Urban Armada

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Chris Knight
ARCH 684 Competition Elective
Supervisor: T. Boake
Summer 2010

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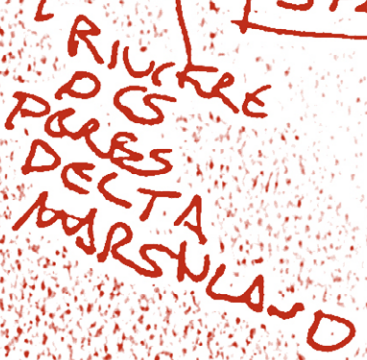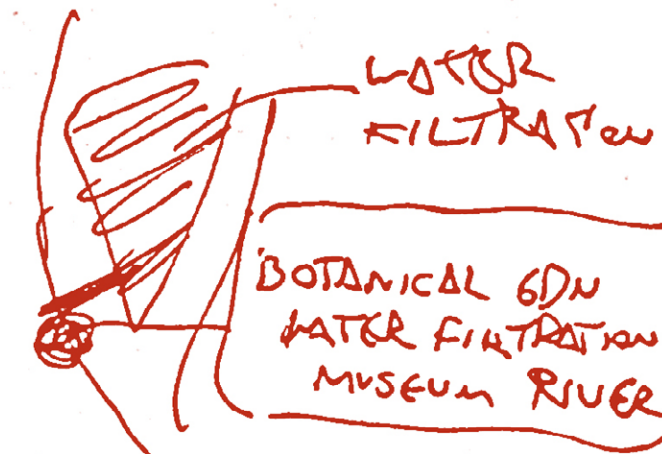
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WATER FILTRATION

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E ST. LOUIS

GALLERY
SHOPS
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HOTEL
GARDENS
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MARSHLAND

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The Competition
The Steedman Fellowship is a bi-annual travel scholarship granted by the Sam Fox School of Design & Visual Arts at Washington University in St. Louis. From the Steedman Fellowship website (www.steedmancompetition.com):

Granted since 1925, the biennial Steedman Fellowship is open to citizens of all countries with no more than eight years experience following receipt of a professional degree in architecture. The competition carries a $30,000 first-place award to support study and research abroad - one of the largest such awards in the United States...

The Steedman Fellowship is supported by an endowment - given to the Sam Fox School's College of Architecture and Graduate School of Architecture & Urban Design - in honor of James Harrison Steedman, who received a degree in mechanical engineering from Washington University in 1889. The memorial was established by Steedman's widow, Mrs. Alexander Weddel, and Steedman's brother, George.

This document includes competition information, an essay which explains the project in relation to historical precedents, a narrative of the design process, and an examination of the submission itself.

The Team
Although this is an *individual* competition, we pursued and were given permission by the competition organizer at the Sam Fox School, Mauricio Bruce, to work on this competition as a team of two, so long as the official submission was under one name.

The team consisted of myself (Chris Knight), and Nevena Krilic. I am currently an MArch candidate at the University of Waterloo School of Architecture; Nevena is a recent graduate from UWSA who works for Zeidler and Partners, in Toronto. The competition entry was submitted under Nevena's name.

2010 Competition Brief
From the Steedman Fellowship website:

The 2010 competition will consider the relationship between urban environment's and the river's edge, specifically the relationship of the City of St. Louis to the Mississippi River. Since 1967, Eero Saarinen's majestic Gateway Arch has commanded St. Louis, occupying the banks of the Mississippi. Commemorating Thomas Jefferson's purchase of the Louisiana Territory, the Arch stands on the grounds of the Jefferson National Expansion Memorial and symbolizes American settlement westward, hence why it is called the 'Gateway to the West.'

While the Mississippi was, indeed, a threshold to Western American settlement, the river itself has always been, and remains, the 'gateway' to the Gulf of Mexico - and thus, by sea, to the rest of the world. What might then be an equivalent to the Gateway to the West for the north-south axis of America? Not in the form of a singular monument, but in the complex ways in which the cities of St. Louis and East St. Louis can respond to and interact with their majestic river.

To address this question, the selected site for the 2010 Steedman Competition encompasses a large, complex territory, from the confluence of the rivers to the north to the bridge crossings south of the Gateway Arch. Thus, an urban design and a landscape design sensibility are required in addition to that of an architect. Considerations of infrastructure, topographic transformation, environmental stewardship, and built form must be creatively

Genesis

We determined back in the summer of 2009 (while I was in my M1 term, and Nevena was suffering through a hospital project that she really was enjoying at work) that we would do a competition together. We had been good friends for the better part of a year, and it seemed like a straightforward decision to make. We enjoy one anothers company and see the world from a similar hopeful if pessimistic point of view - therefore we would design well together!

Of course, there is not a lot of spare energy while one is in M1, and as M1 turned into M2 I spent 2 months travelling in the states. In January of 2010 I was back in Toronto and keen to work on a competition while doing my professional practice and codes courses for MArch degree requirements, and it was then that I stumbled upon the website for the Steedman Fellowship. Neither of us had heard of it before, but it sounded good, so we left it at that and decided (somewhat non-commitally) that we would do this one as our first competition in partnership.

We both had a vague notion that the competition registration deadline was sometime around March 1st, that it was for an individual recent graduate in architecture, and that it cost $75.00 US to enter...

intertwined on behalf of enlarging the range of human uses and experiences at the boundaries of city and river.

Cities seeking to increase the qualities inherent to urban living, rescue land from industrial obsolescence, or provide an alternative to peripheral sprawl turn to their waterfronts more than ever, and for a broader array of reasons. Along these waterfronts, it seems possible to accommodate the changing needs of today's urban dweller, as modern societies continue their millennial shift from industrial-based economies (and their spatial demands) to service- and lifestyle-based economies and their requirements.

Notes jury chair Alex Krieger, chair of the Department of Urban Planning & Design at the Harvard Graduate School of Design: "Urban waterfronts are unrivaled in their potential for providing for an exceptional or celebratory enterprise. Imagine the Sydney Opera House, or the Guggenheim Museum in Bilbao, or the neo-classical customhouses along Shanghai's Bund not juxtaposed against each city's major body of water? Much of contemporary Chicago's identity and self-image, not to mention wealth, comes from its spectacular 20-mile long facade stretching along Lake Michigan.

"Humanity, it seems, delights in and finds inspiration at waterfront settings, but increasingly asks more of them than spectacle alone."

The competition brief will ask participants to propose and portray what that "more" might be along this portion of the Mississippi River.

The jury:
Alex Krieger, Chair
Marilyn Taylor
Charles Waldheim
Dorothee Imbert
Joan Busquets
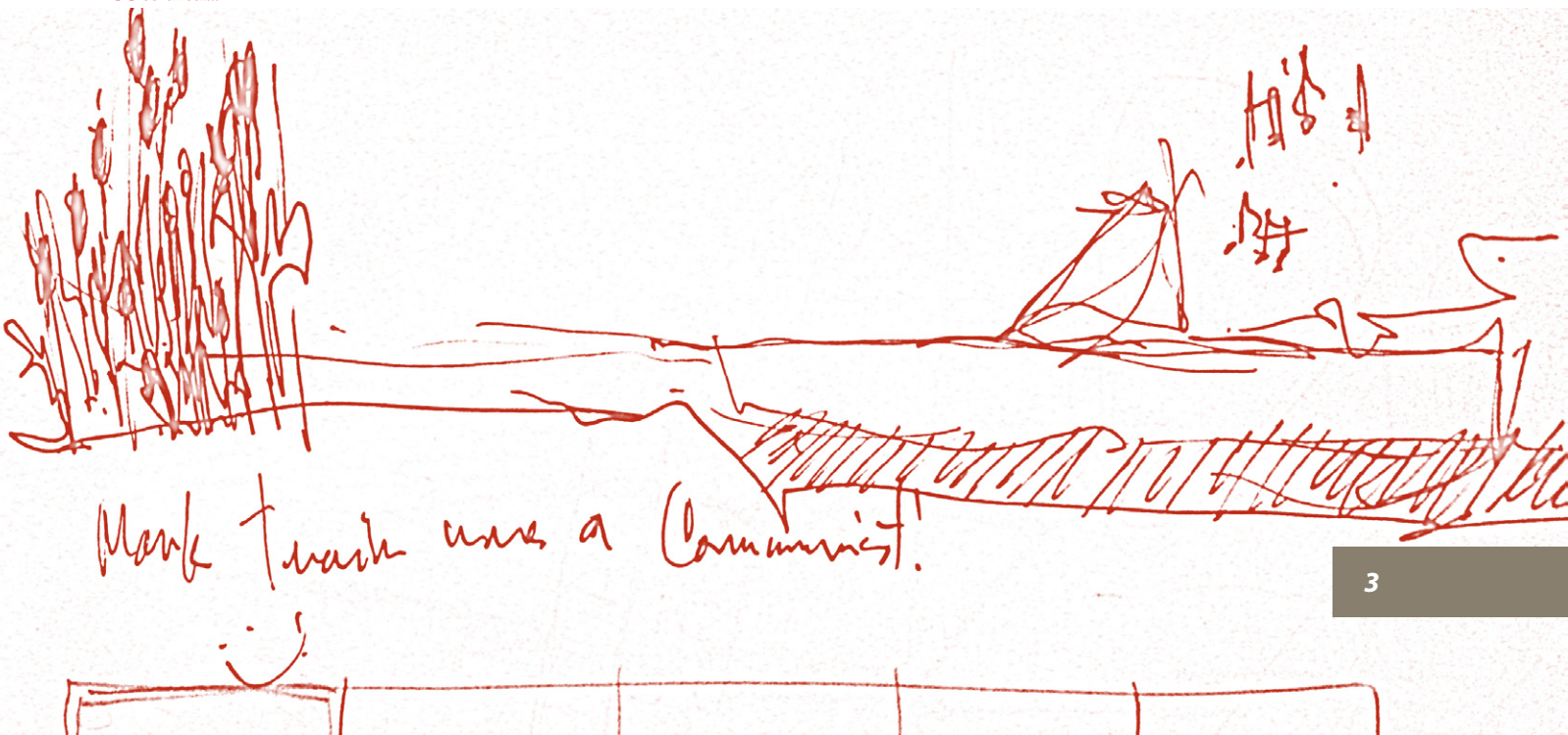
Problem Statement

The works of the past always influence us, whether or not we care to admit it, or to structure an understanding of how that influence occurs. The past is not just that which we know, it is that which we use, in a variety of ways, in the making of new work…. The typology argument today asserts that despite the diversity of our culture there are still roots of this kind, which allow us to speak of the idea of a library, a museum, a city hall or a house. The continuity of these ideas of type, such as they are, and the esteemed examples which have established their identity and assured their continued cultural resonance, constitute an established line of inquiry in which new work may be effectively grounded.
The Harvard Architectural Review. Volume 5. Precedent and Invention.
"Between History and Tradition: Notes Toward a Theory of Precedent." John E. Hancock.

Introduction

In collaboration with Nevena Krilic, I entered the 2010 Steedman competition, with an entry entitled: "*Urban Armada: Anchor and Transform*". The 2010 Competition sought ideas for the transformation of the Mississippi riverfront, from its confluence with the Missouri to the city of St. Louis, an extensive and varied terrain of industrial complexes, farmland, railyards, warehouses, wetlands, canals and levees. Our proposal (briefly summarized) involves the deployment of groups of architectonic barges at key locations along the riverfront to stimulate occupation and engagement with this landscape. The project addresses the complex history of the landscape largely by means of what it *does not* seek to do: it avoids placing value judgments on particular landscape or urban conditions; it does not define a structure or strategy for redevelopment or renewal; it does not seek to understand and address (and thereby over-simplify) all of the impossible diversity of factors at play; it does not place particular emphasis on nostalgia or preservation; and finally, it does not pose itself as a model urban design solution that could be applied to other sites as a generic strategy.

In discussing how this project is influenced by historical or typological precedent, both consciously and unconsciously, it is useful to categorize these influences and our awareness and strategy towards them. From the beginning, the proposal was an exercise in systematically documenting and quantifying the various historico-geological constructs of which the existing riverfront is composed, to quantify the site in terms of regional geological, human, and ecological systems. These elements are considered in the section '*Regional Geo-Morphology*', and provide the primary framework for understanding the complexity of the problem being addressed. Secondly, we were deliberately conscious that the act of designing for an obsolescent urban waterfront carried with it a whole host of typological precedents from which to proceed. 'Rehabilitated' urban waterfronts tend to become tourist promenades and not complex and complete urban conditions: we deliberately wished to create a design that would act as a critique of *theme-park urbanism*; these concerns are considered in the section '*Mediterranization vrs. Landscape Urbanism*'. Thirdly, the question of how a massive reconfiguration of the St. Louis waterfront could be manifested raised numerous questions: top-down versus emergent strategies; the value relationship in this context between vital communities versus reconstructing (or engineering new) ecologies; concerns about inequalities of access to riverfront amenities; the potential effects of

We almost didn't enter this competition. For whatever reason: laziness, being busy with other projects, a lack of consensus, or a reluctance to spend the registration money on a competition that neither of us would have time to work on, we neglected to register until the final day for registration - March 1st.

The only problem was, when I logged onto the website to fill out the registration forms, I discovered that the deadline was not March 1st. It was February 28th! Frantically, I phoned Nev, who was not really surprised, but thought that I might as well email the guy running the competition to see if we could still submit our registration. After all, it was only 1 day late...

After sending off an embarrassed email requesting permission to register late, I came across the following on the website: "candidates must be graduates of an accredited school of architecture..." I hurriedly put together another email, asking if my credentials as a graduate of the BAS program at Waterloo even qualified me to enter the competition.

I got my answer pretty quickly. Sure we could enter late. However, the answer to my second query was NO. I was not even eligible to enter. Figuring it was a lost cause anyway, I asked if it would be all right, despite the fact that the competition is for individuals, if I worked with my friend, who has an MArch degree, and therefore is eligible to enter the competition?

Surprisingly, he said "yes".
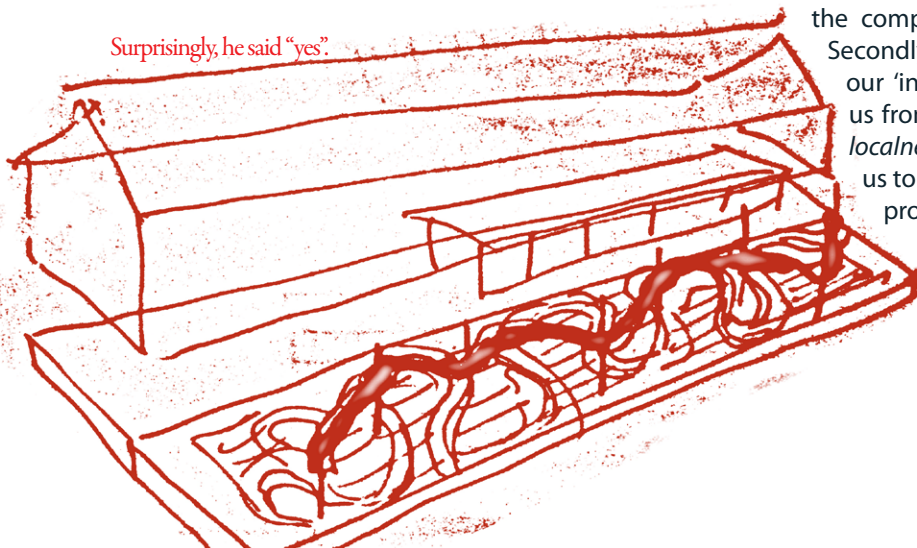
gentrification; and how to deal with the subtle, sublime character of a vast post-industrial landscape. These questions are addressed under '*Urban Renewal*'. Finally, this proposal itself can be classified in relation to other urban design strategies; we have labeled it 'catalytic urbanism' in the presentation copy, but the strategy is certainly in the broad tradition of landscape / infrastructural urbanism which has become prominent in the last decade. We have built upon these examples to develop a specific strategy, which has particular resonance for St. Louis; this is discussed under '*Frameworks*'.

Home Court Advantage?

The first concern when considering our approach was that neither of us had ever been to St. Louis. Though not unusual for an international competition, in this case we were dealing not simply with the cadre of issues surrounding a single building site, but rather the complex history of a massive territory. Designers deal with their geographical limitations of knowledge in different ways. Of course, designers from distant locations win international competitions all the time, even competitions that require a subtle and compassionate reading of a particular local condition. Successful projects proceed from one of two basic strategies: either they perform remarkable and exhaustive levels of research related to the local condition (something which the internet does makes easier, though it is impossible to develop the kind of knowledge which a local inhabitant might have) and produce a design which proceeds from this; or, they abandon a regionalist approach altogether and produce a project which is universal in application but is, in some way, tailored to the brief. The problem with the first strategy is that it is time consuming and complicated to extract the kind of knowledge a contextually satisfying urban design might require. The problem with the second strategy is the likelihood of working hard to design something which has no relevance for the location in question; it is so easy to 'miss the point' when you do not understand the issues involved.

With this in mind, and given the limitations of timing, we realized an analogy would be useful: what if we imagined that the competition took place in Toronto (a city we both know intimately)... What would we absolutely need to know to design a proposal that was both relevant and convincing, able to engage with the existing conditions and imagine new ones that would transform the city in a believable way? We came up with, of course, the usual list of elements designers pursue in order to catalogue their subject: cultural history; geology; urban morphology; broader connections; regional influences; etc. The list immediately grew impossibly long. However, the thought experiment yielded two important points. Firstly, we realized that even when it came to Toronto, a city which we felt we had comprehensive knowledge of, there was an incredible amount of research to be done to understand the kind of regional effects that the competition brief was asking us to deal with. Secondly, and more importantly, we realized that our 'intimate knowledge' might actually prevent us from seeing clearly, as an outsider might. Our *localness* might actually be a disadvantage, causing us to be more conservative about what we might propose, perhaps shooting down ideas before they had a chance to develop, or taking for granted that certain parts of the city are or are not a certain way. Could being an outsider with no knowledge of the city

give us a distinct advantage over locals, and if so, how?

Our logic proceeded as follows:
- there is no way we are going to be able to apprehend and address the complexity of a city that neither of us had ever visited (especially given that the research period was very limited and we had few direct resources besides the internet);
- in order to produce a meaningful urban design strategy for this territory requires that we do just that;
- therefore, we need to come up with a strategy which is not an 'urban design', in order to win an urban design competition.

A touch of irrationality is a saving grace for us, a stroke of luck which gives us some breathing space, a loose fit in the machine which makes us alive. Life, intelligence, goodness probably come out of this free play and this lack of restraint... Perhaps we shall learn one day that the most reliable machines leave room for the unexpected.
Michael Serres, *Genesis*.

Regional Geo-Morphology

What we found, initially, was a vast amount of material relating to the St. Louis of tourist brochures: the gateway arch, the zoo, the mythological colonization of the west, the Oregon trail, Busch Beer, the Cardinals... It was simultaneously impossible to find any information on the mysterious riverside neighborhoods we peered down upon from Google Earth's satellites. Google street view allowed us to venture through the neighborhoods mentioned in the competition brief: Soulard, Kosciusko, Hyde Park, Near North Riverfront. But every approach to the river ended in disappointment, often half a mile or more from the waters edge, the banks themselves hidden beyond levees, concrete walls and rail yards. The territory we were being asked to redesign was essentially invisible to us.

At the same time, we encountered two sources of information, which would be crucial informants for us and would dictate the direction our efforts would take. The first was a fantastic book called *Mississippi Floods: Designing a Shifting Landscape* by Anuradha Mathur and Dilip da Cunha, which looks at the methods and motivations for the attempts to control and manage the Mississippi, explored through the medium of writing, photo essays, and exquisite paintings and silk screens. The second was a blog, *Misfit Stream*, written by a graduate student in Urban Planning named Matt Mourning, which dealt with the history and ecology of a channelized urban river which lies near the southern boundary of the St. Louis metropolitan area, the River des Peres.

These sources complemented each other well: the first illustrates how incredibly indefinable, liquid, and variable the Mississippi is; the second described the necessity of controlling this wildness in order to live next to it, and the results of this exercise of control. *Mississippi Floods* is the tragic history of a living river, which literally whips back and forth across the landscape, at once stealing and giving territory as it overflows its banks and recedes once more, depositing new land in its wake. It is the story of the US Army Corps of Engineers struggle to tame the river, their technological interventions, successes and failures. It documents shifting islands, catastrophic floods, and the ongoing battle to prevent the river from choosing a new delta, marooning New Orleans in a sea of mud. The River des Peres is a

Industrial Lands

Heavy Industry

Rail Lines
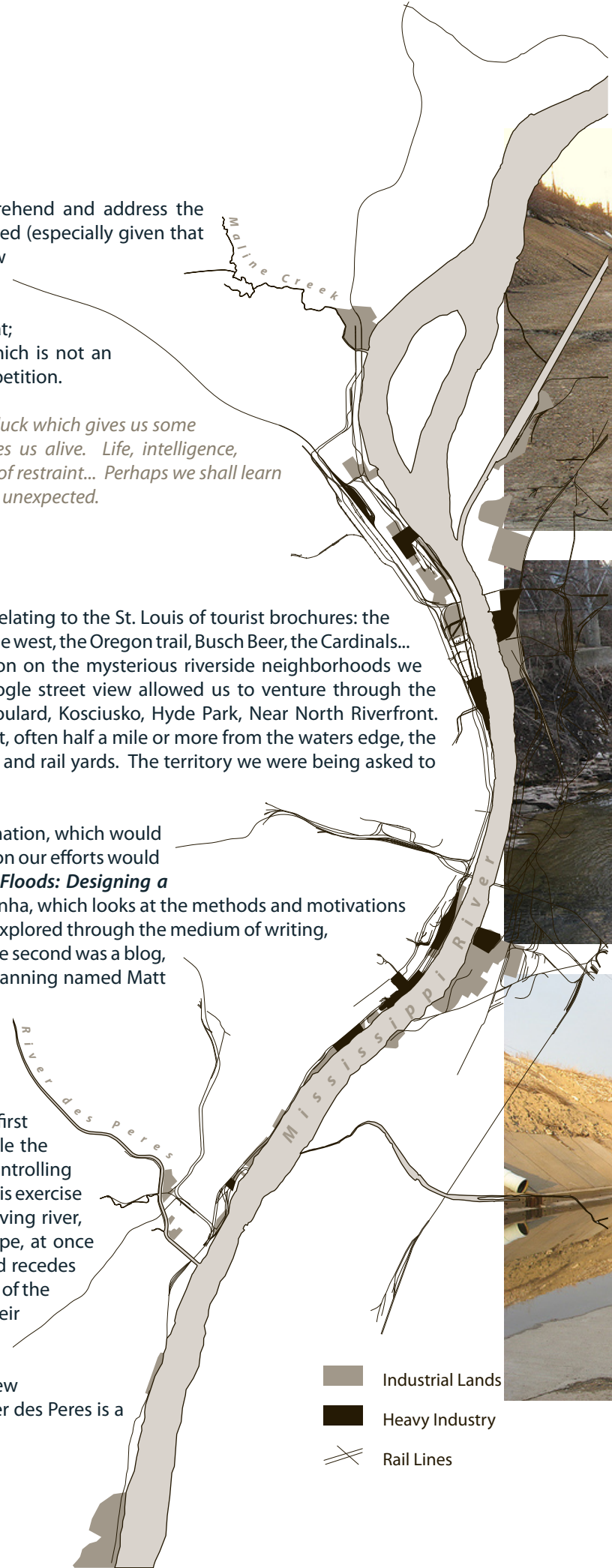
6. **River des Peres:** the "misfit stream"

7. **River des Peres:** limestone bedrock

8. **River des Peres:** Forest Park "tubes"

microcosm of this much larger project of engineered control exercised upon the entire Mississippi watershed; like the larger river it flows into, its banks have been fortified and straightened with embankments and levees. Where once there was a natural, meandering river, there is now little more than a municipal storm drain; in fact, the River des Peres forms the backbone of the St. Louis sewer system, draining effluent from the city into the great river. *Misfit Stream* catalogues efforts to build community support to begin the long process of restoring the River des Peres to a (semi)natural state.

Central to our proposal is a categorization of the existing condition of the riverbanks through the region, according to a series of typologies we identified through research by means of mapping, air/satellite photography, Google street view, anecdotal writings, and with the aid of blogs such as *Misfit Stream*, among several others. The first (and broadest) categorization was simply to differentiate between that portion of the river that is actively connected to the city, and that which is inaccessible from the city. The inaccessible territory predominates; while not homogeneous, these zones are characterized generally by a narrow catalogue of conditions, associated with industrial and riverine control infrastructures. Only about a mile of riverfront (out of approximately 20 miles on the Missouri bank alone) consists of what could be considered 'urban riverfront' connected to the city of St. Louis – basically the urban park surrounding the gateway arch between the Martin Luther King and Poplar Street Bridges. The first step in defining the project strategy was to determine to act on the inaccessible portions of the riverfront.

This vast region of inaccessible territory was further categorized in two ways: first in terms of its proximity to existing 'vital' neighborhoods (ie proximal or not to the various key neighborhoods identified in the competition brief); secondly in terms of its character (ie actively industrial, part of the Mississippi river control infrastructure, post-industrial wasteland, farmland, or natural conditions). It was important to consider both natural and manmade landscape conditions in this assessment, because at no point along the riverfront could the territory be considered totally natural, nor could it be considered completely under human control, despite the Corps of Engineers best efforts.

This proximity assessment yielded 3 typologies. The most common condition, and that which defines most of the riverfront, is post-industrial land with no easy connections to active urban conditions. It is characterized by vast swathes of '*disabitato*' (under-utilized private land) bounded by the curving sweep of levees: overgrown industrial sites, farms, semi-natural land, and massive brownfield sites. The adjacent city is suburban, dispersed, or completely cut off by railyards, interstates, canals, chain-link or concrete fences, and overgrown parkland. This zone was considered ideal as a '*natural catalyst*' site, where an intervention would be centered around the ecological possibilities (rather than urbanization) and form a gateway condition along the riverfront trail. Secondly, there is a landscape which is similar (though more intensively industrial) but which is immediately adjacent to existing and expanding vital urban neighborhoods, including Soulard, Kosciusko, and the Near North Riverfront zone. This territory is typically comprised of railyards, warehouses, riverwalls (20 foot high concrete barriers to the river), industrial complexes and barge terminals, and was considered ideal for an '*urban catalyst*', whereby an intervention would seek to stimulate development and increase riverfront access by drawing on the carrying capacity of existing nearby neighborhoods. Thirdly, across the river from the arch and easily accessible from both St. Louis

and neglected East St. Louis, is a great swathe of largely abandoned land, with one riverboat casino / hotel complex occupying prime real estate directly across from the arch; we dubbed this site '*the Mirror*', and considered it as a unique condition in the city. The next step was to consider how to intervene in such problematic, variable and dispersed landscapes, and how that intervention could be symbolic of St. Louis itself.

Mediterranization vrs. Landscape Urbanism

...the faster history vanishes, the more it is celebrated in areas specially built for this purpose. Thus the neo-theatricality of historical urban areas is an answer to the growth of the new generic city: an intersection of activity and leisure in the quiet of the post-urban zone. De-dramatization, indifferent juxtaposition, the series of motorways and retail chains in a kind of provisional architecture tarted up with billboards and neon – all this reinforces the need for a re-dramatization of certain (usually old) neighborhoods. To use Manuel Castells' terms: the more the 'space of flows' loses its architectural drama, the more the remaining 'space of place' must be dramatized in order to affirm its identity as a 'place to be' and a 'place to stay'.
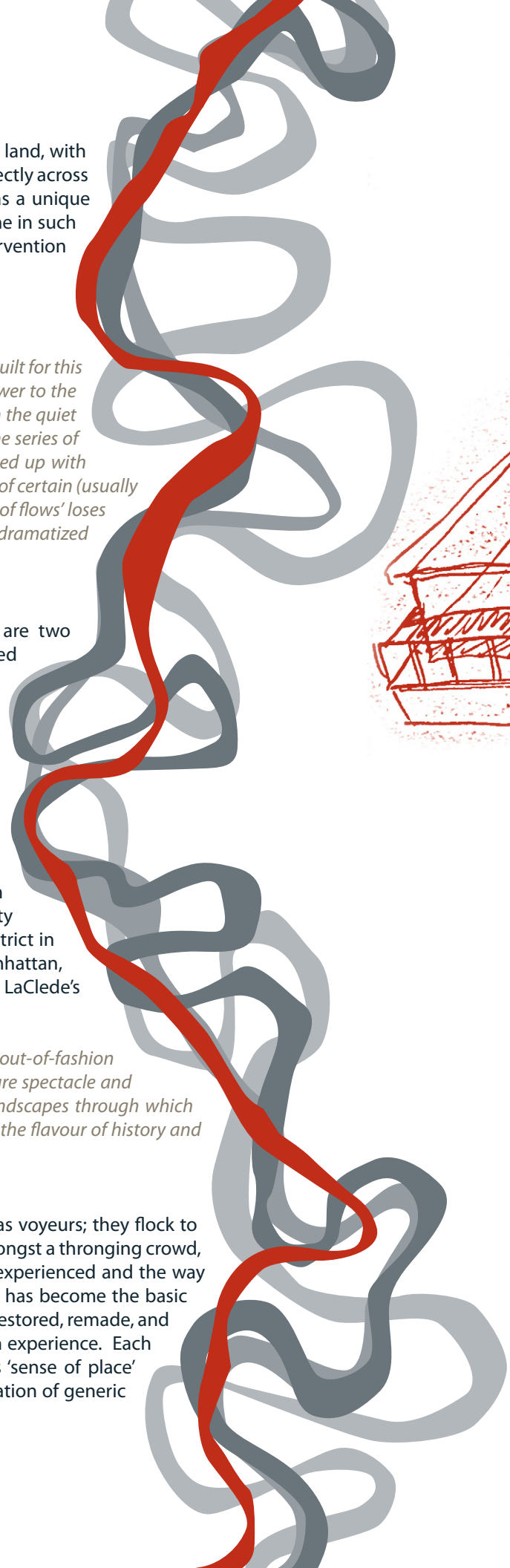
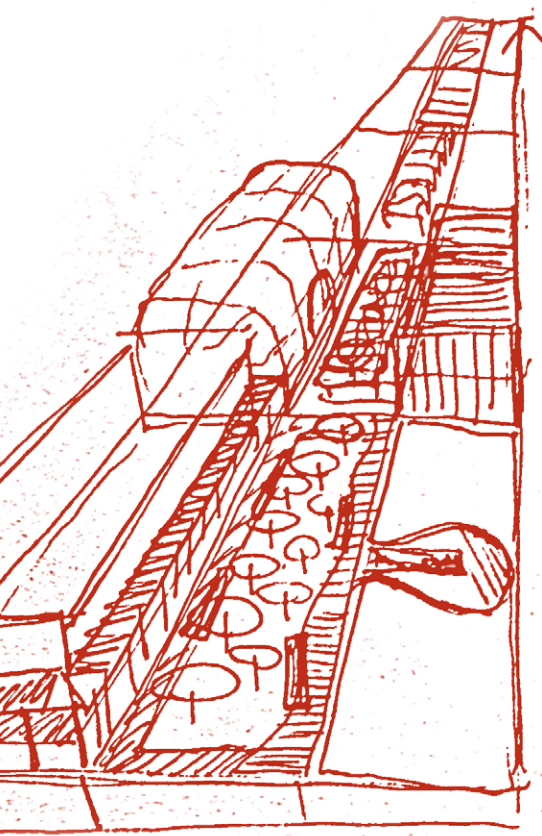Lieven De Cauter, *The Capsular Civilization*, 33

Among the precedents for 'revitalized' urban waterfronts, there are two dominant contemporary typological strategies: the first is described by Lieven de Cauter, who calls the phenomenon 'Mediterranization', but is known by many names – Disneyland architecture or Disneyfication, theme-park architecture, Neo-theatrical city, or less pejoratively Heritage / Preservation architecture. The second dominant strategy (and that which has emerged as the darling of the architectural intelligentsia) can be described under the broad-brush terms Landscape urbanism or Infrastructural urbanism. Interestingly, it is difficult to find a major urban competition in recent years that has not been won by some manifestation of the latter (witness the Toronto waterfront submissions, or Governors Island in New York); simultaneously, it is difficult to find a North American city which does not sport its own brand of the former (the Distillery District in Toronto, Gastown in Vancouver, or the South Street Seaport in Manhattan, for example). St. Louis has its made-over historic district, known as LaClede's Landing, just to the north of the arch.

City after city is discovering that its abandoned industrial waterfront or out-of-fashion downtown contains a huge tourist potential and redesigns it as a leisure spectacle and promenade. All these sites are becoming culinary and ornamental landscapes through which the tourists... celebrate the consumption of place and architecture and the flavour of history and food.

Boyer, quoted from Lieven De Cauter, *The Capsular Civilization*, 31

Koolhaas has described the new urban masses not as citizens but as voyeurs; they flock to the city not to claim their political identity or to assert their voice amongst a thronging crowd, but to experience a city as theatre. The mode in which the city is experienced and the way in which a city establishes its reputation is that of tourism; tourism has become the basic form of urban existence. Thus, the old disused historical districts are restored, remade, and theatricalized in order to commodify the image of themselves as an experience. Each 'revitalized' historic district vigorously asserts each particular city's 'sense of place' while at the same time providing a perfect medium for the proliferation of generic corporate America…

There is not space or need in this essay to assess the merits and problems with either phenomenon; suffice it to say that our awareness of both oppositional and competing strategies led us to seek a position of bemused skepticism. Historicist urbanism has been widely criticized for its lack of diversity, exclusivity, shallow imagery, hyper-real simulacra, etc. Returning to a Toronto analogy, we nevertheless felt that there was room enough in the city for both a Distillery District and a Kensington Market; in fact, is the latter not more remarkable when contrasted against the former? We suspected (and were later proven correct) that most of our competitors in this competition would approach the problem with strategies derived from landscape urbanism. The Mississippi, at first glance, is pregnant with possibilities for ecological revitalization: along almost the entire length, the banks have been lined with concrete mats; the floodplain has been protected with 50' high levees; the channel has been straightened, resulting in a shortening of the length and increase in the speed of flow; and the river is used as a sewer for many of the towns and cities along its length. However, **Mississippi Floods** makes it very clear that there is no easy solution to this condition. One cannot simply remove the concrete reinforcing in certain portions of the banks in order to restore a 'natural' habitat along the river. The natural condition of the Mississippi is a meandering state of flux, constantly overflowing and remapping itself in its flood plain. But the river in its current state is a synthetic waterway, it's flow engineered for uniform speed, self-dredging and maintenance of navigable depth. River transport, while in continuous decline throughout this century, remains a necessary and viable transportation method, especially in light of looming oil shortages. A more nuanced understanding of the Mississippi must consider its value as a major transportation corridor, whose creation and very existence is intertwined inextricably with the history and culture of the United States.

The post-industrial wasteland that makes up the St. Louis foreshore is not without value. 'The landscape of the Mississippi in the region of the confluence is a landscape of super-human scale; its moods and characteristics are monumental and riddled with palimpsest both human and natural - abandoned factories and abandoned streambeds, the relentless levee and the ancient mound, islands that have drifted from one human jurisdiction to another. It is clear that the radical and rigorous design strategy imposed by the US Corps of Engineers upon the river has created many unforeseen problems; however, it is also clear that the Mississippi must remain navigable in order to sustain healthy economies along its flow'. 'Urban Armada' proposal A conscious acceptance of this fact was the kernel that sparked our project: what better symbol for a connection between St. Louis and the rest of the world, via the river, than

We are going to win...
13 days before the submission deadline, we finally had our first formal 'meeting' to brainstorm for the competition. I had just finished all of my coursework for Acts & Codes and was quite ready to have a vacation. Not only that, but it was a beautiful day - one of the first warm days of the year, a friday at the end of March.

We met at a bar in Kensington Market. We talked of the obvious issues presented in the brief. I talked about my frustration in finding information on the internet related to the actual riverfront districts. I also mentioned the Mathur and da Cunha's book, and the blog I had discovered, Misfit Stream.

We had another beer.

Then, we had a revelation. We will make a floating riverfront out of river barges! We left the bar to meet friends, convinced we had the competition in the bag.

the Mississippi river barge? The whole synthetic ecology of the river is built around the dimensions of the barge: locks are constructed just larger than the 30' width of the barges; bridges are just high enough to allow laden hopper barges to pass underneath; and the flow has been engineered to maintain a depth of one 'twain' (from whence Samuel Clemens, a Missouri native, took his pen-name). The whole morphology of the synthetic landscape is built around the barge. We would use the barge as a medium for transformation of the riverfront, as a way to strategically inhabit and intensify key locations along the waterfront, providing destinations and spurring nearby development.

Furthermore, we felt there was a place for a kind of ecological urbanism in the proposal, but that the place for action was not the banks of the Mississippi itself, but in the countless tributary streams that flow into it. While the project of releasing the Mississippi from its bondage goes far beyond the means (and arguably the welfare) of the city of St. Louis, there are 3 separate tributary streams that enter the Mississippi within the city limits. Two of these tributaries – Maline Creek and the River des Peres – bound the city to the north and south. Both streams are heavily urbanized, confined to concrete chutes, buried underground and fed by municipal storm sewers. In an extreme example of historicist ecology, a simulated 'natural' River des Peres even meanders through Forest Park, fed by municipal drinking water, while the real river flows in sewers beneath it! These urbanized tributaries are emblematic of the lost natural typologies that once characterized the Mississippi landscape: vast tall-grass prairies, oak savannahs, bald cypress swamps, shifting islands, bayous and forgotten channels. St. Louis is situated in a unique cultural and ecological location on the Mississippi: not only does St. Louis mark the beginning of the mythical 'west'; it is also at a key junction between north and south. The confluence between Missouri and Mississippi rivers, just north of the city, marks the separation between the Upper and Lower Mississippi. Historically this was as far north as barge 'tows' (groups of barges) from the gulf could go, and formed the raison d'être for St. Louis. Just south of the confluence, in the great sweeping curve of the river known as 'Sawyers Bend', lies the Chain of Rocks, the southernmost rocky cataract in the river. The Chain of Rocks is the expression of the limestone bedrock that underlies the whole St. Louis area, pocked with karst formations and caves. The US Army Corps of Engineers built the Chain of Rocks Lock bypassing the rapids in the 1940's, finally allowing barges access to the upper river. As the commercial shipping lanes passed to the east of Mosenthein, Chouteau and Gabaret islands, the river channel itself has been left in its natural state, and provides important bird habitat along the major migration routes to the Gulf.

Our investigations had yielded a plethora of natural and synthetic landscape typologies with which to work. But the territory was vast, and the question of how, why, and where we would propose interventions still begged many questions.

Urban Renewal

In love with the tabula rasa, architects are the perfect moderns, the perfect believers in purification and obsolescence of successively immanent ideas. Whether the deletion of ruthless moderns or the "healing" and "stitching" of their descendants who profess to be more gentle, the tabula rasa is a seizure or conquest usually accompanying utopia. It is a weapon of delusional superiority in aesthetic generational wars.

9. 15 Barge tow

10. 15 Barge tow

11. Pruit Igoe

More important, the tabula rasa is the weapon of patient urban magistrates whose masquerades of cleansing and purifying diseased fabric often disenfranchise entire populations. The subtractions of planning may be no less violent or deliberate than the subtractions of warfare. Marshall Berman... has called these subtractions 'urbicide'. Demolishing areas deemed to be blighted is a long - standing municipal practice used to revalue property or recalibrate parcels. Shifting political climates may also delete ownership, value, or physical property with a slight change of laws or master plans. Although it may hide within the folds of legalities, this covert destruction may be as devastating as wars or natural disasters… Accumulation or accretion generally signals growth, and subtraction generally signals loss, but in active urban organizations every building construction is a subtraction or replacement. Subtraction is not simply absence or presence, but a trace in a set of exchanges and advances, aggressions and attritions. The extreme ecologies of development make of deletion a recognizable building activity - even a global industry.

Keller Easterling, *Enduring Innocence*, 162

When facing such a massive, ecologically and culturally complex, politically charged territory, traditional strategies of urbanism fall apart. This territory spans multiple political bureaucracies, contains diverse user groups with oppositional interests, is bordered by ethnically and economically diverse communities, has different degrees of natural / ecological potential, and is largely occupied by active heavy industry or abandoned brownfield sites. Given its history, St. Louis is perhaps particularly sensitive to large-scale razing of historic districts to make way for new development. It was here in 1947 that a low-income black neighborhood, DeSoto-Carr, just to the north of downtown, was demolished to make way for the brave new world that was to be the Pruit-Igoe housing projects. The city has many stakeholders, including industries, communities, historic districts, and business groups. Just as there is an oppositional relationship between the Mississippi's value as a transportation corridor and it's health as a natural ecosystem, these stakeholders seldom share unified interests. The political situation reflects this: municipal control is divided amongst 28 wards, each retaining a large degree of autonomy relative to each other, and the city is further polarized by multiple governing bodies at the county, senatorial and even state level (East St. Louis is in Illinois). As **Misfit Stream** makes clear, these disparate bureaucracies make political consensus on contentious issues (such as the restoration of the River des Peres) impossible.

A metaphor for the political situation was manifested by the 'Riverfront Trail', a network of trails (privately managed by a company called Trailnet) connecting the historic districts of the city with park and wild lands near 'The Confluence', where the Missouri marries its flow to the Mississippi, 10 miles north of St. Louis. It was clear that the trail was still in its infancy, as vast stretches of it were nowhere near the riverfront. Furthermore, its agenda was clear: it connected the wealthy tourist district around LaClede's Landing with wealthy suburbs to the north of the city, but seemed to ignore the possibility of interfacing with derelict industrial land to the south, or impoverished East St. Louis. It raised the question: if there was to be a large-scale landscape project to remake the riverfront, which communities would be involved, and which would be left out?

Landscape urbanism proposals have proved attractive in similar situations. The idea that landscape design can affect the city is not a new one; indeed, landscape urbanists recall Frederick Law Olmsteads (the designer of New

York's Central Park) contention that urbanism can be activated, and is actually most efficiently and effectively activated, not '*through the construction of buildings [but] simply through the organization of horizontal surfaces*'. Waldheim, 37 Landscape, which throughout the modern period was relegated to the status of amenity, or as a '*moral and practical antidote to the corrosive environmental and social qualities of the modern city*' Corner, 25 – the city's 'other', is once again elevated by the realization that in New York, Central Park has actually driven the process of city creation.

The principle is that the processes of urbanization – capital accumulation, deregulation, globalization, environmental protection, and so on – are much more significant for the shaping of urban relationships than are the spatial forms of urbanism in and of themselves.
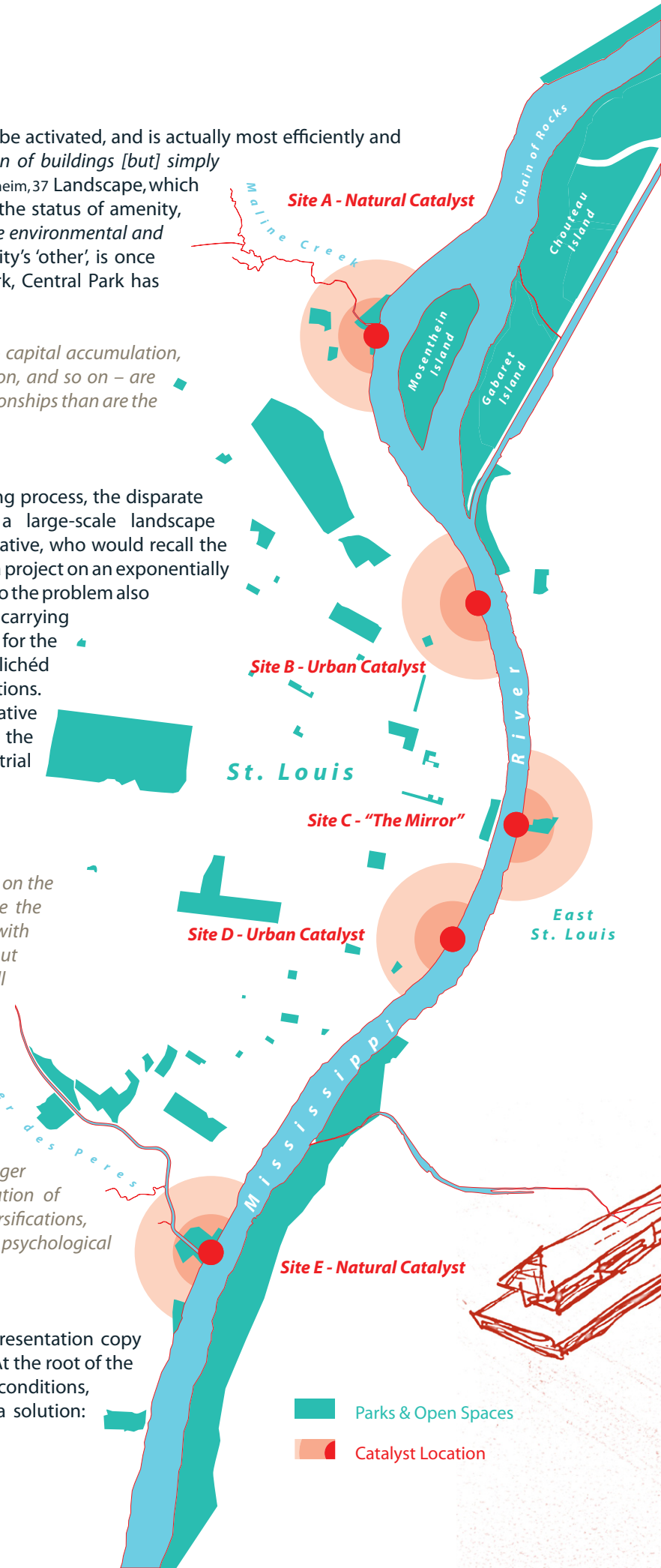James Corner, "Terra Fluxus", 28

However, as with a more traditional urban planning process, the disparate political situation seemed unlikely to make a large-scale landscape rehabilitation project very realistic to a St. Louis native, who would recall the ongoing debacle surrounding the River des Peres (a project on an exponentially more modest scale). A purely ecological approach to the problem also assumes that adjacent territories have sufficient carrying capacity to activate vast natural landscapes, which for the most part, they do not. This approach seemed a clichéd approach that ignores larger socio-economic questions. Furthermore, there was the question of the negative value judgment this approach might imply on the sublime, tragic character of the existing post-industrial landscapes.

Frameworks
If there is to be a "new urbanism" it will not be based on the twin fantasies of order and omnipotence; it will be the staging of uncertainty; it will no longer be concerned with the arrangement of more or less permanent objects but with the irrigation of territories with potential; it will no longer aim for stable configurations but for the creation of enabling fields that accommodate processes that refuse to be crystallized into definitive form; it will no longer be about meticulous definition, the imposition of limits, but about expanding notions, denying boundaries, not about separating and identifying entities, but about discovering unnamable hybrids; it will no longer be obsessed with the city but with the manipulation of infrastructure for endless intensifications and diversifications, shortcuts and redistributions – the reinvention of psychological space.
Rem Koolhaas, "What Ever Happened to Urbanism?", 962

The proposal is a strategic compromise; in the presentation copy we have labeled the strategy 'catalytic urbanism'. At the root of the proposal is a determination to avoid defining end conditions, but rather to stimulate possibilities. This is not a solution:

Site A - Natural Catalyst

Chain of Rocks

Chouteau Island

Maline Creek

Mosenthein Island

Gabaret Island

Site B - Urban Catalyst

River

St. Louis

Site C - "The Mirror"

East St. Louis

Site D - Urban Catalyst

River des Peres

Mississippi

Site E - Natural Catalyst

Parks & Open Spaces

Catalyst Location

It is one thing to come up with a great idea, but another entirely to bring it to fruition, as every architecture student knows.

We had no problem coming up with barge ideas: swimming pool, beach, restaurant, biergarten, nightclub, market, art gallery, museum, greenhouse, hotel... The difficult task was to determine where and why to locate certain amenities in certain locations.

We set to work documenting the neighborhoods of the city. What were they like? Who lived and worked in them? Where did people go for entertainment?

Our work was made much easier when we decided we simply did not have time to locate and document 15 different locations along the river... Instead, we would group the barges, in groups of 3 for most of the year. These groups of three would then be joined together once a year for the Fair St. Louis, the city's birthday party, to form a 15 barge 'tow' of St. Louis cultural attractions.

Each group of three would thus form a cohesive urban nucleus, with a consistent theme relating to the location.

the territory has a long road ahead, not to recovery but to reinvention, and the project is as concerned with destabilization as with defining boundaries. The proposal involves two simple classes of elements: urban elements and landscape elements; together, the group of elements form a kit of parts which are strategically deployed at specific locations. The landscape elements are global, while the urban elements are particularized to each unique site.

St. Louis was the 2nd largest port in the country in the 19th century; it is still one of the largest, moving vast quantities of bulk goods such as grain, metals, petroleum and chemicals on barges capable of carrying as much as 15 rail cars or 60 transport trucks at once. The barges are typically transported in 'tows' of 15 barges, strung together with steel cable and pulled by powerful tugboats, but are separated and moored in a linear configuration for loading / unloading. The urban elements at each location are a group of three barges, moored at existing barge docking facilities, part of the existing industrial infrastructure. Each group of three consists of two architecturally and programmatically distinct positives (built form barges) linked with a negative (public space barges) forming the quintessential urban nucleus. The groupings can be divided into three types, based on the three typologies of riverfront identified earlier: the '*natural catalysts*', the '*urban catalysts*', and '*the mirror*'. The landscape elements are a simple kit of parts: expansion of the riverfront trail network, establishing tributary deltas, and the retro-planting of existing levees with native biomes – tall grass prairie and oak savannah. Together these elements form an interconnected network on which the urban elements form nodes.

The two '*natural catalyst*' sites (barge groups A and E) are located at the mouth of heavily urbanized tributary streams. In each case, the tributary is re-naturalized with the installation of a synthetic 'delta', an area where the waterway is freed to overflow its banks once more in a broad wetland, slowing the flow of refuse into the Mississippi and effecting a cleansing of the unfiltered storm sewers. As these sites are both adjacent to relatively dispersed, suburban portions of the city, they are programmatically more self-contained than the other sites. They also function as gateways to the city along the riverfront trail, which has been reconfigured to follow the crest of the levees along the river north and south of the city. Group A is at the mouth of Maline Creek; the strategy at this location is educational programming, for not only is this a gateway to the city, it is a gateway out of the city to the Confluence lands and the Chain of Rocks, which form a huge area with natural potential for a new wilderness park. Group E, at the mouth of the River des Peres, takes a different approach to the site condition in the form of a natural retreat in a new urban wetland. The '*urban catalyst*' sites (barge groups B and D) interface with established urban cultural centres which subsume a critical mass capable of drawing and sustaining people at the riverfront. Group B is north of the arch, adjacent the varied terrain of the Near North Riverfront, a diverse neighborhood of warehouses and industrial facilities, many retrofitted with high-tech offices, condominiums, restaurants and music venues. Group D draws from the Soulard / Kosciusko district, which contains a famous outdoor market, beautifully restored Victorian houses, breweries and restaurants. Finally, '*the Mirror*' site (barge group C), directly adjacent to the arch on the East St. Louis bank, is conceived of as a playground for the downtown core, which would begin the process of activating the Illinois bank of the river. In this case, an excess of people is drawn
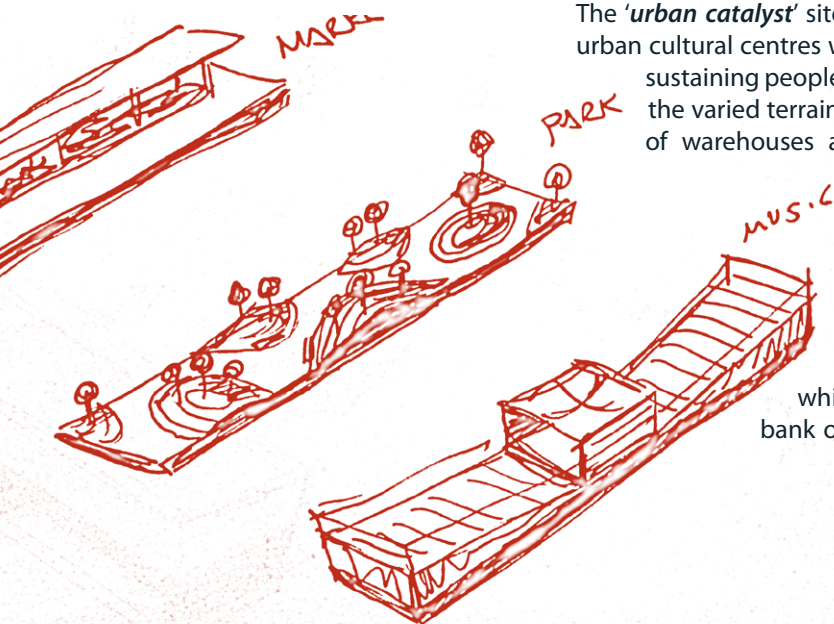
from the heavily visited tourist district around the arch and LaClede's Landing, as well as St. Louis natives in the urban centre.

But these nuclei, like the river, are temporal themselves. The idea of the barge as a moving urban artifact is further reinforced when all 15 barges group together to form an armada for the Fair St. Louis on the July 4th weekend, when the fleet relocates underneath the gateway arch. This aspect could be further explored by deploying the armada on a '*sawyeresque*' journey down the Mississippi, as a vessel of St. Louis culture.

Conclusion

The proposal is seductive for its simplicity. As an urban proposition it relies upon a very modest group of interventions, which have been implemented to invoke possibilities in the terrain with which they interact. The project was conceived of with the theories of emergent architecture in mind, where work on the city takes the form of stimulated evolution, rather than controlled hierarchies. This mode of urbanism was coherently formulated by Wayne Attoe and Donn Logan in their book ***American Urban Architecture: Catalysts in the Design of Cities***:

Catalytic theory does not prescribe a single mechanism of implementation, a final form, or a preferred visual character for all urban areas. Rather, it prescribes an essential feature for urban developments: the power to kindle other action. The focus is the interaction of new and existing elements and their impact on future urban form, not the approximation of a preordained physical ideal.
Wayne Attoe & Donn Logan, American Urban Architecture, 48

The work of Teddy Cruz provides an example: simple architectonic elements produce remarkable urban and social effects when implemented *en masse*.   His **Manufactured Sites** project is exemplary of a catalytic strategy, where a vernacular tendency from a specific location (home businesses in Tijuana) is co-opted to create a mass-produced architectonic form which challenges discriminating zoning practices in San Diego amongst a disenfranchised latino population. No preordained physical ideal is proposed: the architect has designed a modular element which has urban and social implications in its implementation, but its actual utilization is limited only by the imagination of the user. Like Cruz, we have relied upon the imagination of the viewer of the project, which is stimulated to visualize the trickle-down implications of the proposal.

But the question that remains is: what effect would this strategy of urbanism really have? The **Manufactured Sites** project, like ours, is a theoretical proposition, untested in a real urban condition. A more important measure is found in another Cruz project, **Casa Familiar**, in San Ysidro, California. A component of that project is the development of a community-scale set of development policies. '*This Affordable Housing Overlay Zone (AHOZ) micro-policy proposes that community-based non-profit organizations such as Casa Familiar can become mediating agencies between the municipality and the neighborhood, facilitating knowledge, policy, and micro-credits. In essence, these agencies incrementally will become informal City Halls, managing and supporting the shifting of socio-cultural demographics within many of these inner-city neighborhoods.*' Estudio Teddy Cruz Website Our proposal highlights the fact

Epilogue

After 11 solid days of work, with little sleep for the final week, a flu for both partners, several sick days from work, a few screaming matches and threats to give up, not to mention an all night printing session, the project was finished. We sent it off by courier to St. Louis on the friday before the Sunday deadline (a sure way to give the locals a home court advantage in our opinion). We were finished too - I didn't want to hear or think about barges ever again.

In the end, we were happy with the project; we both felt it was some of the best work we had pulled off under such a short time frame and with limited information. We had learned alot about working together, about how to go about doing competitions, about letting go of the little things, and about the city of St. Louis itself. All said and done, we were both intrigued by the city, and were curious to see the results of the competition. In the wee hours of the night, as we were waiting for our panels to inch out of the printer, we spent about an hour writing our travel proposal (another requirement of the competition). We would begin in Moscow, and then travel through the Eastern Bloc, studying the effects of the emergence from communism on the local architecture.

Of course, neither of us thought we had a chance. We sort of jokingly told each other we would win for sure - we had it in the bag! But surely some entrants would have been working for months on this, applying both a greater knowledge of the city and a superior talent for competitions. After all, the $30,000 prize was one of the largest offered in North America on a regular basis...

So it was with an astonished wild-eyed bemusement that we simultaneously and independently checked the website and found we had won!

Next stop, eastern Europe.

that massive policy changes would be neccessary to bring meaningful change to the neighborhoods that border the St. Louis and East St. Louis riverfronts. The competition brief illustrates the disparity of focus: the maps and information provided in the initial package are concerned with those portions of the riverfront traditionally understood to be viable for redevelopment. We deliberately placed our barges in locations that would open up a dialogue about the scope, connectivity and inclusiveness of the urban riverfront. Each of these locations would require community stewardship, in addition to development investment and policy changes, to spur interest in developing a broader vision for the St. Louis riverfront than simply a 'tourist promenade' for the downtown core. We hoped that by providing an unexpected vision of an expanded scope to the competition that we could foster discussion about such issues.

In conclusion, the project is deceptively simple; we have tried to embed an expansive agenda in a simple set of actions. We would be the first to question the viability of such a '*catalytic*' approach; our strong desire to avoid both nostalgia and cliché led us to abandon an urbanist approach altogether. In not proposing something antithetical to our researched conclusions, we have illustrated but avoided answering the more difficult questions. The implementation of such a proposal could easily be co-opted to catalyze the very model of nostalgic tourist urbanism we were initially motivated to avoid; our urban armada could be the centrepiece of a vast casino / hotel riverfront extravaganza just as easily as it could be a celebration of the post-industrial *disabitato*. But maybe that is ok. As much as we would like to imagine the luminous and surreal juxtapositions portrayed on our competition panels, we would have to simultaneously acknowledge our own selfish motivations for believing them possible. While we would wish to advocate for an inclusive and community-willed initiative for the waterfront, the truth is that we are in no position to know what form that might take, or even what kind of strategy might lead in that direction. Rather, it was our hope that what the project would catalyze is astonishment - astonishment that such landscapes already exist in this territory, and astonishment at how easy it might be to inhabit them. We would hope to be amazed and not disheartened by the results.

*In conclusion, I would simply repeat that fantasies about the fragmentation of urban structure play a structural role in collective life. It is not that collective life is threatened by fragmentation; it is rather that collective life can only be **conceived of** in terms of fragmentation. Fragmentation is neither a negative nor a positive term. The risk lies not with fragmentation but with the fantasy of stable form. Violence in the sense of overt or covert exclusion is a structural principle institutionalized by the simple drawing of lines and we need to challenge the seeming innocence of such lines in order to understand architecture's more brutal effects. But to make such a challenge, contemporary scholars and writers need to acknowledge the pleasure, even sadistic pleasure, they take in the very systems they criticize - in both their personal and intellectual lives. The all too comfortable critics who weep about the city have to acknowledge, embarrassing as it may be, the extent to which they are successfully able to place themselves outside the threats they point to, and the key role this kind of withdrawal plays in the violence they denounce. To resist our usual nostalgic narratives we have to face the embarrassing pleasure we take in the contemporary world. A simple awkward acknowledgement of our own compicitous pleasure is absolutely neccessary as a precondition for any form of political activism...*
Mark Wigley, 'Bloodstained Architecture', 294.
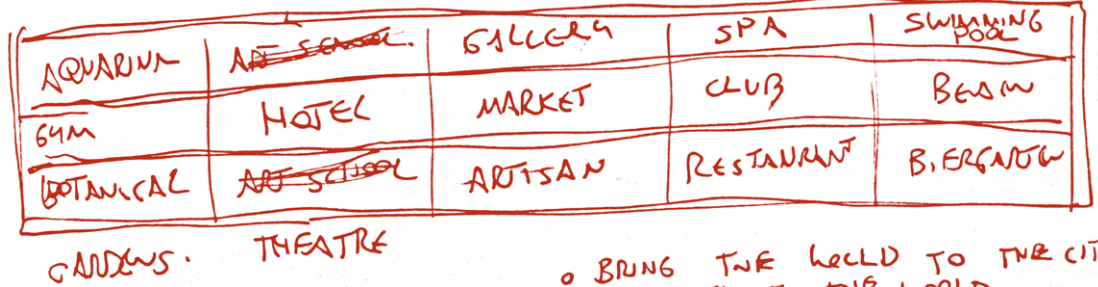
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