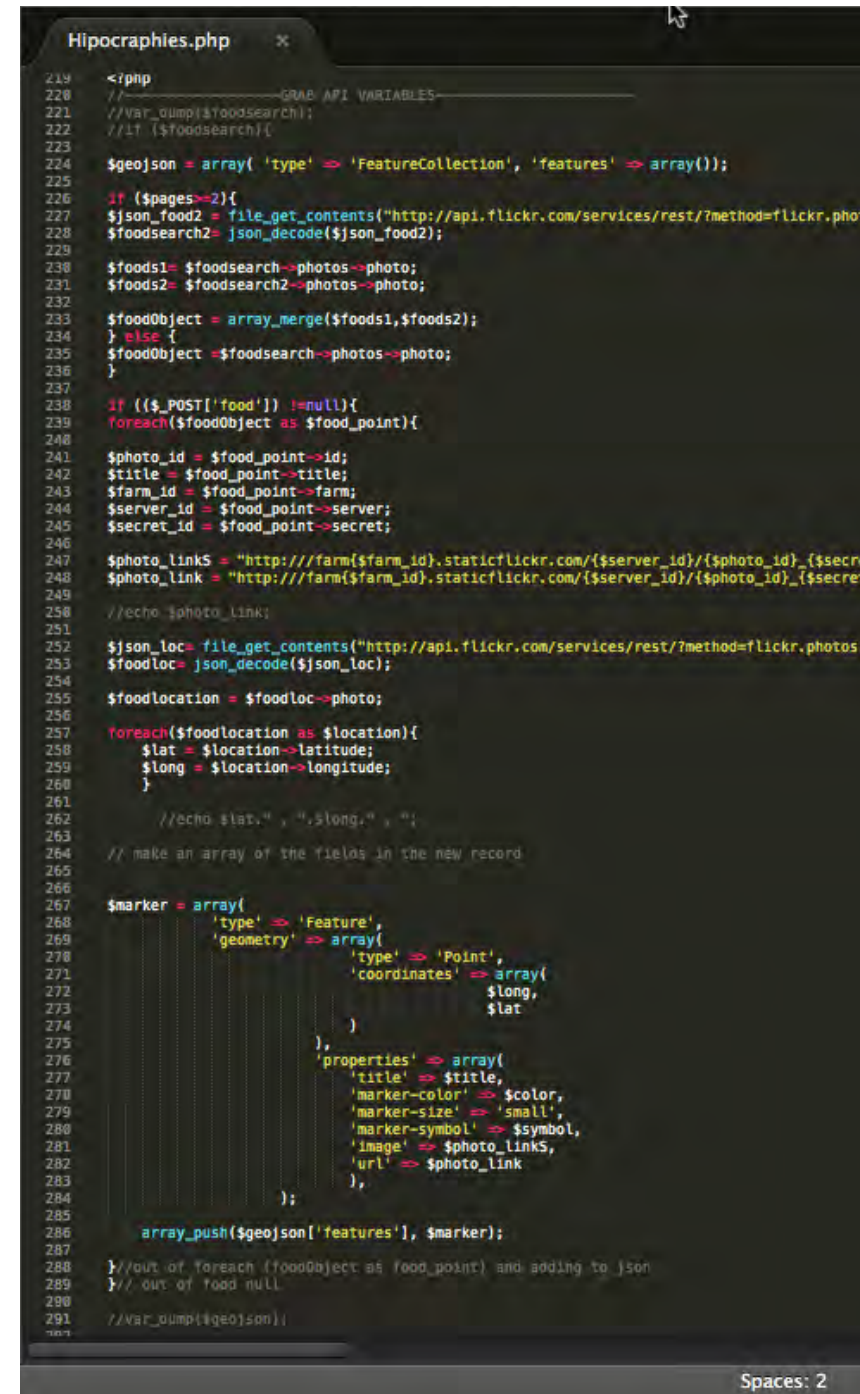
Sight



HIPOCGRAPHIES

This php and api-based search application enables users to visually, geographically skim flickr's database. It combines the typical front-end and back-end elements of environmental advocacy sites like StateImpact (immediately right), while playing on the exhibitionist impulses and fetishized forms of hipsters-tech media.

In short, Hipocraphies is a light-hearted test of code compatability (php, javascript, html, css, json, geojson, mapbox, leaflet) designed to experiment with the data-forms and cartographic-tools central to my research and teaching.

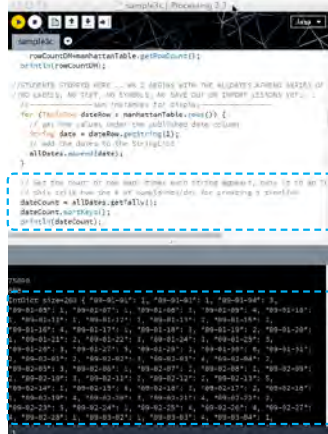


MANHATTAN BOILERS

One of several teaching exercises, this processing program was designed to incorporate NYC open api data, use typical table-reading functions, and combine statistical math with geocoded display. To the immediate right, pages from the accompanying code tutorials show how line by line instruction/coding builds to create more complex graphics.

Through live examples and collaborative exercises students were shown how to interactively layer several different types of visualization for rhetorical argument, nesting different display functions (between timeline, quantitative geographies, and data-roses).

WK 2-INTERDICTS FOR NUMBER OF OCCURANCES 61



The function .getTally() compares the dates in the StringList and returns a condensed list of dates and the number of calls per date. To store these linked values date/#of calls we will use the IntDict dateCount.

To see the results look in the monitor below the code. (Println is used to produce that readout.)

SKETCH: EXAMPLE 3C CONDENSED COUNTS

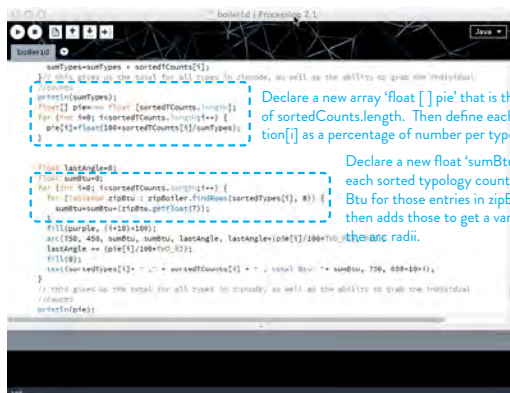
To compare the StringList internally, we'll use the getTally() function. See above for details of deployment and output as an IntDict.

In addition to the basic transfer of the condensed count of incidents/date to the IntDict, we are also using the function .sortKeys() in order to make sure those counts are in order. SortKeys shuffles the list to ascend from earliest/lowest date to highest/latest date recorded in the cvs table. Here, the sorted IntDict should start from Jan 1st, 2009 (with one complaint) and ascend toward December 31st, 2009.

PROCESSING WORKSHOP

[WEEK 2]

WK 2-ZIPCODE STATS- PERCENTAGES & RADII 87



Declare a new array 'float []' pie that is the length of sortedCounts.length. Then define each pie position[] as a percentage of number per type/all types.

Declare a new float 'sumBtu' that, for each sorted typology count, grabs the Btu for those entries in zipBoiler. It then adds those to get a variable for the arc radii.

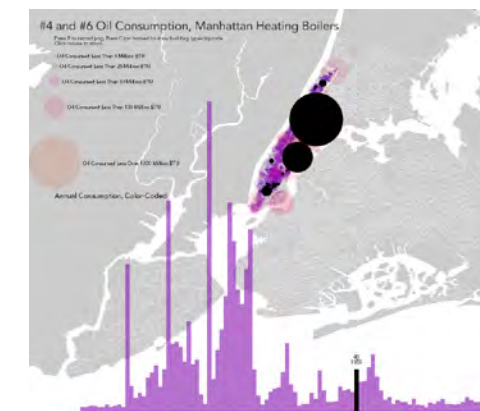
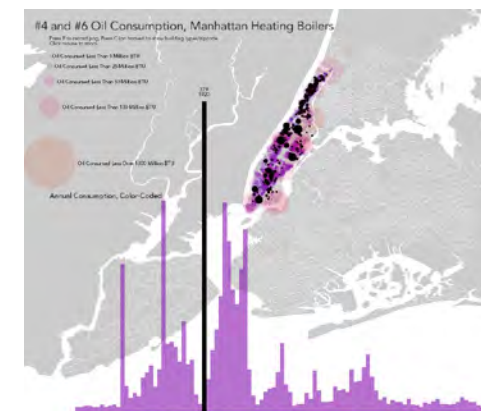
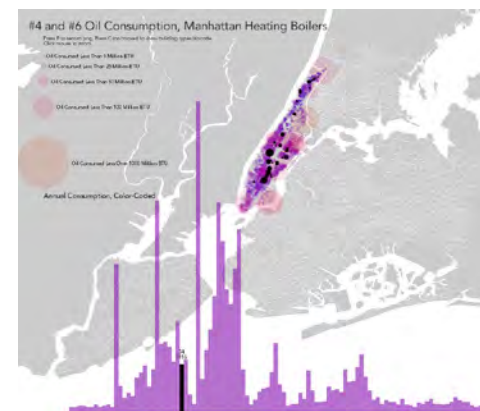
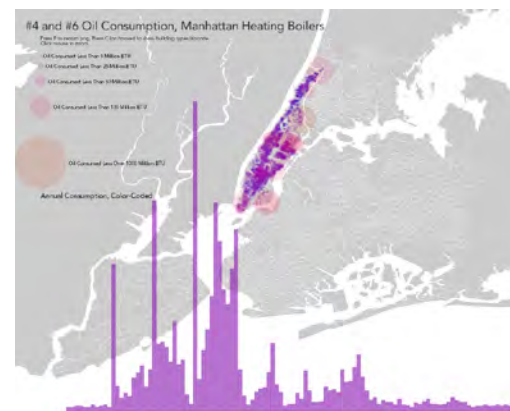
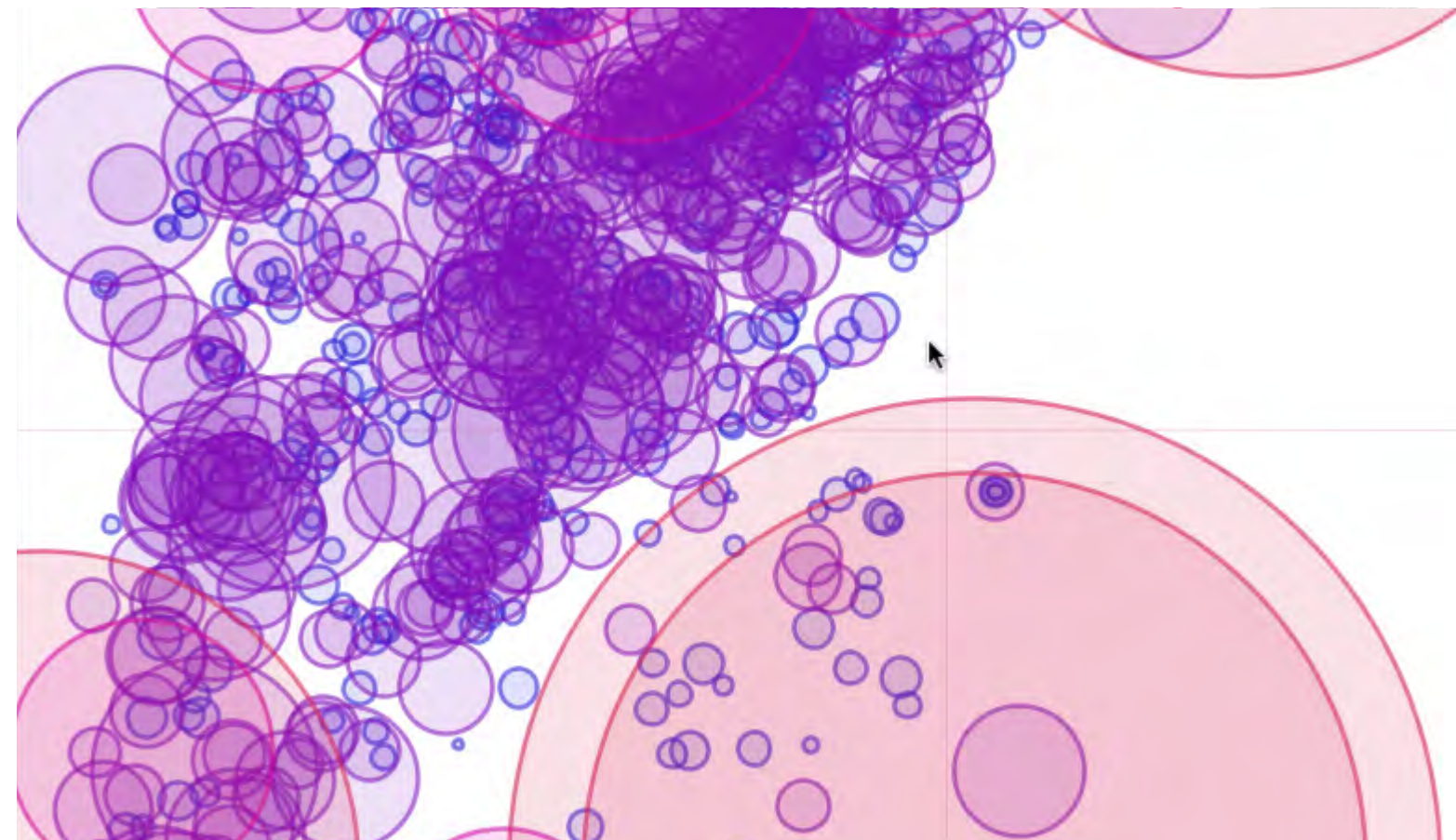
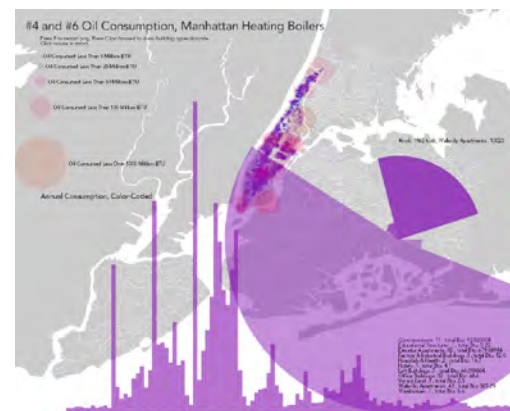
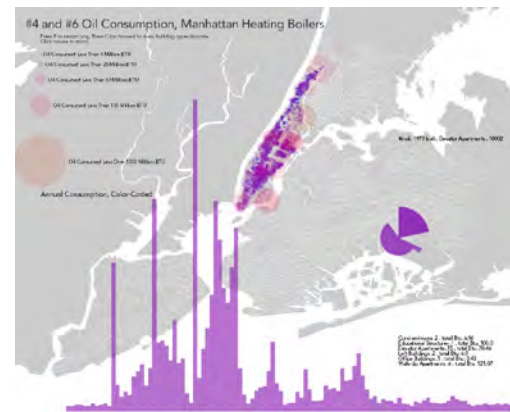
SKETCH: BOILER 1D VARIABLES FOR ARCS

Here, in order to build a data-rose that displays the percentage contribution of each building typology to that zipcode's #4 and #6 oil use, we'll derive two sets of values.

First, we set up the array pie [] to hold the count of properties per type as divided by the total count per zipcode. This series of percentages will be used to get the angle of each typology pie slice (percentage x 360 degrees). Second, we'll want to get the total amount of energy used in each typology as well as used overall, here as 'sumBtu'. These numbers will be used to dictate the length of the arc, i.e. the varying radii of each pie slice in our data-rose.

PROCESSING WORKSHOP

[WEEK 2]

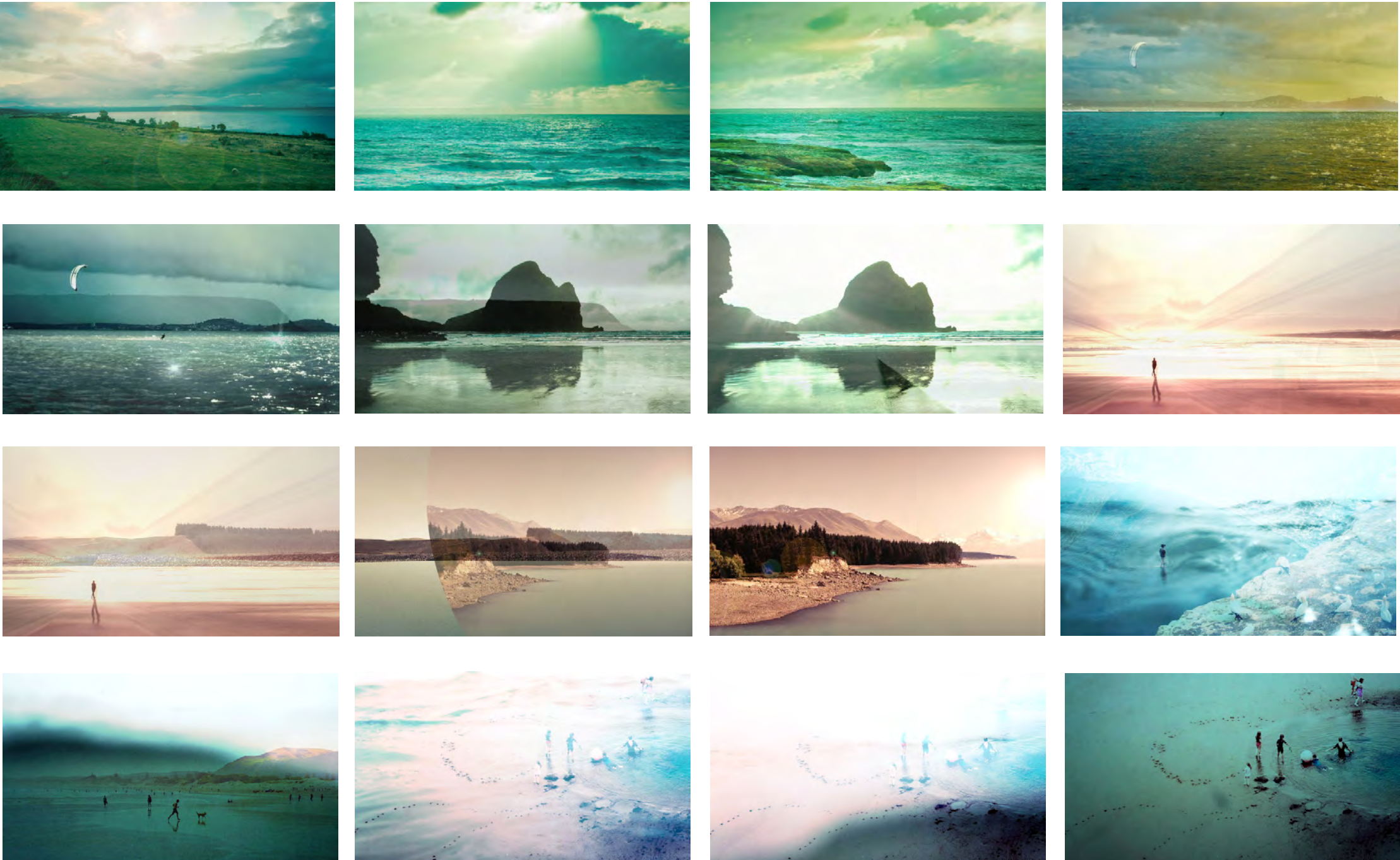
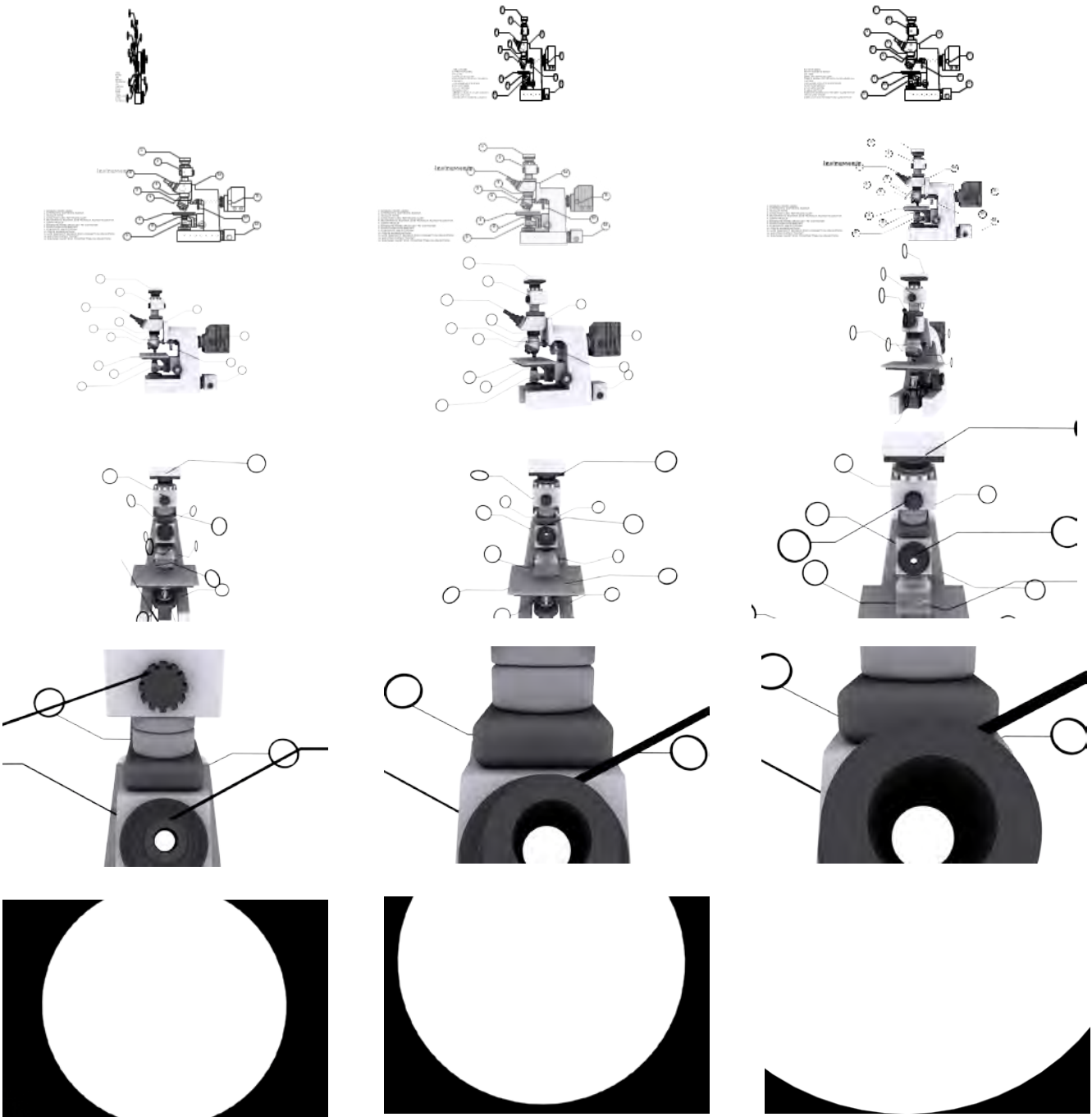


MICROSCOPE ‘WHITE OUT’

In this transition, rhino/3d max model animations come together with illustrator and flash annotations to provide a ‘down-the-rabbit-hole’ white-out sequence. The movement from 2d diagram to 3d, analytic object and visual instrument was conceived to play on the generative aspect of viewing and the powers of parallax to alter subject and object.

FEELING OCEANIC

Although I rarely focus on raster and rendering work, this short started with stills and simple water footage. Transitions are created both through fades, general masking, and exaggerated lighting effects. Like Daguerre's dioramas, this test suggests the potential, internal manipulations of season and time within after effects and premier pro.



PROJECT ANIMATIONS

STREAMLINES

This landscape proposal was done at Stoss for the Minneapolis Riverfront Competition. It was shortlisted and shown at the Walker Art Center. Selected transitions and phasing are shown to the right.

Steamlines re-imagined 5.5 miles of Mississippi Riverfront in Minneapolis, from the cultural riverfront in downtown north to the city limit. It engages urban ecological systems, putting them to work to clean, to re-constitute this working riverfront, and to guide a longer-term transformation of the city fabric.

With multiple strands, it evokes the stories and lives of the people who live, work, and play by the river's edge and have done so for centuries. It builds from the rich histories and evolving identities of the Mississippi River, to put in place a series of working and operational landscapes, green infrastructures, and urban fabrics.

DATE 2011, Stoss Team Entry

ROLE animation, designer

EXPOSURE

- Competition Shortlist/Finalist
- BSA 2012 Unbuilt Award

WIDER TEAM

- manager- Scott Bishop
- Margaret Graham, Jill Desimini, Jill Allen, Thomas Clark, et. al.

TOOLS/DATA

- gis, ai, rhino, psd, ae
- mixed: city/state gis, water processing calculations, energy calculations



STREAMLINES

This landscape proposal video was done in collaboration with Emily Schlickman. It was short-listed and exhibited at the Pruitt Igoe Now competition.

‘From Below’ aimed to activate the former Pruitt-Igoe site as one node in a larger network—tapping, exposing and diverting existing CSO wastewater flows as a catalyst to re-engage the surrounding urban fabric.

The proposed system inundates the surface of the site with a series of constructed cleansing basins to produce a number of regional economic outputs: rich biosolids for community composters, urea crystals for “growing” biobricks and bio-fuels. Local ecologies and elevated plazas are woven throughout the system. When fully constructed, the site becomes a mosaic of experiences – from overflow amphitheatres to floodplain forests to exposed karst collection basins.

DATE 2012, shortlisted, exhibited

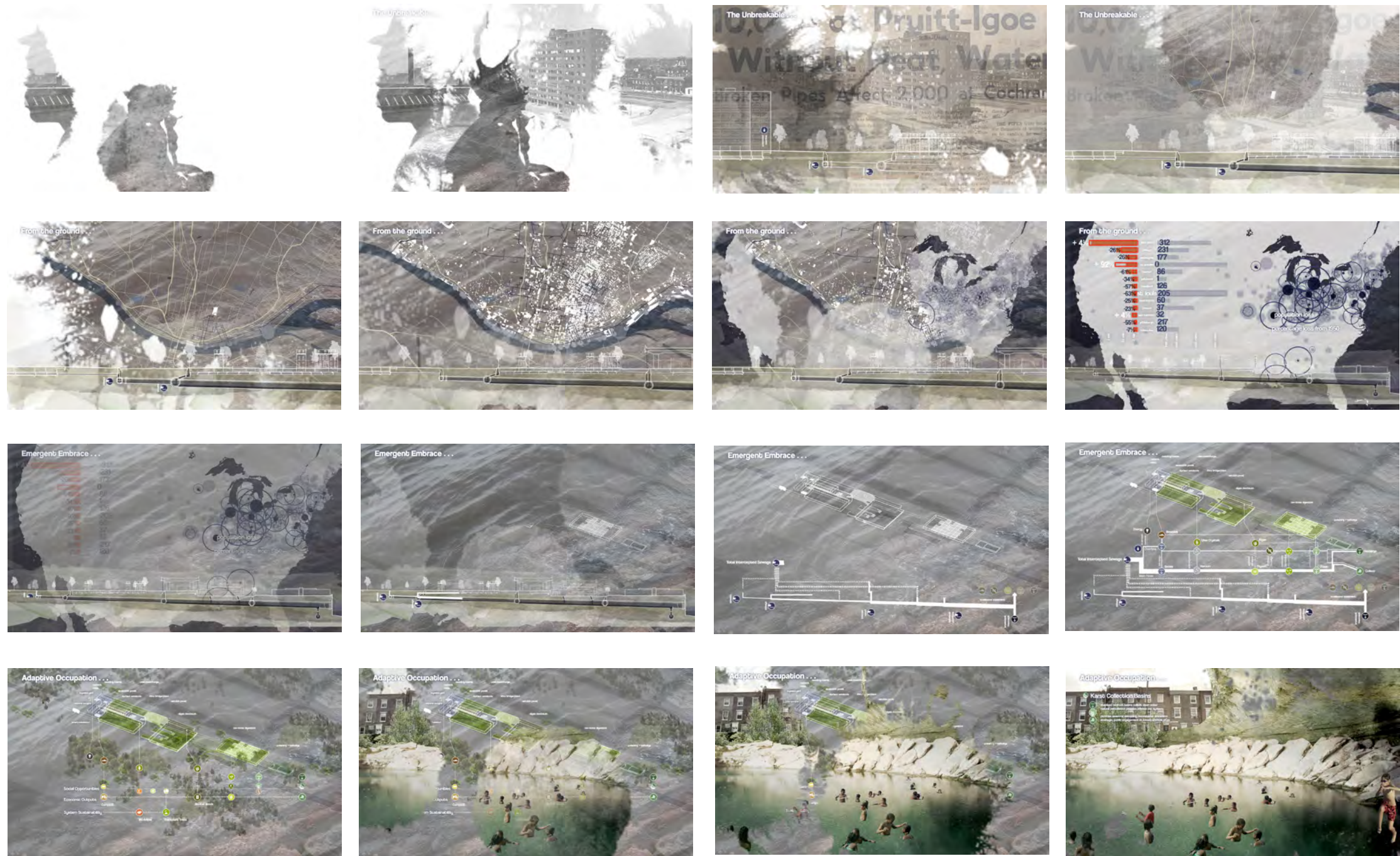
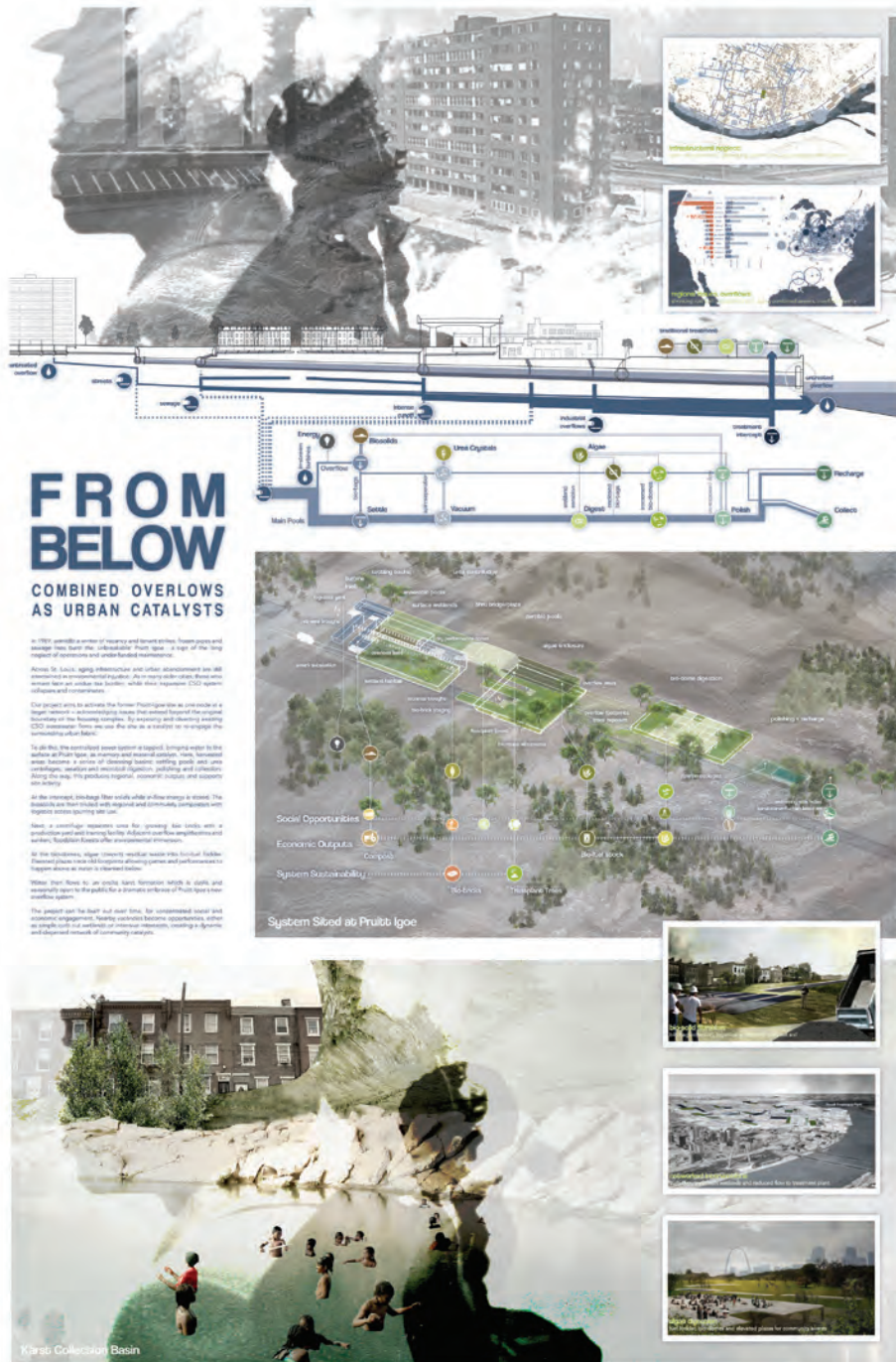
ROLE animation, designer (with Emily Schlickman)

EXPOSURE

- 2012, Pruitt Igoe Now competition and exhibition, St. Louis, MO, July 2012 and online at <http://www.pruittigoenow.org/competition-finalists>

TOOLS/DATA

- gis, ai, ae, rhino, psd
- mixed: city vacancies, epa water quality/cso reports, city water authority data, fema maps



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www.siteations.com

Boston Statistics *(as available)*

GROWTH & DECLINE OF TRADE

INDUSTRY 1900

HARVESTED ICE
MANUFACTURED ICE

MEG STUDER

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2014