

**Bridging**

**the**

**Gap**



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2016 marked the year of the Chicago River with an unprecedented focus on how accessible, clean, public waterways benefit public health and urban livability. With the international conference, Urban Waterways Forum, and proactive city initiatives such as Our Great Rivers and The Chicago River Trail Action, the theme was widely addressed.

The following research project studies such large-scale urban tendencies, while readdressing them on a human scale, seeking to better understand how well designed urban spaces stimulate urban life. Taking a playground as an example of how a moderate piece of architecture alters a great deal in the perception of a kid, the project also is an investigation on 'playful architecture'.

The project proposes a redesign of a specific site in the city – the north tip of Goose Island – imagining a space of curiosity that will speak to the kid in all of us while bringing attention and awareness to the greater city scheme – transforming the river into a corridor of transportation, recreation and sustainability.

*The points stressed most strongly here are that an expertise in urban design can only be developed by:*

- (1) studying historic precedents and the way in which modern space has evolved;*
- (2) developing an understanding of the underlying theories of urban spatial design; and*
- (3) developing skills in synthesizing and applying these in the design process.<sup>1</sup>*

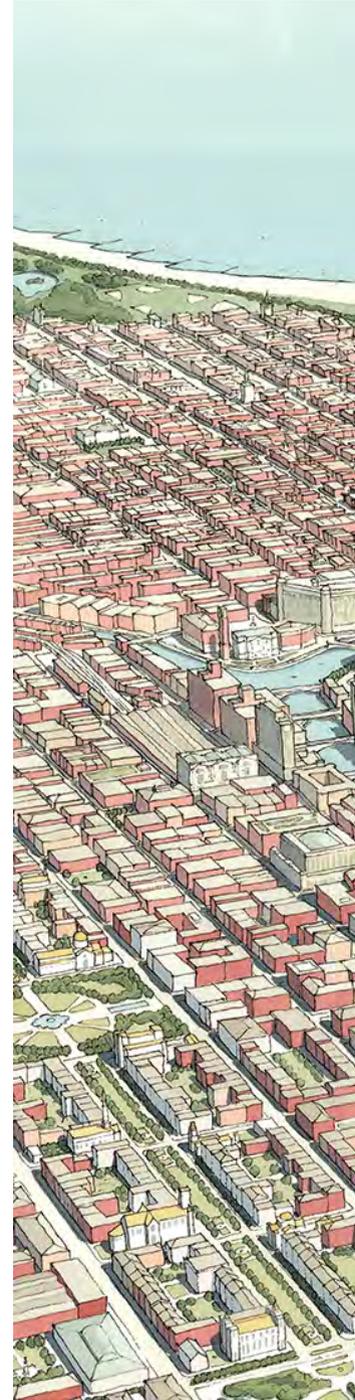
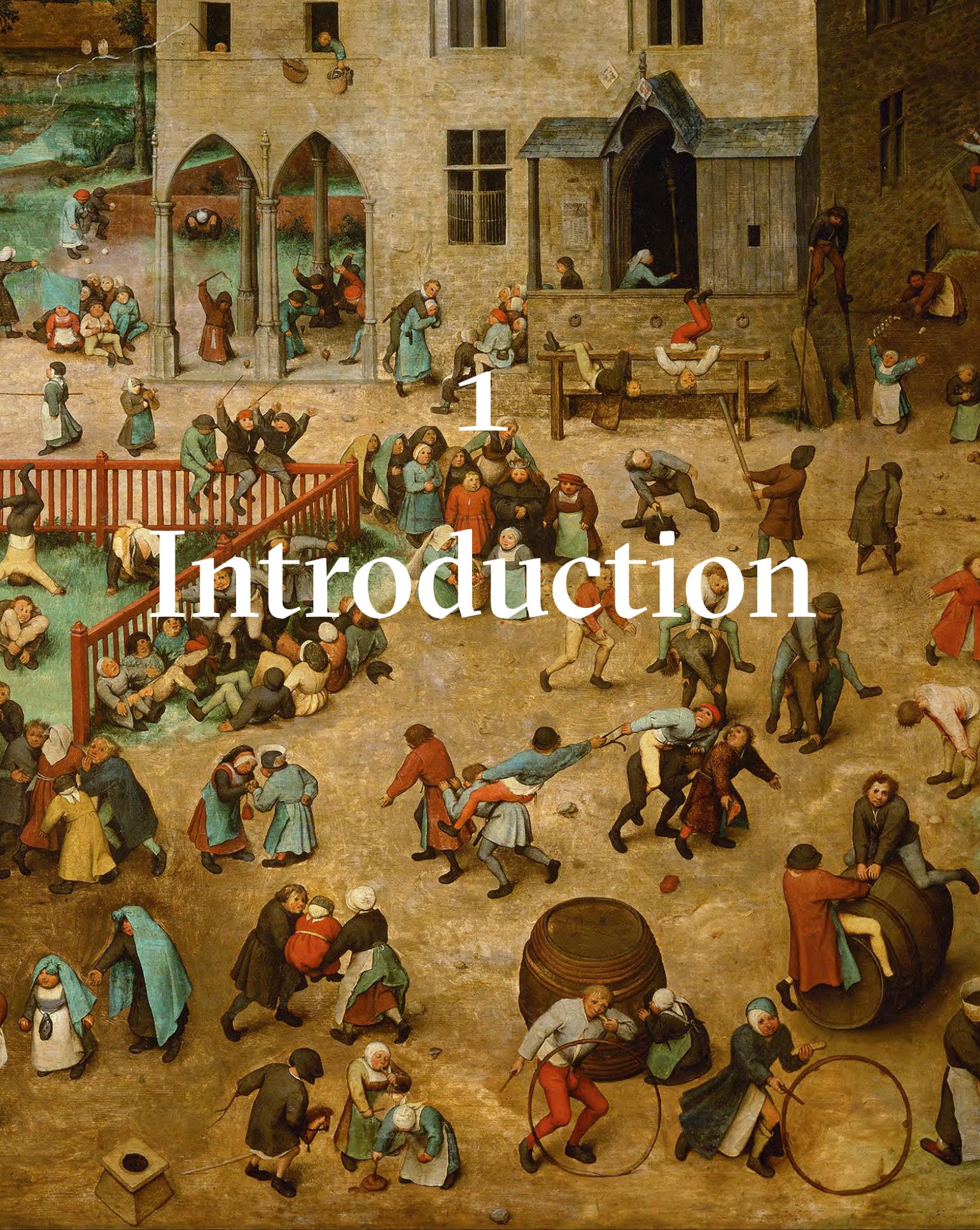


Fig. 0.1.

The Notre Dame Graduate Design Studio. "The Notre Dame Plan of Chicago 2109". 2009. Accessed July 28 2017. In *The Loop L*, the Catholic School of Architecture reimagines the city of Chicago by 2109.

1. Trancik, Roger. *What is Lost Space? Finding Lost Space: Theories of Urban Design*. New York: Van Nostrand Reinhold, 1986. Print.





1

# Introduction



*All grown-ups were once children...  
but only few of them remember it.*<sup>2</sup>

The research project and this booklet as part of such is meant as a means rather than an end, a toolset to be used, played with and reused again. Born out of a personal interest in urban design and the social and sensory activation implied, it aspires to inspire others that may stumble upon it, much like the theory concepts discussed and the design ideas proposed in this booklet.

Likewise, although much of its content is set in Chicago, it is merely an attempt to capture and understand a modern trend in architecture and urban planning that is not bound to a specific place but requires one to be exemplified.

Such an example is found on Goose Island, the only island on the Chicago River, and a place that is only about to become the next big site of development in the city. A fact that has not materialized too evident as of yet, but which still can be sensed visiting the place.

On the northernmost tip of the island runs a newly instated small strip, barely 200 yards, of riverfront trail - a patch of breathing space in the city - that terminates there just as unexpected as it started.

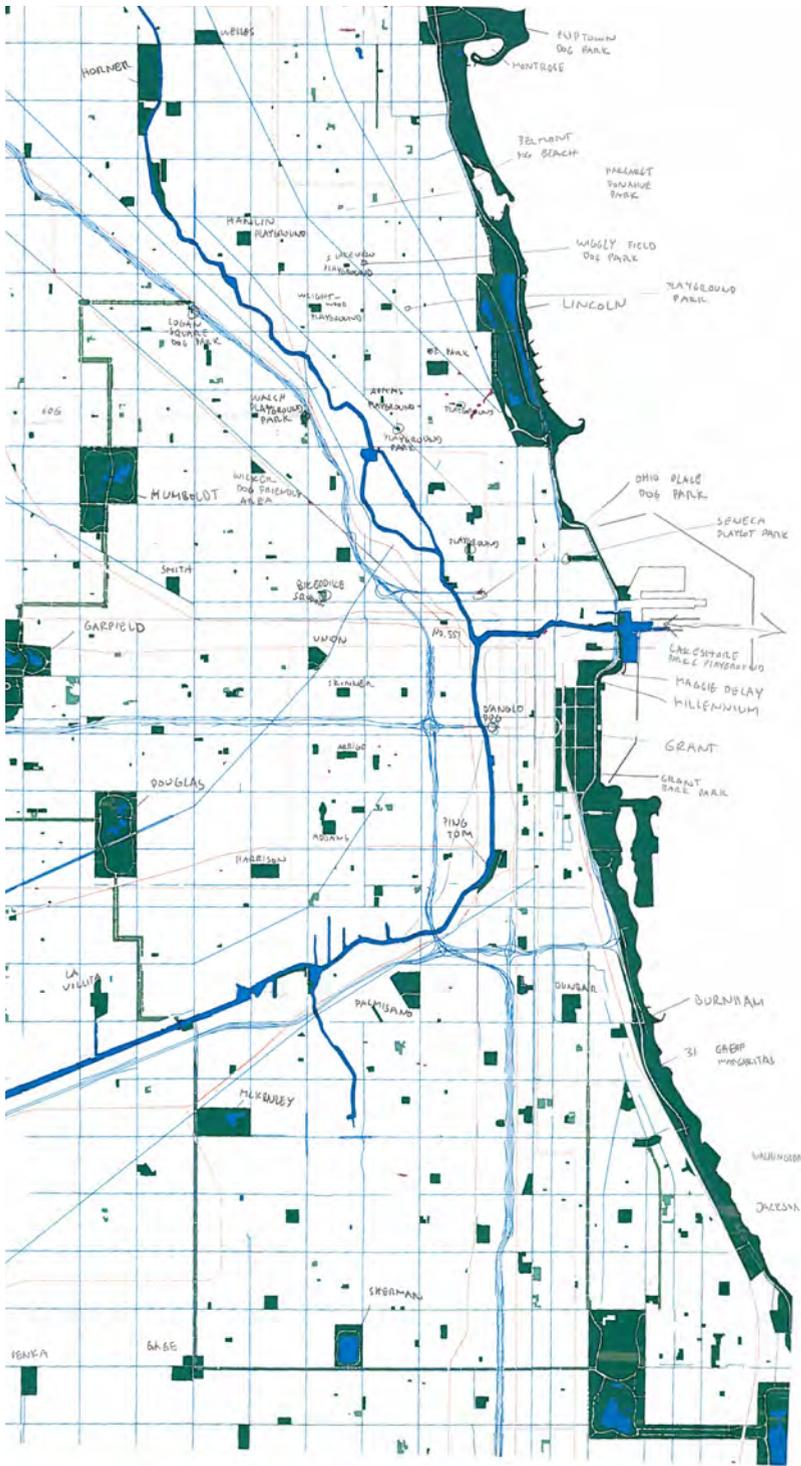
And as you are running out of walkway, the mind starts to wander - a point of departure for this research project.

Fig. 1.1.

Bruegel the Elder, Pieter. *Children's Games*. 1560. Kunsthistorisches Museum, Vienna.

This Belgian painting depicts more than 230 adults occupied with 83 different children games of the time. Earlier interpretations included how we are all children in the eyes of God, however modern scholars think this may simply be an encyclopaedic view of pastimes of the day.

2. Saint-Exupéry, Antoine De. *The Little Prince*. 1943. Print.



*Unpredictability is what makes cities places where we can spend hours looking at other people, and unpredictability is what makes it so difficult to quite capture the city's wonderfully variable daily rhythm.*<sup>3</sup>

As inhabitants of the city our habitual nature makes us prone exposing ourselves merely to a limited diversity of urban spaces. Once we find a place in which we feel comfortable and intrigued that is our go-to in the future. And as time goes by, we easily forget the thrill and joy of which it is to discover - or more accurately, to rediscover - the city we populate.

*What puzzles me is why these people who look up remote parts of the world to explore don't stay at home and explore their own backyard. There's as much to be seen in your own neighborhood or city as in Timbuctoo or Bangkok. It's all in your point of view.*<sup>4</sup>

In my research I have come across various urban spaces throughout Chicago, both on and off the beaten track. And along the (green)way, I have found that the pedestrian/bike friendly infrastructure in the area, or the lack thereof, often is a determining factor of the liveliness of an urban space, at times even more so than the outlay of the urban space itself.



Fig. 1.2.  
*Map of visited sites of interest in Chicago.* Personal Sketch.

Fig. 1.3.  
b/w picture of a New York alleyway with a shade of curiosity.  
Unknown photographer

3. Gehl, Jan, and Birgitte Svarre. *How to Study Public Life*. Washington, DC: Island, 2013. Print.

4. Drury, John. "The Great Goose Island Expedition." *The Chicago Daily News*. 1930. Accessed July 28 2017

5. Hillier, Bill. *Cities as movement economies*. 1996. Print

*Natural movement is the proportion of movement on each line that is determined by the structure of the urban grid itself rather than by the presence of specific attractors or magnets. This is not initially obvious, but on reflection does seem natural.*<sup>5</sup>

Although not solely actuated by the circumstance, being in close proximity and within reach from other sites of interest is evidently beneficial to the popularity and the flux of people to one site alone. However, easily accessible urban spaces end up being just another walkthrough if they are not inviting, offering passersby something in exchange for their attention.





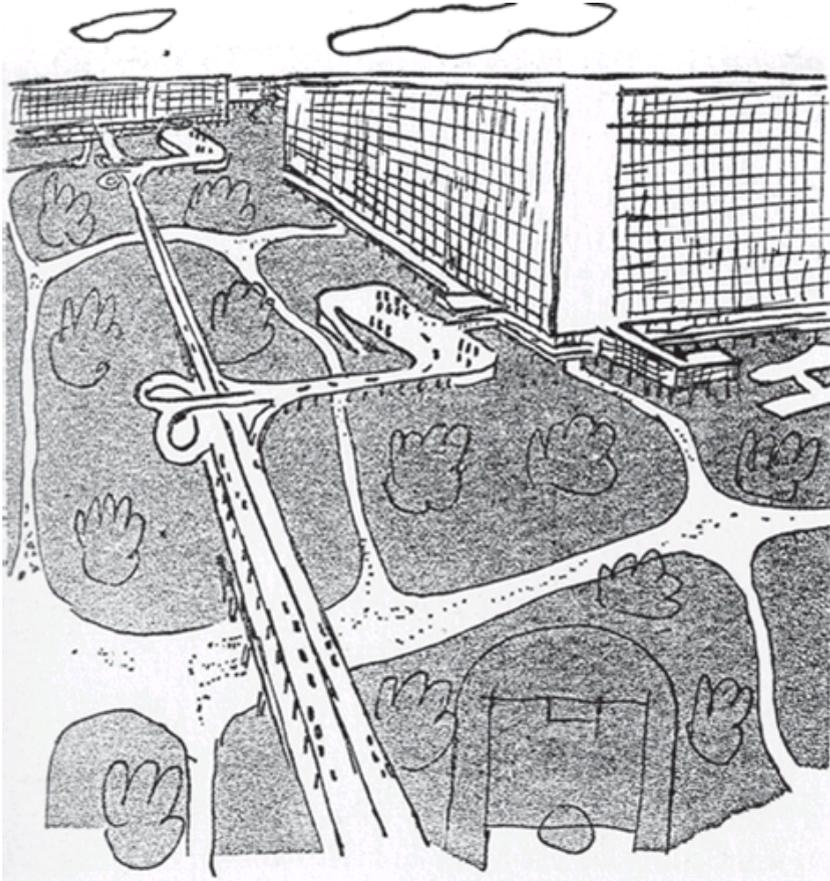
Fig. 1.4.  
Personal photograph of the north tip of Goose Island, wintertime 2017

It takes people to make a space; people need to be there to enjoy the space, to wander and experience its premises, to play in and with its environment and interact with other people absorbed in the same process. Clearly, a space has to be 'good' and amusing in order for people to want to do so, but for such activity to take place at all, people need a way to get there.

Thus, a good urban space is always multi-faced, and the premise of this research project is that in order to understand what makes up an intriguing urban space in the first place, the implications and circumstances of such must simultaneously be studied and applied.

*Decisions about growth patterns are made from two-dimensional land-use plans, without considering the three-dimensional relationships between buildings and spaces and without a real understanding of human behavior. In this all too common process, urban space is seldom even thought of as an exterior volume with properties of shape and scale and with connections to other spaces. Therefore what emerges in most environmental settings today is unshaped anti-space.<sup>6</sup>*

6. Trancik, Roger. *Finding Lost Space: Theories of Urban Design*. New York: Van Nostrand Reinhold, 1986. Print.



At the time of writing, big plans are in the making for The Chicago River and its adjacent banks. Historically used for predominantly industrial purposes like infrastructure and waste dump, its future looks a lot different. Grand visions have been laid out such as swimmable waters, wetland parks and a contentious riverfront trail.

Recently, the city council agreed on the 'North Branch Industrial Corridor Modernization Plan'. That is to say, some politicians of the north branch of the river argued the plan compromised too much, favoring the developers and less so the occupants. As many of the other aldermen, Tom Tunney (44th ward), disagreed on the space put aside for recreation, saying that people are '*simply out of places to play*' in the area: *We often say, 'It can happen. Open space can happen. Infrastructure improvements can happen.'* How do we make that '*can*' a reality? <sup>7</sup>



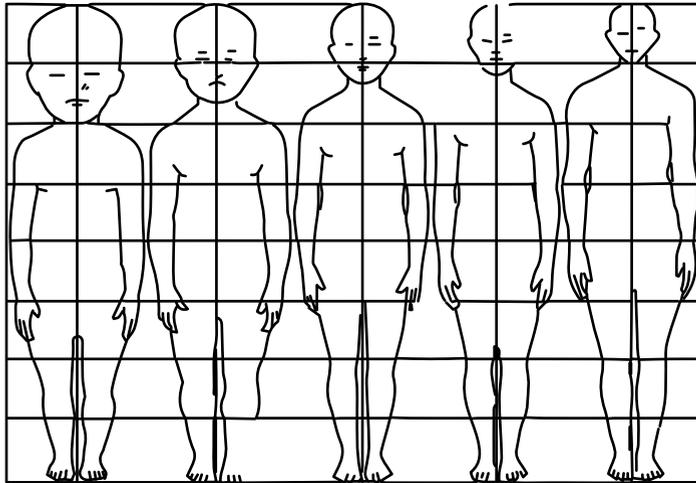
Fig. 1.5.

A sketch by Le Corbusier from *La Maison des Hommes*, 1942 captioned: *100% of the ground is given over to pedestrians. Cars roll along their motor roads 16 feet / 5m above the ground. The impossible has become possible: seperation of the pedestrian from the automobile has been accomplished.*

Fig. 1.6.

*Operating Architects*, Derek Bacon.

7. Spielman, Fran. "Plan Commission Approves North Branch Guidelines." *Chicago Sun-Times*. 18 May 2017. Web. Accessed 28 July 2017.



The following research project studies, deals with, and attempts to answer this simple yet intricate question. However, bringing the great urban visions and the unplanned living reality of our cities closer together is an intricate matter. Since the implications themselves are often too complex in time and scope for any one study to comprehend, the project, like any good business model, attempts to spread its assets to a broader spectrum, placing itself in the transitional phase of one good idea and the next.

Bearing social trends in mind, the project proposes a redesign of an existing unused urban space along the river, redefining a playful environment in which people play the leading roles. In the end, it is people, and not designers, that define the urbanscapes.

*By shaping the built environment, urban designers influence – inhibit, facilitate, precipitate and modify, but do not determine – patterns of human activity and, therefore, of social life.*<sup>8</sup>

Urbanscapes need to be interesting to stimulate people to go there; and need to be interconnected to enable people to do so; but need people to be interesting at all.





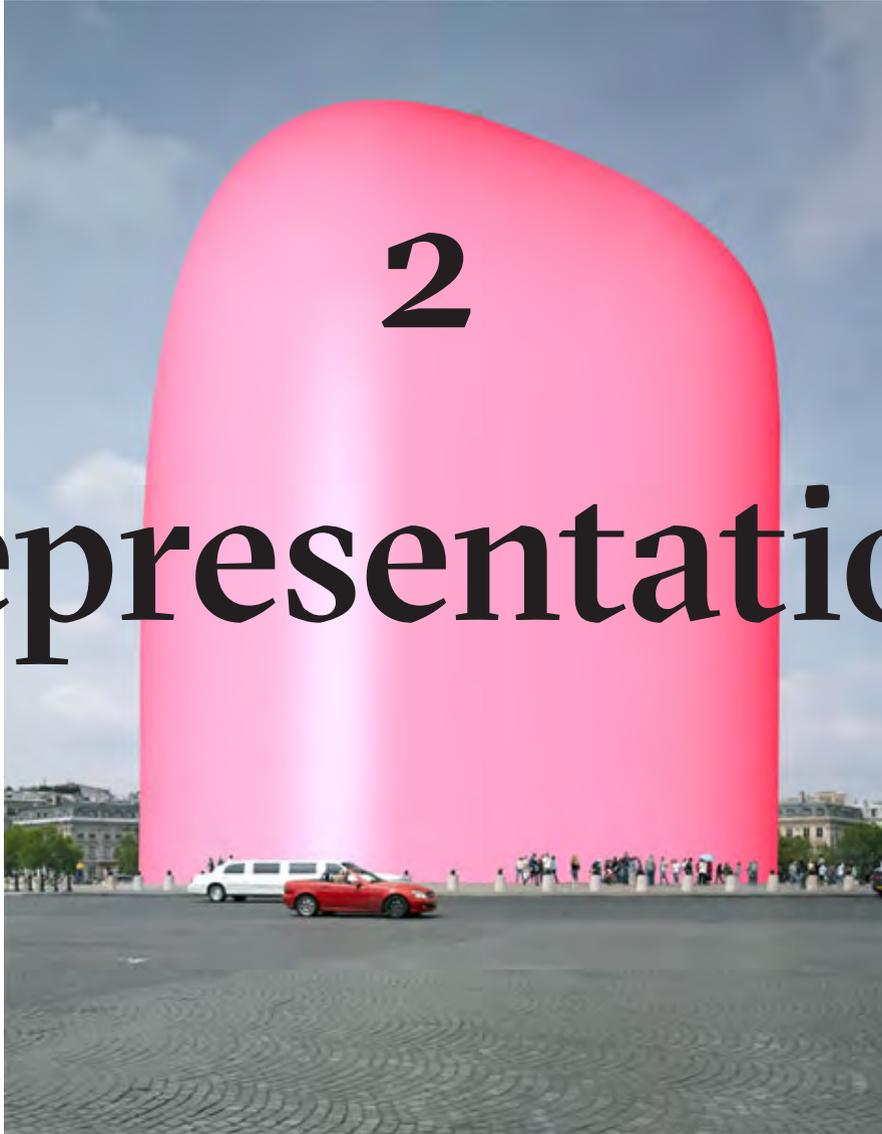
Fig. 1.7.  
Neoteny, the retention of juvenile features in adults. Personal sketch

Fig. 1.8.  
Boy looking, man cleaning.  
Personal photograph, New York 2017

8. Carmona, Matthew and Tiesdell, Steve. *Urban Design Reader*, 2007.  
Print.

2

# Representation



*There is no logic that can be superimposed on the city; people make it, and it is to them, not buildings, that we must fit our plans.*<sup>9</sup>

What Jane Jacobs called 'connective strength' in the city is that of a mosaic character, where residential, recreational and commercial entities are mixed and intertwined instead of divided into different blocks and sectors. Connective strength is exactly what good outdoor spaces possess, a meeting place of amenities in the public realm that invites and attracts strangers to the same spot.

'Urban open spaces' are communal places where residents interact with their everyday communities - places where people gather, where markets are held. As the Danish saying goes, 'dear child has many names', and urban open spaces have always played a great civic role - like the 'agora' in Greece, the 'forum' in Rome and the 'piazza' in Italy, the latter deriving from the Latin 'platea', which refers not only to open spaces but also to the streets themselves. The streets were exactly what Jane Jacobs stressed as being the core of city life. If the streets work the city does too - if not, the city flaws.

Fig. 2.1.  
Brodbeck, Mauren. *Extracoated*. 2008. Artwork.

9. Jacobs, Jane. *The Death and Life of Great American Cities*. Pelican Books., 1961. Print.

Civic and social centers in the city are designed to be exactly that on prominent locations around the city, a fact that make them spring to mind when thinking of urban outdoor spaces. However, the majority of such spaces are neither designed nor intended to be of public use.

*In common parlance, public space is associated with parks, playgrounds, or systems of open space that are obviously in the public realm. But not all open spaces are in the public realm, and for that matter not all public spaces may be open, in the sense of being either alfresco or accessible and free.*<sup>10</sup>

While a lot of places are not designed at all but flourish even so, the vast majority are neither designed nor interesting but merely a leftover of space in between the buildings. A rare few, however, are successfully designed to be centers of attention and interest.

Chicago's elevated greenway, The 606, which opened to the public in 2015 is a perfect example of how a change in the open urban landscape in some cases far surpasses the hopes and dreams of public activity as a conceptualized project meets the practicalities of the built environment.

Not reserved for the 80,000 people that live within a 10 minute walking distance, the pedestrian way has become a highly attractive amenity that may sometimes, if possible, prove too popular for its own good as it accommodates a variety of users – like commuter, strollers, racing bikers, runners, sightseers, etc. – with a variety of requirements.

The American architect, William 'Holly' Whyte, argues that plazas in downtown areas "*are not ideal places for striking up acquaintances, and even on the most sociable of them, there is not much mingling*". Yet Whyte notes that such 'triangulation' sometimes occur on plazas as well as anywhere in the public realm under the right circumstances. "*Triangulation is the process by which some stimulus provides a linkage between people and prompts strangers to talk to other strangers as if they knew each other*".<sup>11</sup>

10. Banerjee, Tridib. *The future of public space: beyond invented streets and reinvented places*. 2001. Print.

11. Whyte, William H. *The Social Life of Small Urban Places*. Project for Public Spaces. New York. 1980. Print.

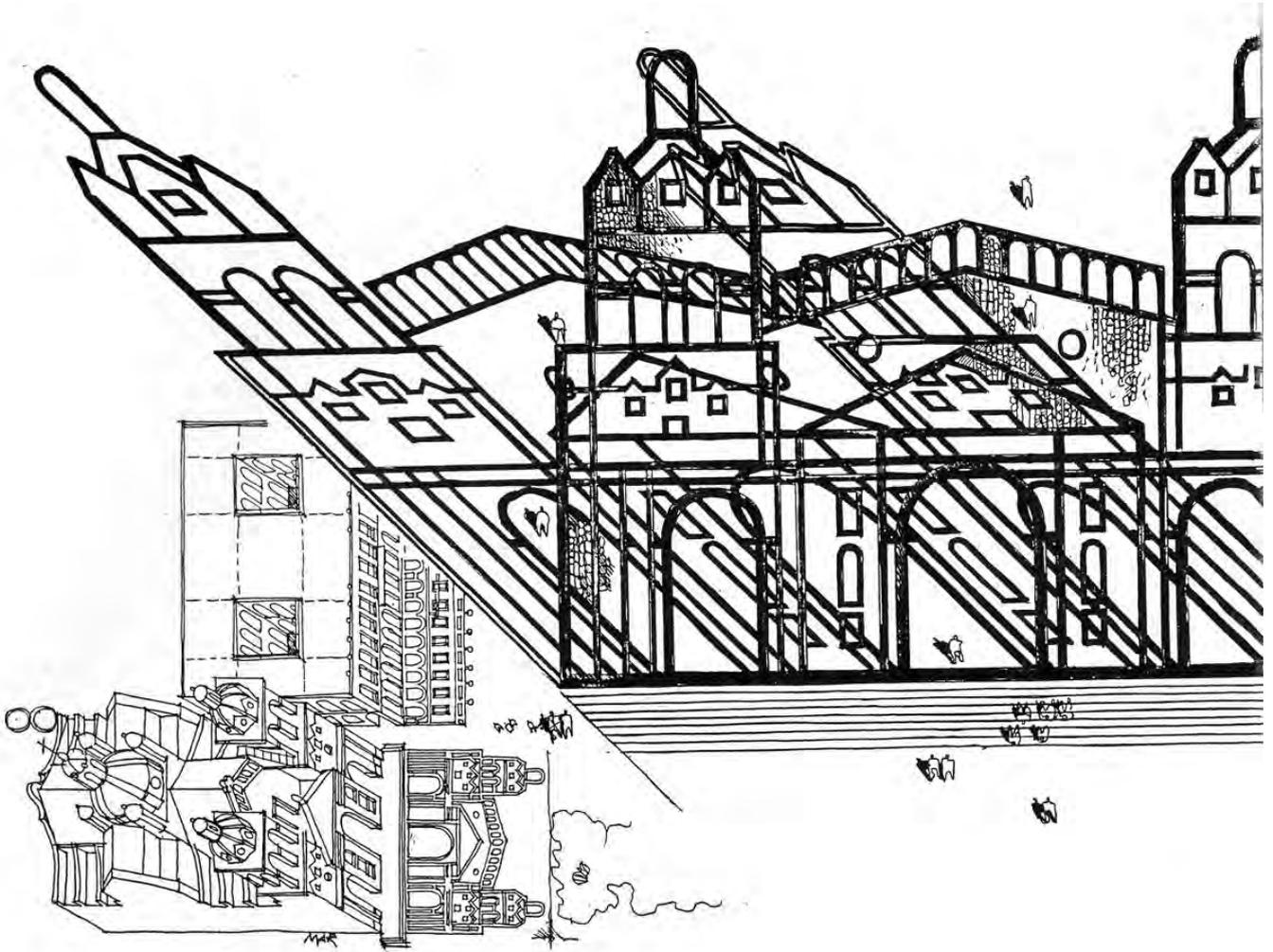


Fig. 2.2.  
Original drawing of Plaza de Armas,  
Miguel Angel Roca. 1980



Fig. 2.3.  
Photograph of Plaza de Armas, 1980

Fig. 2.4.

*View of The 606 from Ridgeway Observatory*

Dates: 2015

Landscape Architect: Michael van Valkenburgh

Project Location: Western Trailhead, Bloomingdale Trail, Chicago

Description: Photograph



On the very western end of The 606 lies a small hill. Along its periphery runs a narrow path that leads people to the top in an ascending spiral. As you ascend, you see a pile of dirt that has been laid out in the very center of the spiral forming 3 quarters of a circle. Three straight lines of concrete blocks cut through the pile with the words 'equinox', 'summer' and 'winter solstice' that meet in the very center. As you stand there, gazing out into the horizon wondering how this modern Stonehenge works, you soon realize you are not the only one. People that have also just come across this odd installation for the first time stand around with puzzled expressions on their faces.

And soon the silence between strangers is broken by the exchange of theories on how the darn thing works. It is obviously some sort of solar clock but whether it is the shadows cast on the ground or the sun's position in the sky is somewhat of a mystery since no more information is provided. So strangers soon become acquainted, if not on a personal level then on how to understand and solve this common spatial mystery.

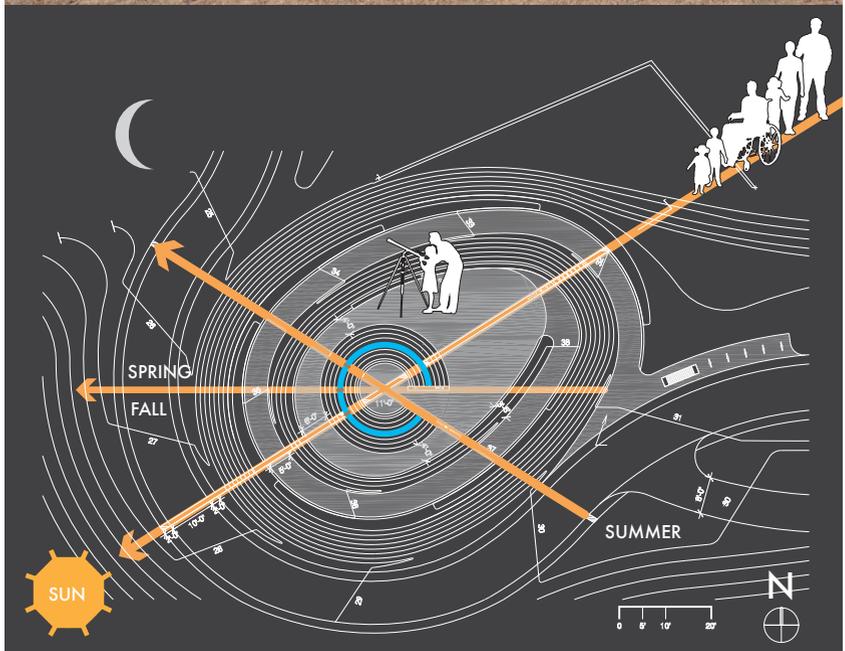


Fig. 2.5. Kid running up the observatory. Personal photograph.

Fig. 2.6. Original plan drawing of The 606 Western Trailhead and Ridgeway Observatory

Fig. 2.7.

*The Rope Show*

Architect: UNO

Dates: 2015

Location: Carlsbergbyen, Copenhagen

Description: A pavillon encapsulates an atmosphere of possibilities in a jungle of of 3300 hanging ropes



Fig. 2.8.

*Vær i Vejret (Stay in Weather)*

Architect: Olafur Eliasson's

Dates: 2016

Location: Museum of Ordrupgaard, Denmark

Description: The simple installation sparks interaction by the mere sculptural beauty and natural sensation of mist



*Challenge and mastery are qualities that stimulate interest and use and are human needs that explain much of the use of public places. Yet most of the time this need is not acknowledged as sites are designed to minimize dangers and reduce the risks of liability of the space managers. People need to be able to test themselves, intellectually and physically, or they lose interest. These opportunities are especially critical to children because they are the foundation of the development of their cognitive abilities and their sense of competence <sup>12</sup>*

A playground, by definition, has two meanings – one with and one without boundaries. The one aspect we often link with children is also linked to the physical place that encapsulates the recreational area. The other is merely a place where people choose to enjoy themselves. It is a ground for play that exceeds its physical namesake as the play finds higher ground.

Fig. 2.9.

*Labyrinth*

Architect: Gijs Van Vaerenbergh Architects

Dates: 2015

Location: Art Centre C-mine, Genk, Belgium

Description: 1 kilometre of walls reinterpreting the traditional Labyrinth focusing on the experience of space

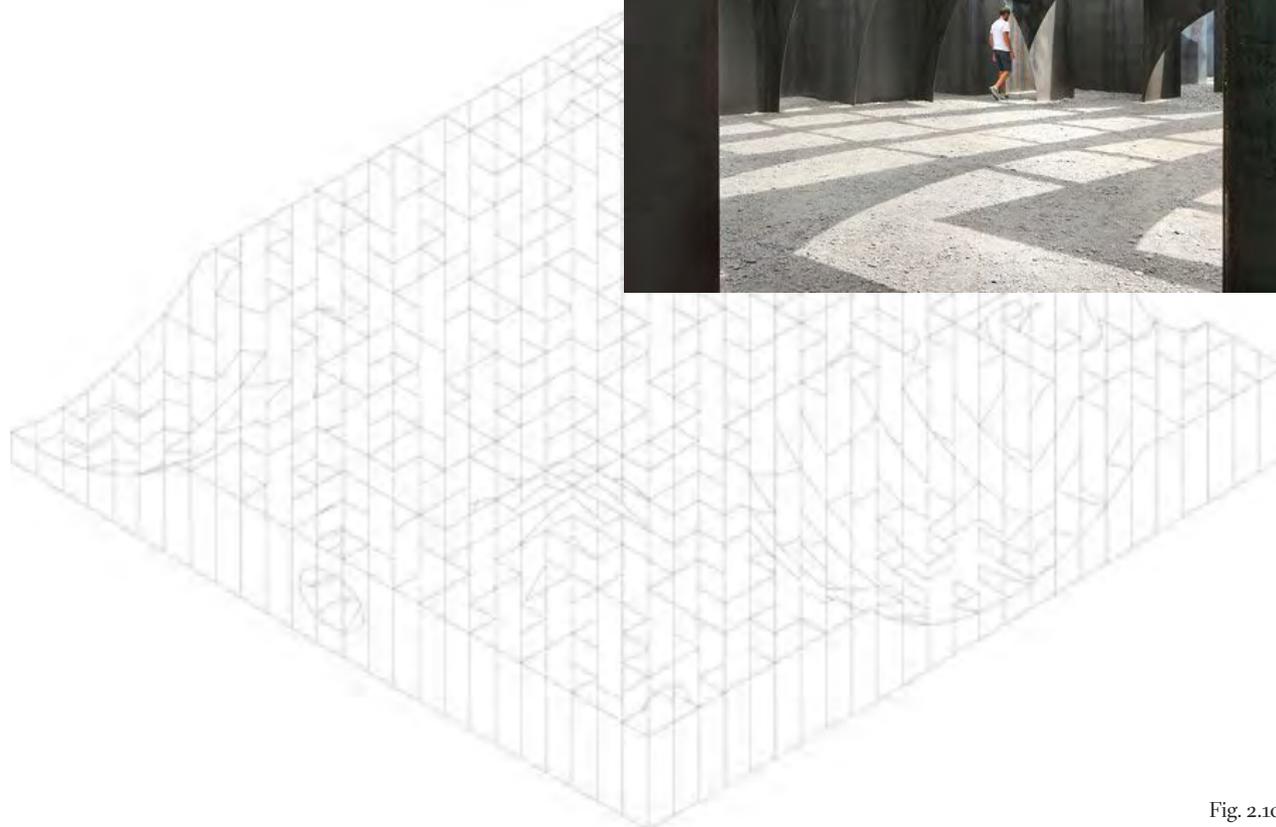


Fig. 2.10.

*Maze Washington*

Architect: Bjarke Ingels Group, BIG

Dates: 2015

Location: Washington National Building, Washington

Description: The curved maze flips the traditional one by giving explorers a better overview as they travel deeper into the labyrinth

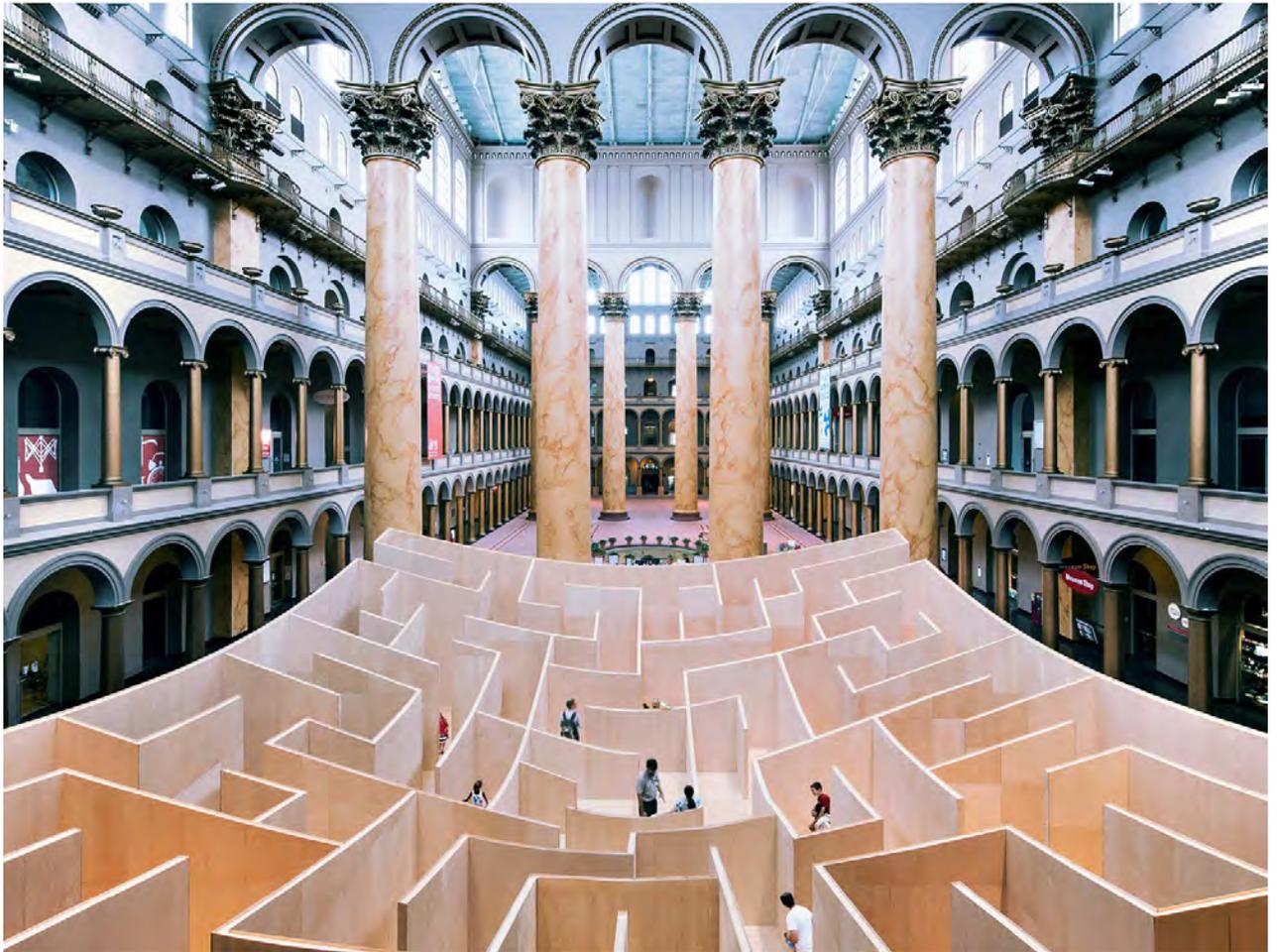


Fig. 2.11.

Construction site of metro station

Spatial designer: Brian Ulbrichsen

Dates: 2016

Project Location: Kongens Nytorv, Copenhagen

Description: The installation is based on the unpredictable, the unplanned. It gives people another way to determine their next destination. (personal photograph)



Good urban spaces do not only induce activities, the places themselves have the power to enhance the health and attractiveness of cities. Sometimes referred to as 'urban medicine', the term relates to the notion that recreational opportunity in the city is essential to the health of its population.

*Psychologists have shown that stimulation is essential throughout the years, including the later ones. Some of the deterioration of the elderly appears to come from the limited, uninteresting lives of many, due to physical problems, poverty, and restricted participation in the outside world. Yet most positive challenge has been removed from our public environment, although it may be one of the key reasons to have public space. Their active qualities may be among the most important influences on the staying power of places, separating the ones that are boring and not worth a second visit from those of enduring interest.*<sup>13</sup>

Similarly, the Danish urban planner, Jan Gehl, continuously studies why some urban spaces invite us to stay while others repel, accentuating it is not as much about what is beautiful versus what is ugly as whether the urban space fits our senses and body. A good and interesting space activates your senses. It is about our way of movement and our sensory apparatus: to see, hear, speak and feel in that space.

Fig. 2.12.

*Reflecting Gardens*

Artist: Jeppe Hein

Dates: 2017

Location: IGA Berlin, Germany

Description: Three lines of triangular mirror lamellae placed equal distances apart create a circular concentric effect that invites visitors to approach the artwork.



13. S. Carr, M. Francis,  
L. G. Rivlin and A. M. Stone,  
*Needs in public space*. 1992. Print

Fig. 2.13.

*Meeting*

Artist: James Turrell

Dates: 1980

Project Location: Museum of Modern Art PS1, NYC

Description: 'The skyspace' frames and emphasizes something ordinary into some extraordinary



As Edward T. White writes, a great urban room is well defined; with a distinguished atmosphere; has strength of character; and historical weight; enjoy connectedness; and is beautiful, habitable and sensual: *A successful place is sensual. All our senses are awakened, invited to take the site in, to touch the space in many ways. To be there is a multidimensional experience.*<sup>14</sup>

The door handle is the handshake of the building - so rings the famous words of Finnish architect Juhani Pallasmaa, concerned with phenomenology; the built environment and its psychological impact on people. In his book, *The Eyes of the Skin*, Pallasmaa discusses the importance of building architecture that engages all senses, not solely the visual.

*While some persons seek out settings in which to relax, others gravitate toward physical and social challenges, active engagement with the public place and its occupants including interaction with others, shopping, participation in street life, and vigorous encounters such as sports, wading, and jogging. Other challenges can be found in places that support discovery, enabling opportunities for new experiences, new vistas that excite, educate, and delight.*<sup>15</sup>

Fig. 2.14.

*Field of Light*

Artist: *Bruce Munro*

Dates: 2014

Project Location: Hermitage Museum and Gardens, Norfolk, Virginia  
Description: Through the motif of an enlightening the environment, the instalation creates an emotional response for the viewer



14. White, Edward T. *Path–portal–place*. 1999. Print

15. S. Carr, M. Francis, L. G. Rivlin and A. M. Stone, *Needs in public space*. 1992. Print

Fig. 2.15.

Original drawing of *Parc de Villette*

Architect: Bernard Tschumi

Dates: 1984-1987

Project Location: Paris, France

Description: 35 architectural deconstructive follies shares the same overall theme, making them part of a larger grid and understanding of the park system

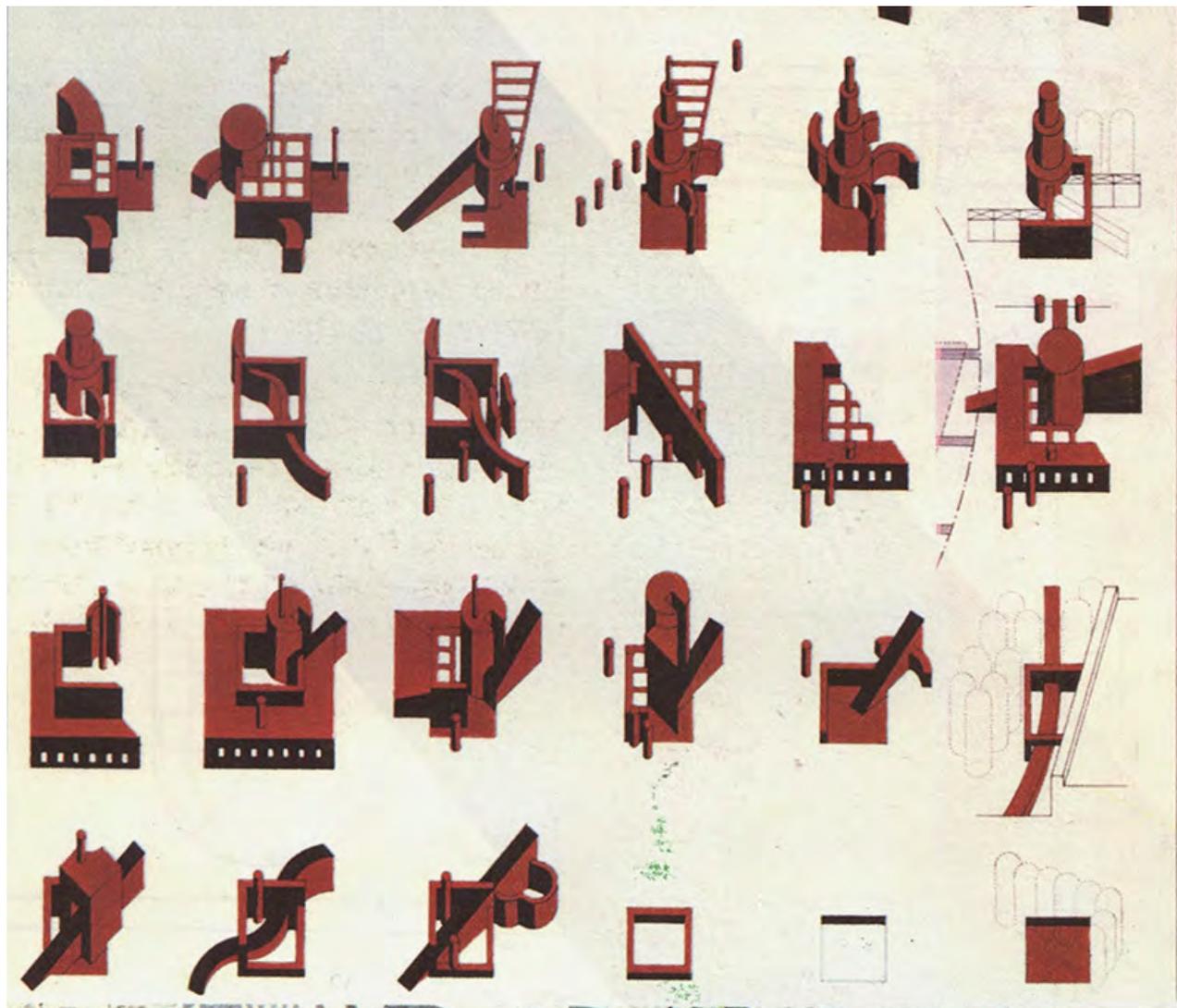


Fig. 2.16.  
Picture of Parc de Villette

Architect: Bernard Tschumi  
Dates: 1984-1987

Project Location: Paris, France  
Description: The follies are laid out around the park as points of references for the enjoyment and navigation of visitors



*Despite the criticism that Modernism has received over the years, "Form follows function" remains a good slogan for architecture and urban design provided one redefines function.<sup>16</sup>*

An urban outdoor space - and any other space for that matter - should be functional in the sense that it fits the needs of its occupants. Everybody sees a place in a different perspective, based on his or her own experiences, culture, and personality. Thus a good space is including, presenting visitors to an array of possibilities, not dictating a specific use but offering an environment of motivation.

Fig. 2.17.

*Dance-O-Mat*

Designers: F3 Design

Dates: 2012

Location: Christchurch, New Zealand

Description: An outdoor dance floor and speakers for free public use brings people together in the rubbles of the 2011 earthquake



*This array of human needs [...] should include opportunities for pure joy and fun, qualities missing from many places. The descriptions provide clues as to why some sites are filled whereas others are empty. Functionality, the usefulness of a site, provides a simple explanation of its success. But needs alone are not a sufficient reason for vitality. There are other qualities that constrain or facilitate open space experiences, and the different uses and rights of users of areas are essential ones.<sup>17</sup>*

17. S. Carr, M. Francis, L. G. Rivlin and A. M. Stone, *Needs in public space*. 1992. Print

Fig. 2.18.

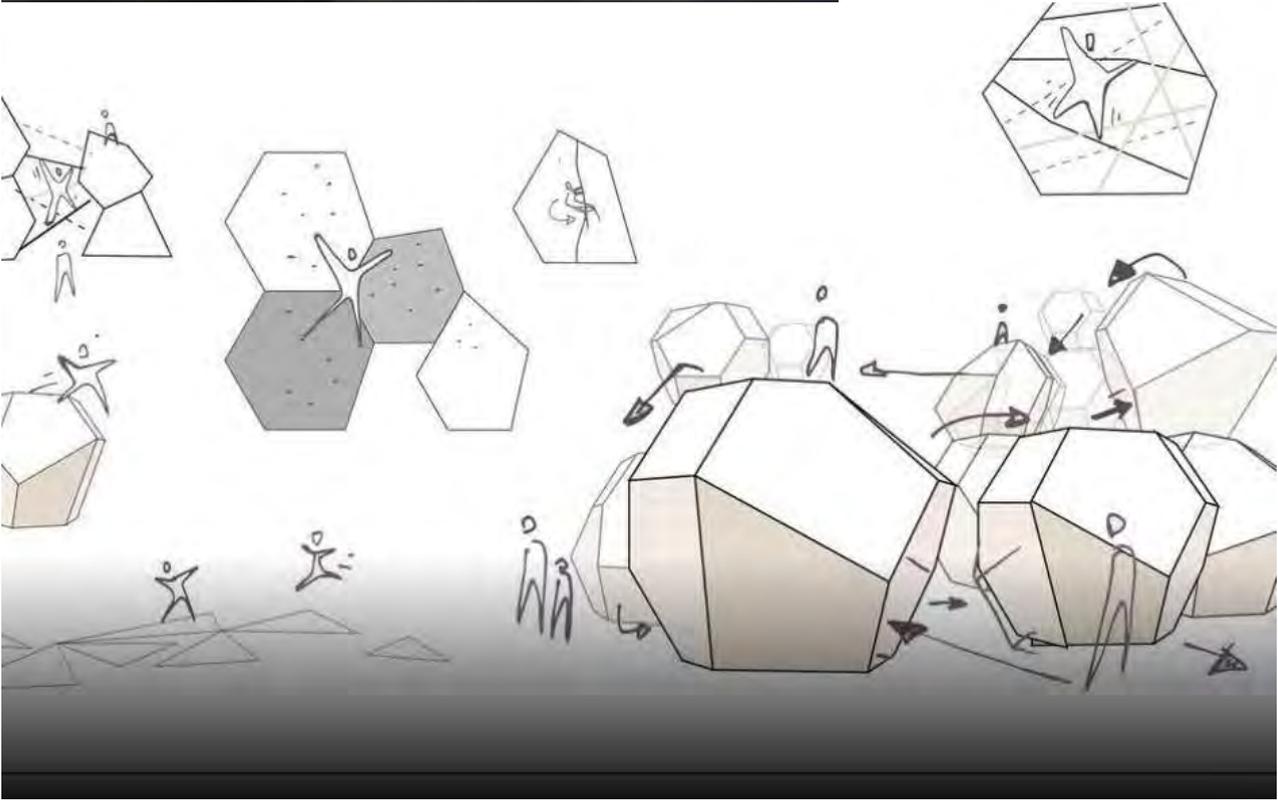
*My Playground*

Architect: *Gustin Landscape*

Dates: 2017

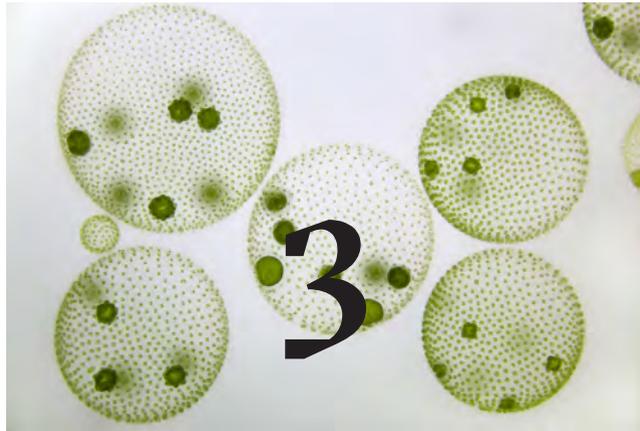
Location: European capital Aarhus 2017, Aarhus, Denmark

Description: A social and playful cubic landscape for adults and kids alike that is portable and a rotating playground throughout Denmark during 2017









# Context

Lungs of the City

*Any discussion of the future of public spaces must necessarily begin with a retrospective view of the evolution of values and symbolism associated with urban open spaces in the past century.*

*In the second half of the 19th century, most major cities of America—initially Boston, Chicago, New York, and San Francisco [...] — acquired large chunks of land within the city and transformed them into major urban parks or park systems.<sup>18</sup>*

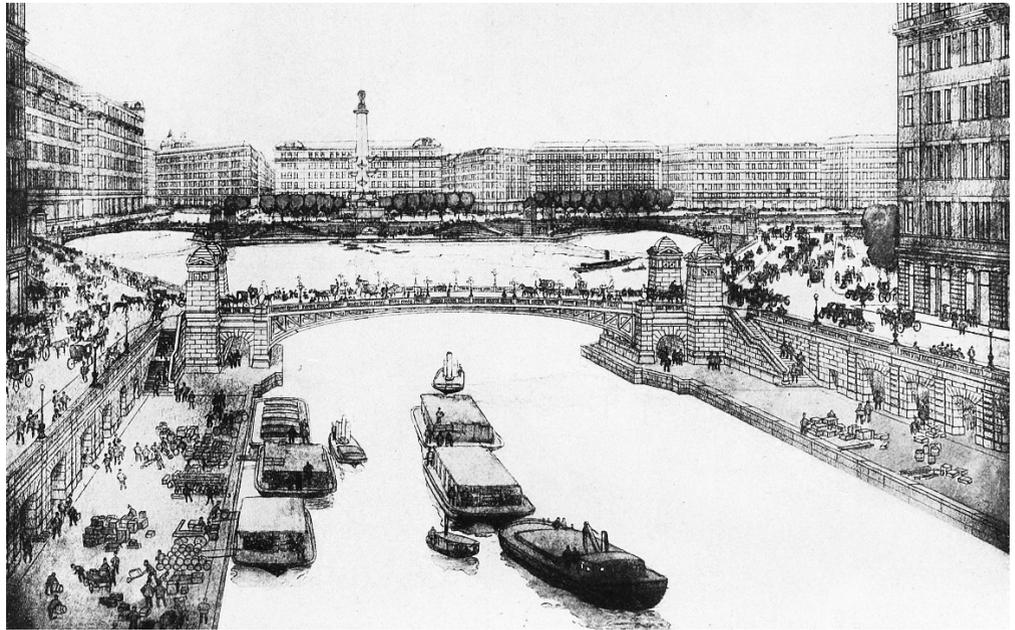
Among other park friendly cities, the public urbanscape of Chicago is unique, especially in an American context, since its lakefront, the most valuable land in the city, boasts of a 18-mile-long public park space, reserved for the people instead of developers, prized for its social value all the more than its monetary.

*The urban park systems are probably the only exception to the otherwise privatized world of city building, where private monuments, department stores, railroad stations, skyscrapers, sports stadiums, and the like have dominated the American cityscape. The park system represented an attempt to humanize the utilitarian form of American cities. This was reflected in Frederick Law Olmsted's designs for parks and his writings about creating order and structure in the expanding industrial cities of the late 19th and early 20th centuries.<sup>19</sup>*

18. Banerjee, Tridib. *The future of public space: beyond invented streets and reinvented places*. 2001. Print.

19. Banerjee, Tridib. *The future of public space: beyond invented streets and reinvented places*. 2001. Print.





As immortalized in the city's municipal device, the Chicago River systems have played a crucial role in this industrialization and unprecedentedly rapid growth of the city - but less so in recreational regards.

Here, Lake Michigan has always been way ahead, not least owing to the 'Watchdog of the Lakefront', Aaron Montgomery Ward, who so famously secured Grant Park and thus the shoreline as "Public Ground... forever open, clear and free of any buildings or obstructions whatever".

*In the American context public parks served to inspire republican virtue in several forms: civic pride; social contact, especially between people from diverse backgrounds; a sense of freedom; and finally, common sense (as in aesthetic standards and public taste).*

*Social contact, especially with people of different backgrounds, was acknowledged as one of the values of open space, but almost in denial of the everyday reality of the class and ethnic ecology of American cities and the conflicts and contradictions it represented.*

These civic design principles of urban outdoor spaces was what contemporaries called the City Beautiful Movement, but what by Jane Jacobs later would refer to as the 'architectural design cult'.

In America, civic pride has been deemed inadequate dated back to long gone eras of 'Olmstedian times'. *Since then [the 1930s], parks and open space in American cities have been identified with recreation, physical and mental health, communion with nature, and the like, making them a public good and service.*<sup>20</sup>

Fig. 3.1. & Fig. 3.2.

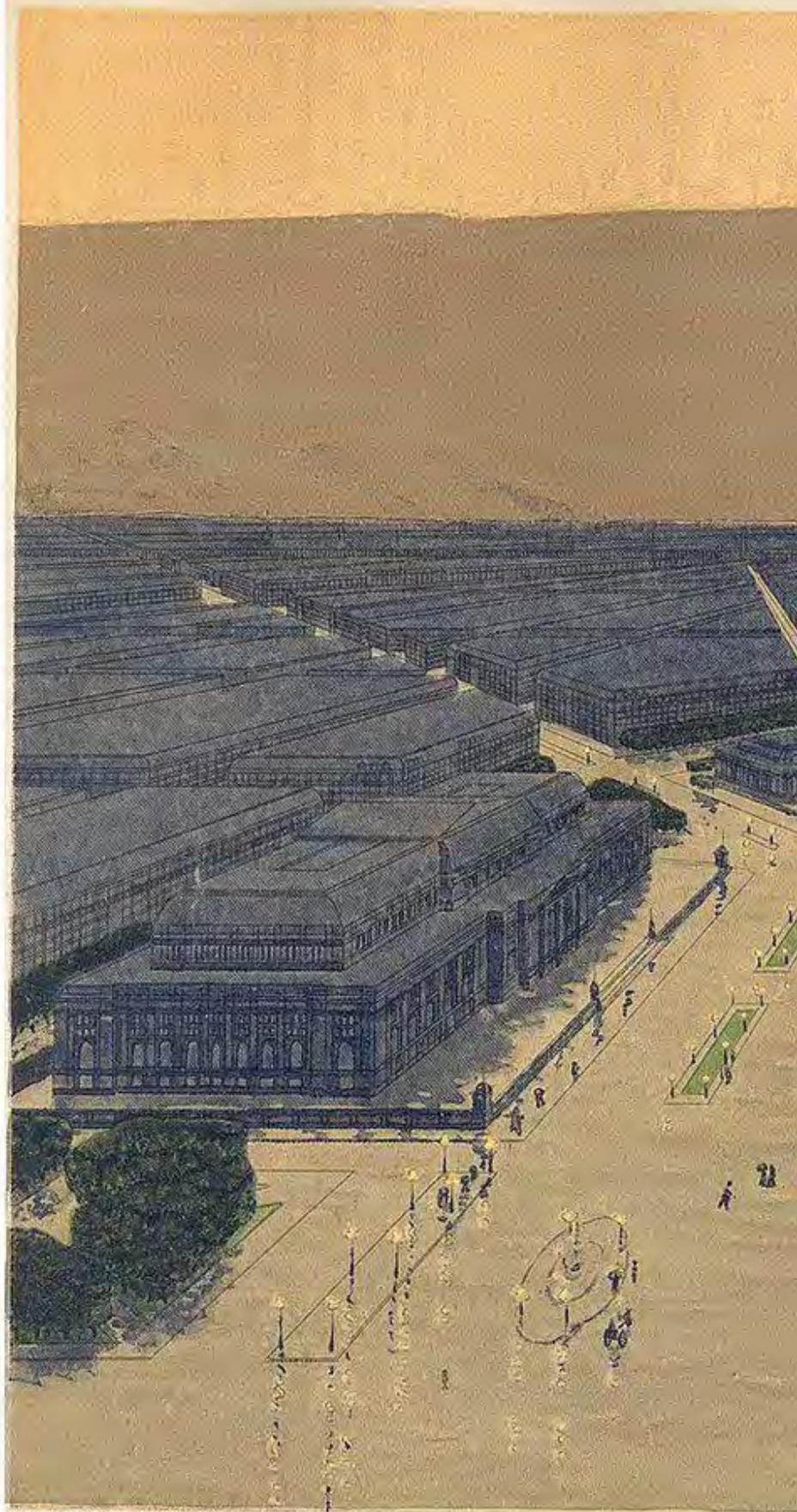
Guérin, Jules. Illustration of the *Plan of Chicago*. Burnham, Daniel and Bennett, Edward. Commercial Club of Chicago. 1909.

20. Banerjee, Tridib. *The future of public space: beyond invented streets and reinvented places*. 2001. Print.

A previous term for infrastructural projects in The US was in fact 'public works', a term later changed due to negative connotations like corruption and misuse of government power. However, not that long ago, people took great pride in public works, gathering in droves to see the inaugurations of parks, bridges, plazas, dams, etc., yawning at the sheer amount of planning and cooperation that goes into achieving such large scale projects, with a sense of ownership, a sense of responsibility over these new places and achievements in the public realm.

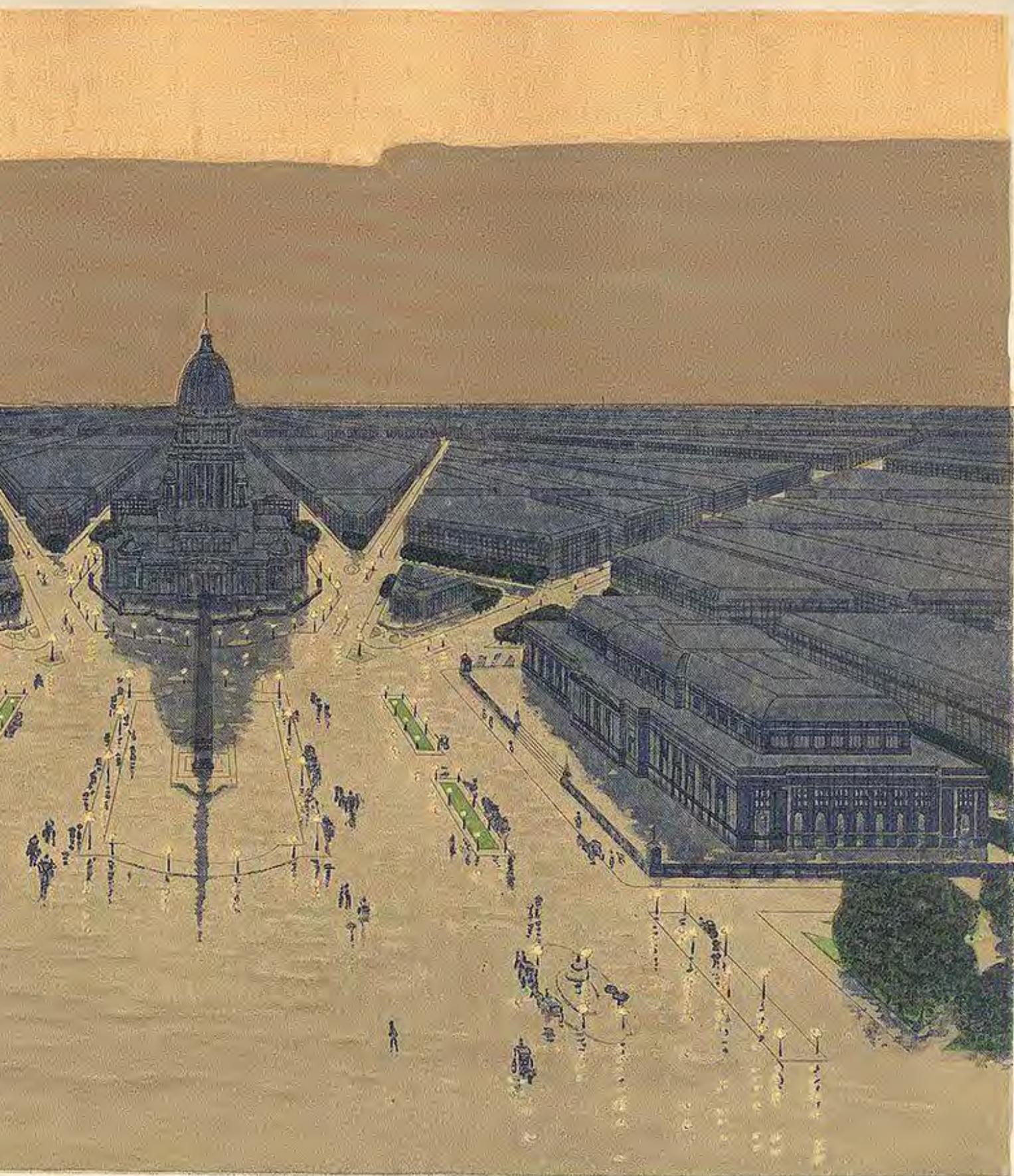
Here again, in the grand scheme of things (quite literally), Chicago seems to be unique. 'Make no little plans, they have no magic to stir men's blood' are the famous words ascribed to Daniel Burnham. Arguably the biggest architect of his time, Burnham's 1909 Plan of Chicago (co-authored by Edward Bennett) was too one of the most influential urban plans of the modern era. The grand visions laid out in 'The Plan' indeed stirred the men, women and children of Chicago in such ways that parts of it were realized long after they were conceived, even long after Burnham's death.

Fig. 33.  
Guérin, Jules. Illustration of the *Plan of Chicago*.  
Burnham, Daniel and Bennett, Edward.  
Commercial Club of Chicago. 1909.



COPYRIGHT, 1909, BY COMMERCIAL CLUB OF CHICAGO

CXXXII. CHICAGO. VIEW, LOOKING WEST, OF THE PROPOSED  
CIRC  
I

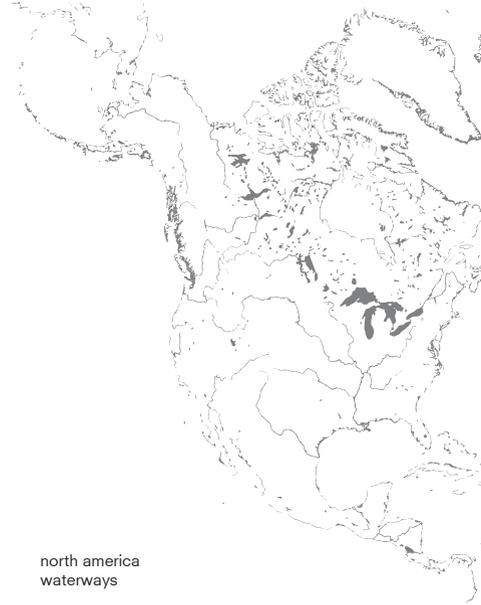


CIVIC CENTER PLAZA AND BUILDINGS, SHOWING IT AS THE CENTER OF THE SYSTEM OF ARTERIES OF CIRCULATION AND OF THE SURROUNDING COUNTRY.  
Painted for the Commercial Club by Jules Guerin.

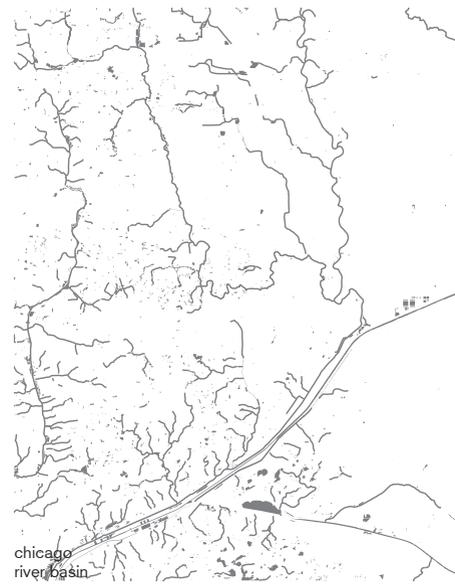
Post office of 1953



Post office of today



north america  
waterways



chicago  
river basin

To give an example, the Old Chicago Main Post Office - built in 1922, 10 years after Burnham's death - was majorly renovated in 1932 into an immense concrete structure. However, the central footprint of the building was left with a gaping hole with the hope and confidence that someone in the future would follow Burnham's recommendations too and extend the highway across the river at that very location. And 20 years later, that is exactly what happened.

And that is exactly what Chicago is, The Windy City where the visions fly high; where the sky - reflected in the industrial river - has always been the limit:

When faced with the epidemics and health issues of the river carrying the city's waste into Lake Michigan, the water supply of the city, the industrious people of Chicago came up with a simple yet hardly conceivable idea: Named the 'Civil Engineering Monument of the Millennium', the man-made 28 mile drenched canal not only connected The Great Lakes with the Mississippi River watershed but also reversed the flow of the entire Chicago River.

*When Burnham's Plan of Chicago's dramatic proposal to reshape the metropolis fit the spirit of a place used to big engineering solutions to its problems. Within the memory of its readers,*

*Chicago had raised itself 10 feet out of the mud, tunneled two miles under the lake for fresh water, rebuilt a third of the city after the Fire, transformed a swamp into the biggest World's Fair ever, and had reversed the flow of an entire river. The city's leaders, looking at the city's rapid growth, honestly thought Chicago was destined to become the world's largest city.<sup>21</sup>*

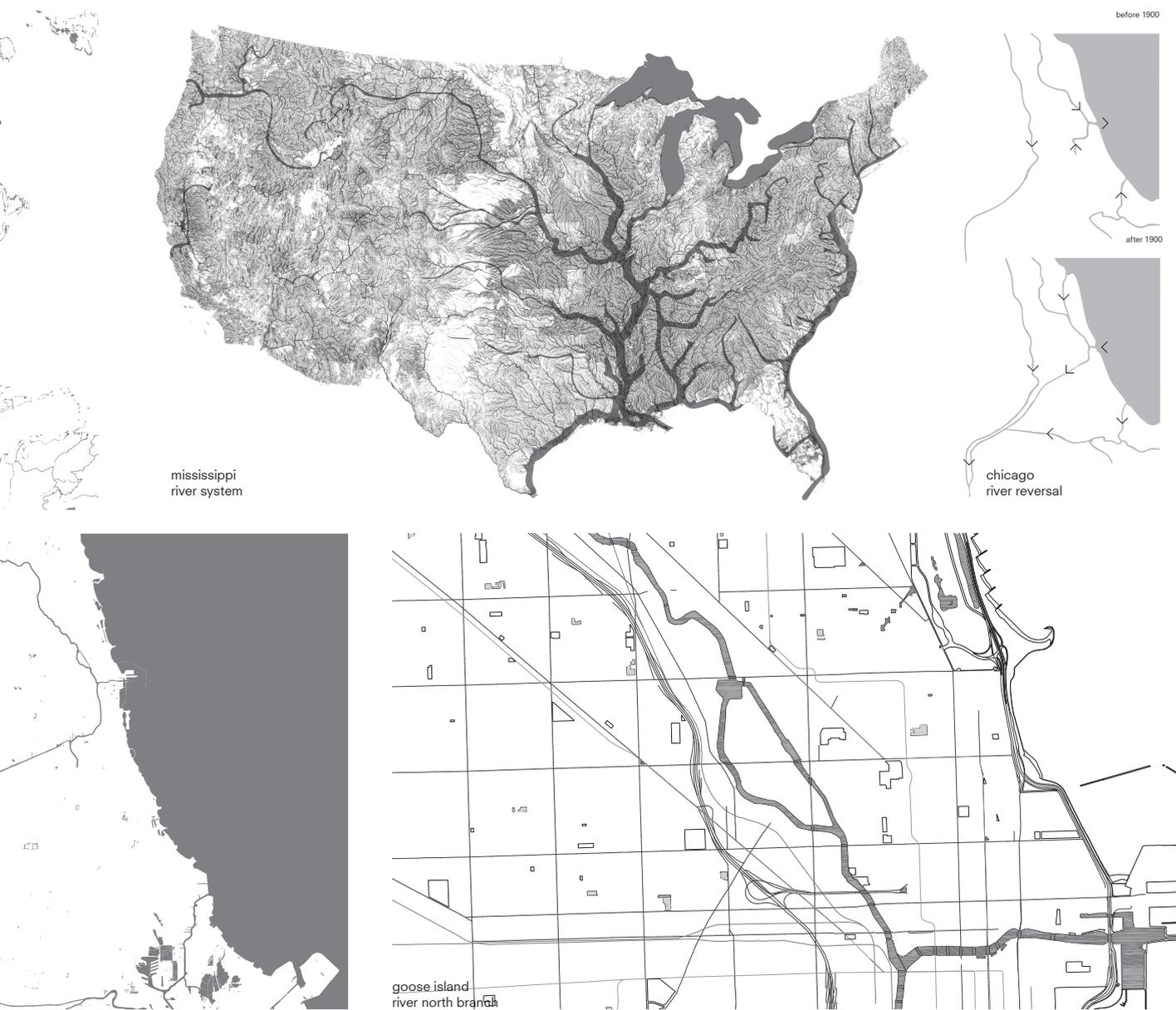


Fig. 3.4.  
Photograph of Chicago Main Post Office in 1953. Unknown photographer.

Fig. 3.5.  
Photograph of Chicago Main Post Office today. Unknown photographer.

Fig. 3.6.  
The water systems of North America. Personal drawings.  
From the big scale to the small, the reversal of the Chicago River forever changed the conditions and connections of the city to the world, and for the ecosystems of such.

21. Smith, Carl. *The Plan of Chicago: A Regional Legacy*. 2008. Print.



Fig. 3.7.  
*California Cycleway*, 1900. Courtesy Pasadena Museum of History

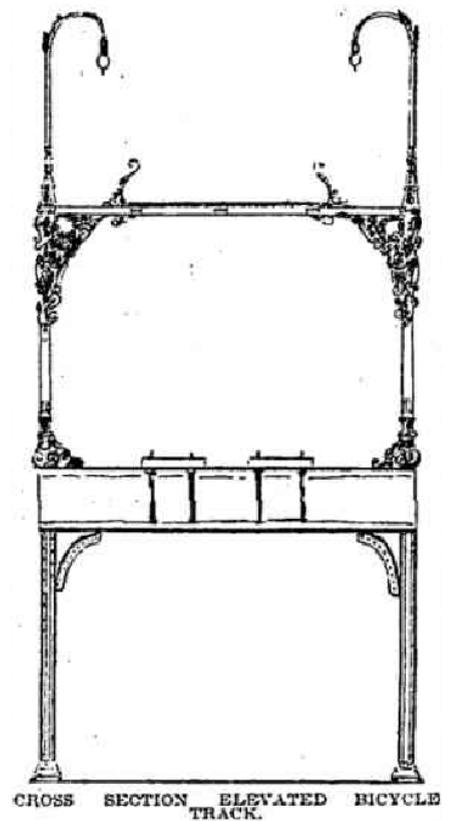
Fig. 3.8.  
Original cross section of the *Elevated bicycle track* from "To Pedal Up in the Air" Chicago Tribune. June 7 1897.  
Web. Accessed 28 July 2017.

Fig. 3.9.  
Photograph of the swimming race of 1908 in the Chicago River

22. "Surprise for Chicago - Swimming Race in Once Murky Stream" Chicago Tribune. June 26 1908. Web. Accessed 28 July 2017.

23. "To Pedal Up in the Air" Chicago Tribune. June 7 1897. Web. Accessed 28 July 2017.

24. "Mapping the Urban Bike Utopias of the 1890s". National Geographic. February 24 2017. Web. Accessed 28 July 2017.



The reversal of the Chicago River forever changed the conditions and connections of the city to the world, and for the ecosystems of such. And for a short period of time swimming races were even held on the industrial river, although the annual event was soon compromised by the federal government and its restrictions on the amount of (waste)water Chicago emitted into the river and south towards neighboring cities on the Mississippi River:

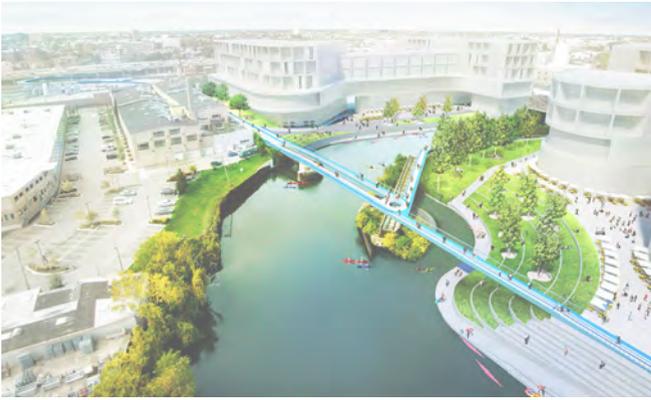
*Officials of the Illinois Athletic club, who are promoting the proposed race, believe the city's best swimmers will not mind the river with all of its past. They think the river can be transformed into a Thames and made a thing of beauty and a joy forever by instituting an annual Marathon race* <sup>22</sup>

Another 'turn of the century' idea (that never came to pass) was an illuminated bike path, elevated on top of the already elevated train tracks, so commuters could sweep through the city with ease:

*The troubles of bicycle riders in downtown districts who make their puffing, panting way over rough stone pavements and play a tipsy hide-and-seek among the vehicles and crossing pedestrians of the crowded business streets [... would be no more] with a bicycle path, illuminated at night by electric arc lights and securely walled in to prevent accidents, over the elevated railroad tracks in the downtown districts.* <sup>23</sup>

*In his 2016 book, The Cycling City, Friss writes that the bicycle gave middle-class people more freedom to travel when and where they wanted. It allowed them to get around the city more efficiently, but perhaps more importantly in an era of rapid industrialization and urban population growth, it allowed them to escape it.* <sup>24</sup>





Chicago is the city of visions. But it is one thing to have visions, and another to realize them.

Chicago won its public 'lakewalk' in court back in 1909, but had to wait another 100 years for its downtown Riverwalk. Now, big plans are in the making for the river itself. Under the name of 'Our Great Rivers', the city envisions wetland parks, freshwater management, swimmable waters and a contentious trail along the riverbanks, part of which would connect The 606 to The Riverwalk.

As the first of the city's 26 designated industrial corridors to be 'modernized' and redeveloped, the North Branch of the river is envisioned be a transit hub, tech mecca and recreational wonderland. But as pointed out earlier, Alderman Tunney criticized the plans for leaving too much to the developers and too little room for people to play, saying; *we often say, 'it can happen. Open Space can happen. Infrastructure improvements can happen'. How do we make that 'can' a reality?*<sup>22</sup>

Fig. 3.10. Site plan of the visualizations from *North Branch Corridor Framework Design Guidelines*. City of Chicago. Department of Planning and Development. May 2017. Print.

22. Spielman, Fran. "Plan Commission Approves North Branch Guidelines." *Chicago Sun-Times*. 18 May 2017. Web. Accessed 28 July 2017.

VISION





PAST \_\_\_\_\_

NOW \_\_\_\_\_

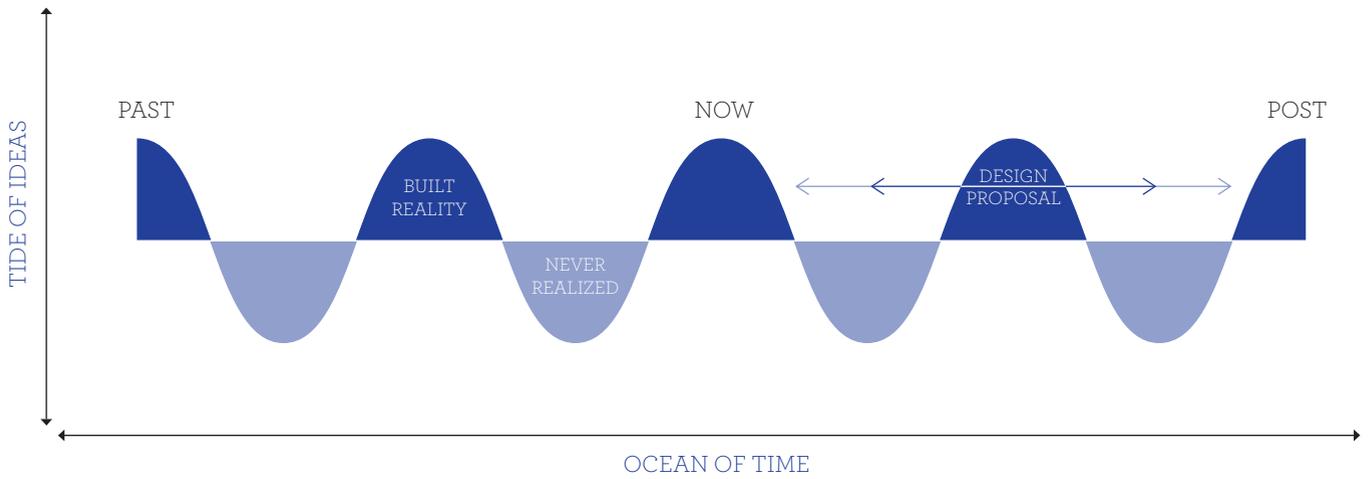


Fig. 3.11.  
Three aerial views of Goose Island looking south from 1960, 2016 and 2066? (personal drawing), respectively.

Fig. 3.12.  
Schematic diagram of the relation between time and ideas. Personal sketch.

23. Dearborn, Frank A. "Wants Goose Island A Park" Chicago Tribune. June 11 1909. Web. Accessed 28 July 2017.



## POST \_\_\_\_\_

There are many good ideas floating around that are never realized. In the ocean of ideas only the tip of the iceberg see the light of day. The following design proposal on the north tip of Goose island studies how to shorten the gap between visions of and the reality of the built environment.

Being the only island on the river, Goose Island plays a central role in these grand plans as it is located right there in the midst of them. However, many of these ideas are far from new, but merely just never been realized.

*The mere mention of the name is enough to make the esthetic squirm, as Goose island neither sounds, looks, nor smells right [... but] if converted into a beautiful park, as it easily could be, it would be a veritable oasis where now it is worse than the abomination of desolation.*

*It would be open and accessible by land and water to the poor and rich alike, which the lakefront is not and never will be, to the poor, at least. If Chicago looks forward to improving and beautifying her river waterfront she can choose no better time and place than now and Goose Island.*<sup>23</sup>

This charming statement from the Chicago Tribune could have been published yesterday, but the time and place the author is referring to is Chicago of 1909. Though the article dates back more than 100 years, it is rather striking how accurately it resonates with the Chicago of today.



New York City

1:500

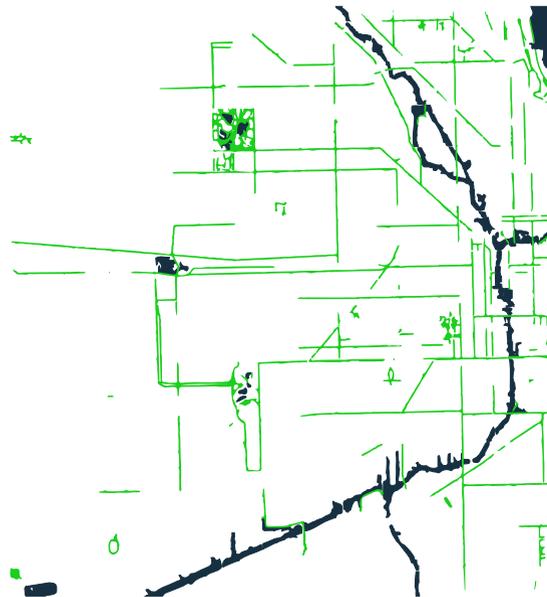


Chicago

Currently, 945,000 Chicagoans live within one mile of the Chicago River, approximately 35% of the population. Therein lies great opportunity, a notion that has surfaced the waters of the city lately.

With the Urban Waterways Forum, mayors from around the world came to Chicago in March 2017 to discuss how different cities use their natural waters to enhance urban life.

And with the Our Great Rivers initiative, Chicago visions to become a forerunner of inviting, productive and living water spaces with a contentious riverfront trail by 2030 and a fully litter- and order-free rivers by 2040.



Detroit

waterways  
bike paths

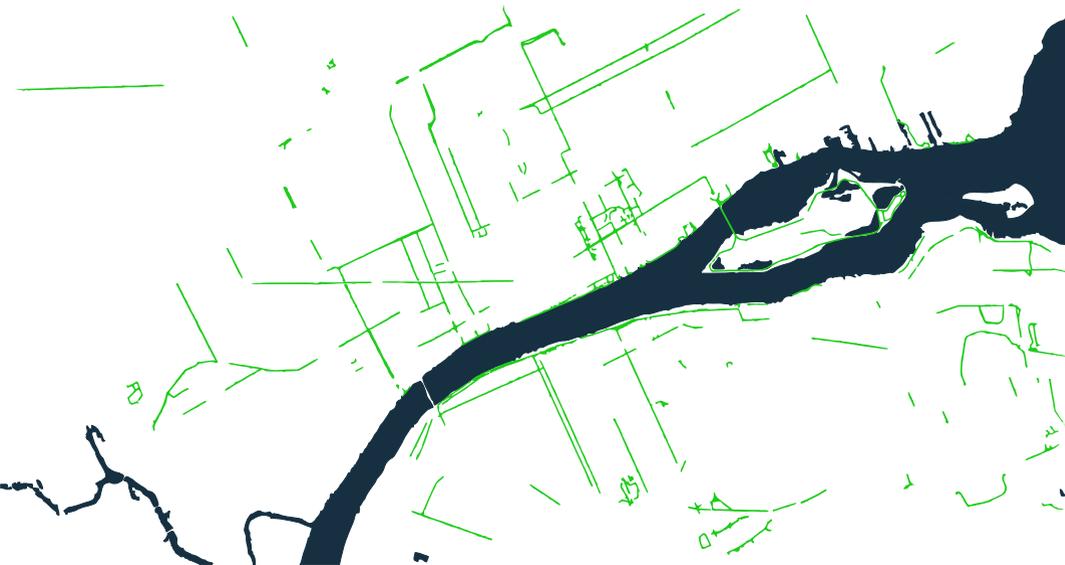


Fig. 3.13.  
A Comparison of five international cities and their water- and bikeways. Personal drawings

Fig. 3.14. (Next page)  
Diagram of transitional concept

25. Relph, Edward.  
*On the identity of places.* 1976



Melbourne

*What is required is an approach and attendant set of concepts that respond to the unity of 'place, person, and act' and stress the links rather than the division between specific and general features of places.<sup>25</sup>*

In the wake of the Mayor's initiative Our Great Rivers, the Active Transportation Alliance recently published the Chicago River Trail Action Plan, envisioning a continuous riverfront trail extending the south and north branch of the river. The plan calls for a corridor linking the many bits and pieces of existing trail that are cherished by the people living nearby, but otherwise not living out their full potential.

In this regard, the northernmost tip of Goose Island is a perfect example. It is a beautiful place with water, low-stress surroundings, great views and a green pedestrian way running through it.

But, to get there and get out of there is a hassle. As so many other great pedestrian and bike friendly places in the city, the beautiful open space begins and ends so abruptly, absorbed in traffic.

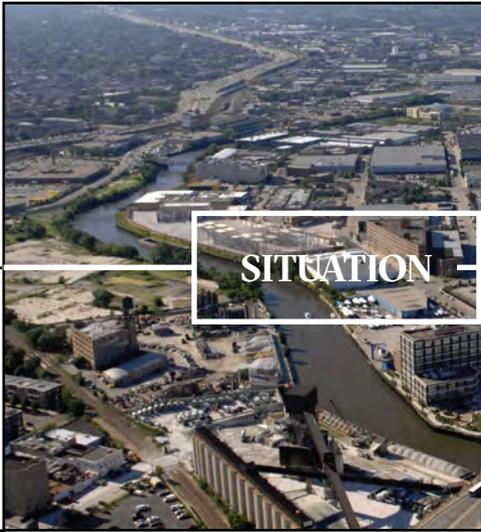
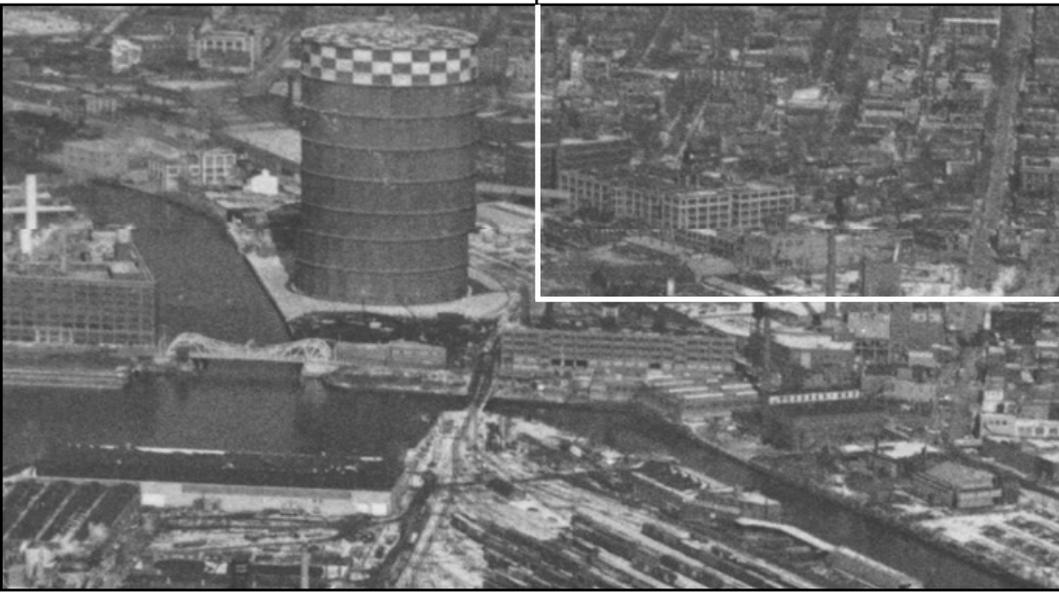
The following design proposal addresses these beautiful plans by comparing the current situation of Goose Island to its past and to its proposed future, emphasizing a connection in a transitional cityscape.

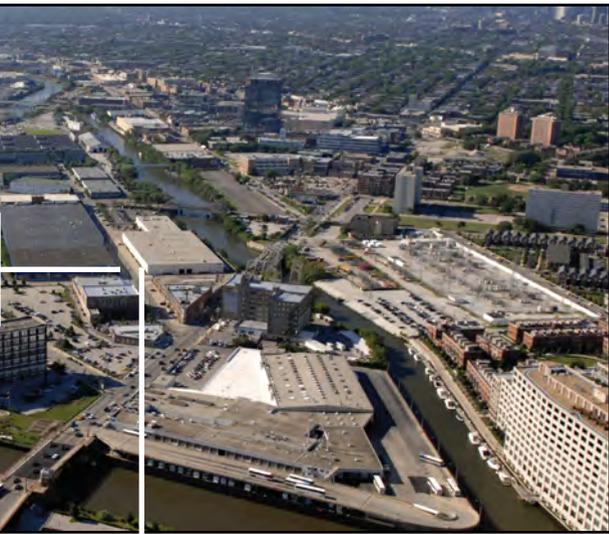
Copenhagen



PAST

SITUATION





TRANSITION



POST



*But there is no reason to believe that sitting still and seeing nothing suffice to arouse the awareness of change. The change must be of some concrete sort.* <sup>26</sup>

What have been discussed thus far was initially the theoretical concepts behind urban design, followed by a glimpse into the industrious history of Chicago, the latter very much being bound by time.

Now, the following proposal for an urban outdoor design is a mere attempt to concretize and visualize such theories on a specific site in the city, and thus in the context of Chicago, trying to bridge the gap between the theoretical world of ideas and the physically built environment, bound by time.

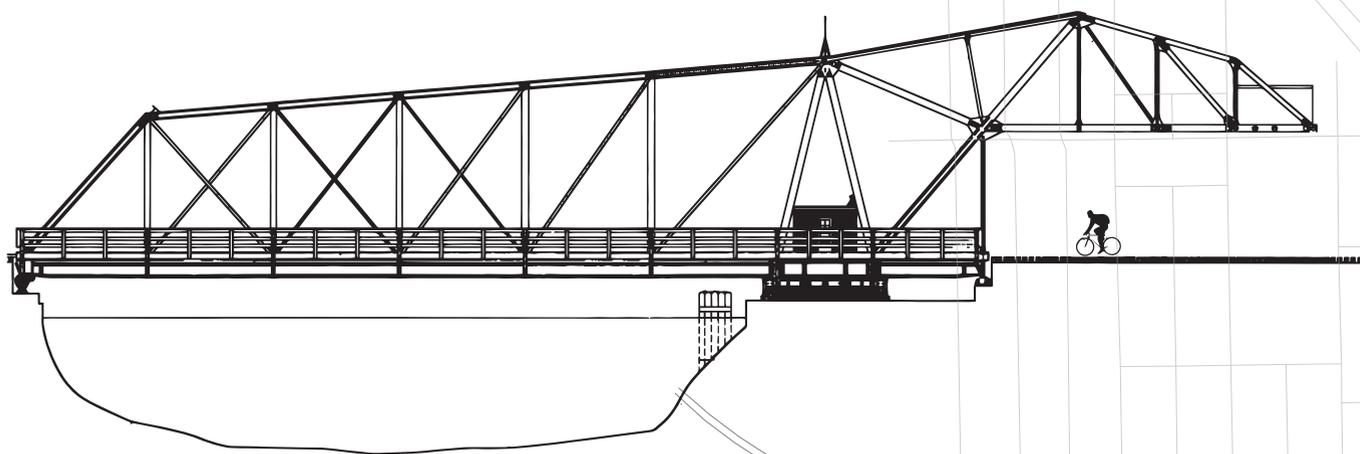
The North Branch Industrial Corridor has, as the name suggests, always been characterized by industry and largely physically and visually inaccessible to the public. The corridor's most significant open space asset, the Chicago River - that fostered the area's commerce - runs through the entire length of the corridor and shaped the location of the adjacent Union Pacific rail system and Kennedy Expressway as an integrated part of its commerce. Each presents physical barriers that have resulted in a grid of through-streets spaced every four blocks

versus the typical Chicago street grid spacing of every one block, creating access and circulation challenges for commuters, workers and area residents.

Such built environments raise a number of questions. Is something beautiful to the eyes that cannot see it? What good is a stretch of open urban space if it essentially is inaccessible to the public? How to extend the boundaries and attach isolated but otherwise inspiring outdoor spaces to the river flowing by and to the city at large?

Fig. 4.1.  
Collage of inspirational site pictures. Personal sketch

Fig. 4.2. (Next page)  
Site plan and elevation of Cherry Ave Bridge. Personal drawings

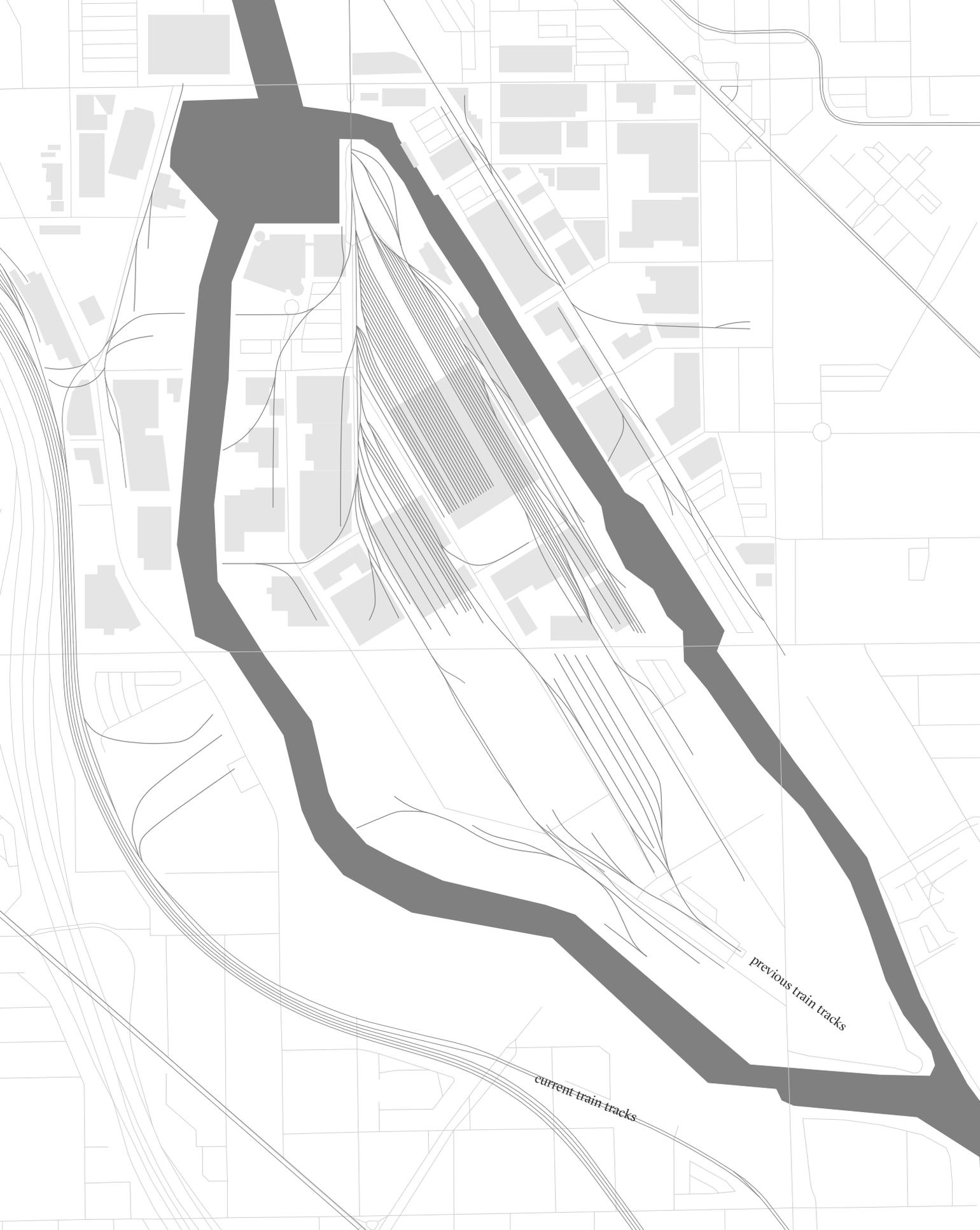


The site itself is characteristically similar to the train tracks and the river to which it neighbors. Without association to a greater system, the otherwise great space becomes underused and inactive. The train does not fare long without tracks and the water stagnates and pollutes without a flow and supply of fresh water.

To extend the boundaries and attach this isolated oasis to the river flowing by and to the city at large, the reinterpretation of the site leans on its industrial past. What continually stands out on this aspiring - but nevertheless undeveloped - place is the nearby steel frame bridge and the train tracks crossing the water, cutting through the site, leading the strip of pedestrian path to the west and leaving a 'none-space' to the east.

Technically known as Bridge Z-2, the bob-tail swing bridge - the only one of two left of its kind in Chicago - was designated a historical landmark in 2007. As it has always been the only way in and out for the many freight trains of Goose Island, this one crucial set of rails splits off into two on the site. Nowadays, most of the tracks are gone, but this split-off would recur some 80 times going south, soon turning into a complex infrastructural network of train tracks forking out into a delta of parallel and intercrossing tracks, connecting the many industrial companies on the island.

A reminiscence of the industrial heritage, pieces of the grid of bygone tracks that in its current state lead 'nowhere' are not limited to the site but can still be found throughout the island, much like the patches of river-front trail that still is to be connected throughout the city.



*previous train tracks*

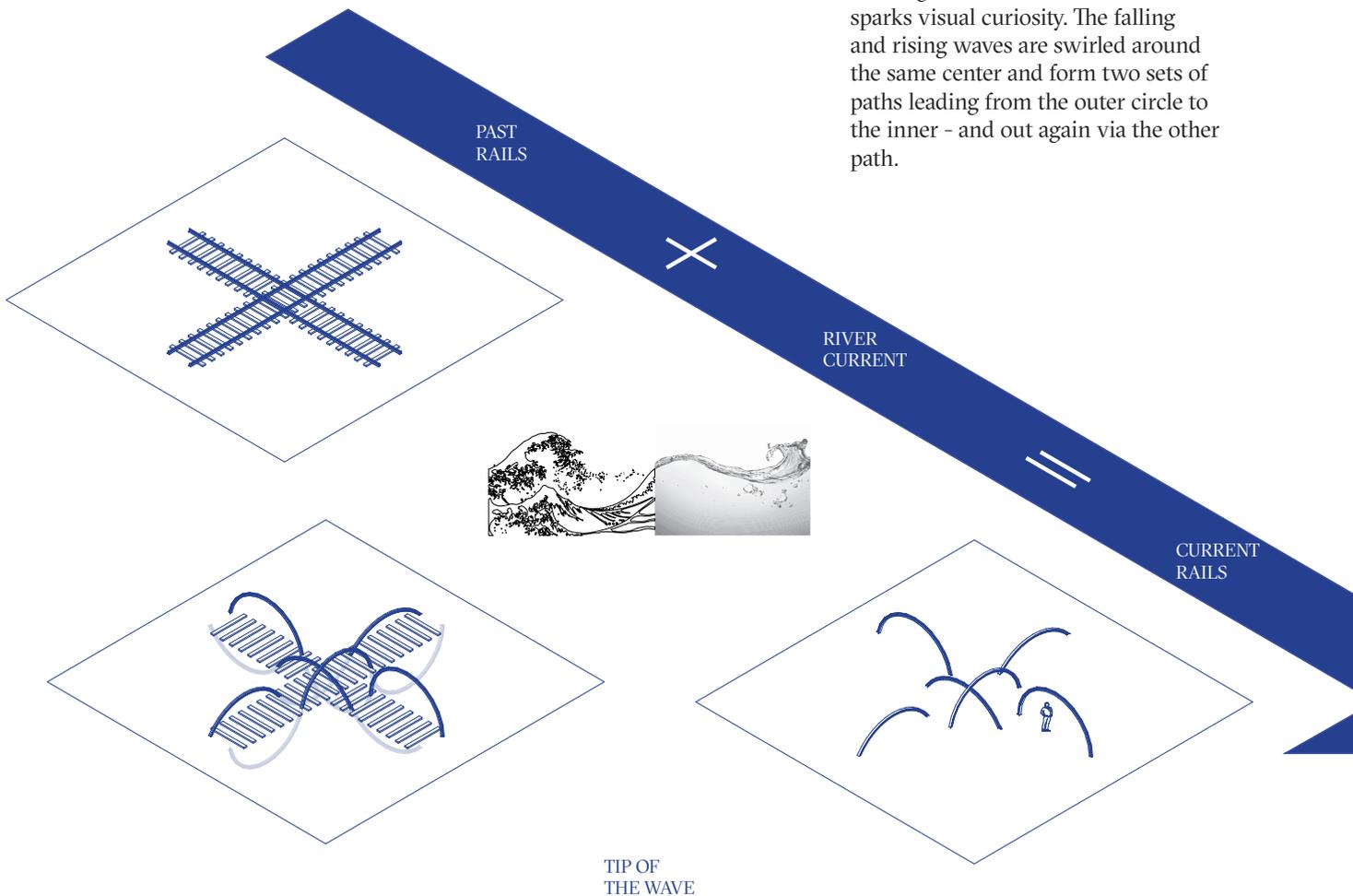
*current train tracks*

Fig. 4.3.  
Diagram of design progress. Personal drawing

Fig. 4.4.  
Model pictures. Personal photographs



Softening the distinction between start and end, past and post, the design of the site proposes a network of steel frame tubes following a parallel grid similar to the train tracks. Here the network bends two-ways, rising from the dirt in vertical waves, forming a maze-like framework that sparks visual curiosity. The falling and rising waves are swirled around the same center and form two sets of paths leading from the outer circle to the inner - and out again via the other path.





DESIGN  
PROGRESS



Grand Plan  
Connecting the Riverwalk to The 606

In the modeled design, each of the paths that the swirling steel tubes collectively creates measures a distance of 1609 meters, better known as 1 mile. The exact same distance is required in connecting the small strip of riverfront trail on the north tip of Goose Island to Montgomery Ward to the south (the northernmost part of the Riverwalk) and The 606 to the north, 1 mile respectively.

By interacting with the designed landscape, making your way through the full length of these maze-like paths, you would end up covering 1 mile, a literal interpretation of the scale and a physical reminder that the extension of the riverfront trail along the northern branch is not that far at all.

Fig. 4-5.  
Location map. Personal drawings.



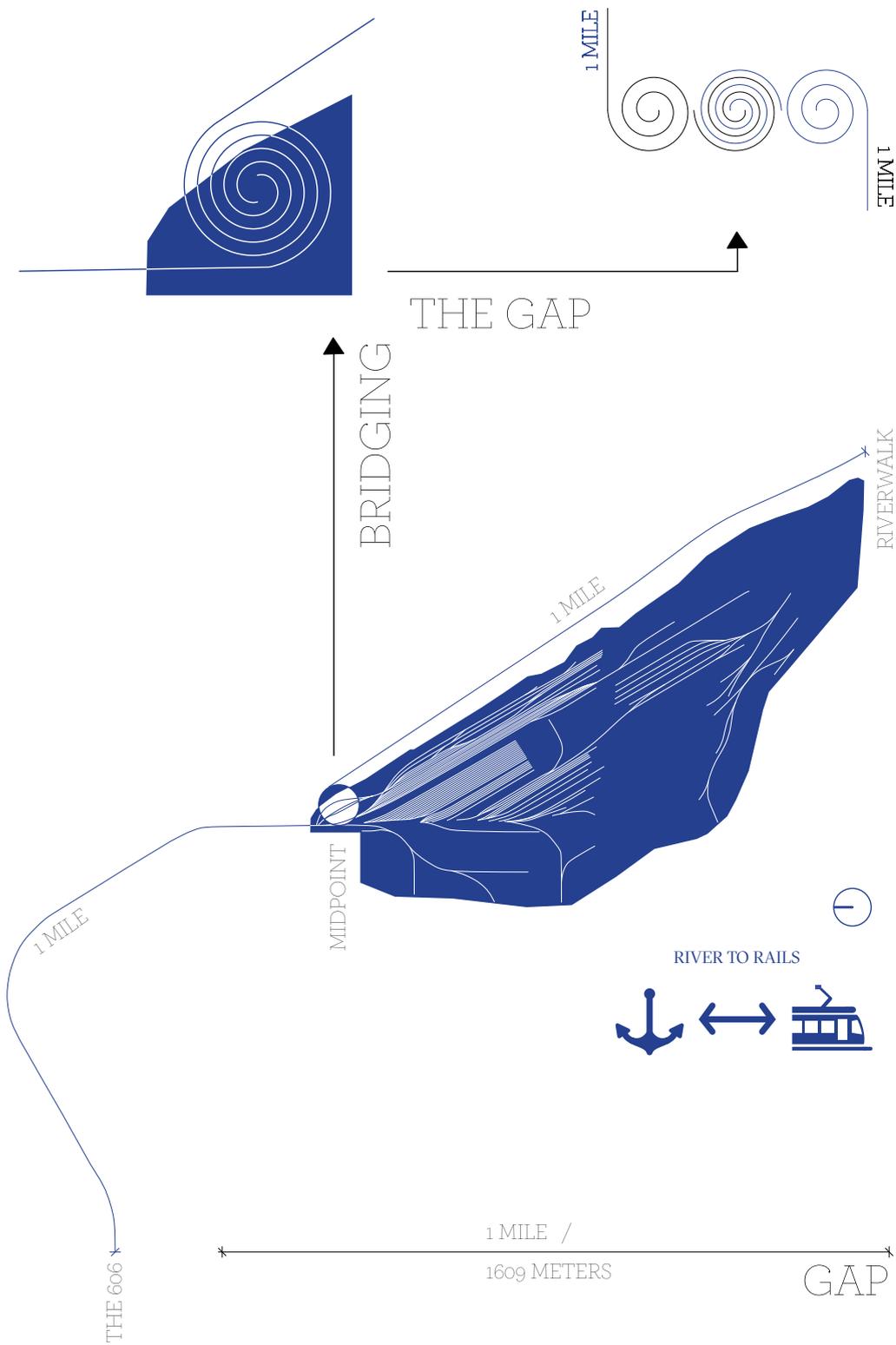
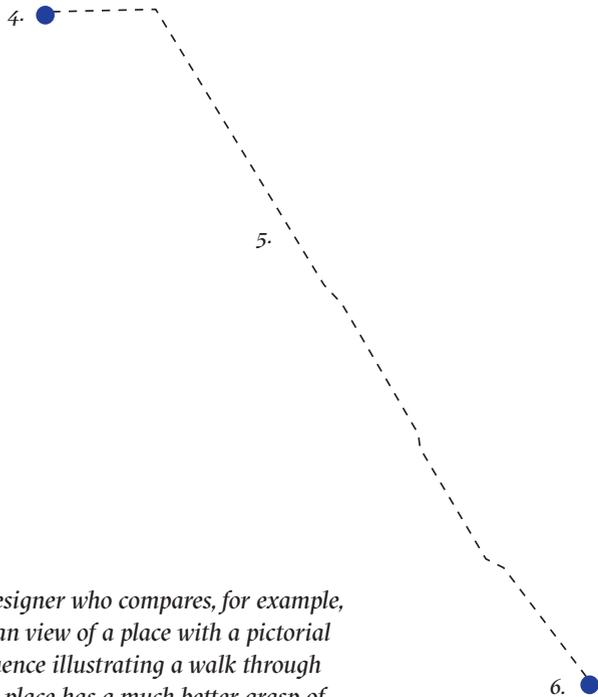
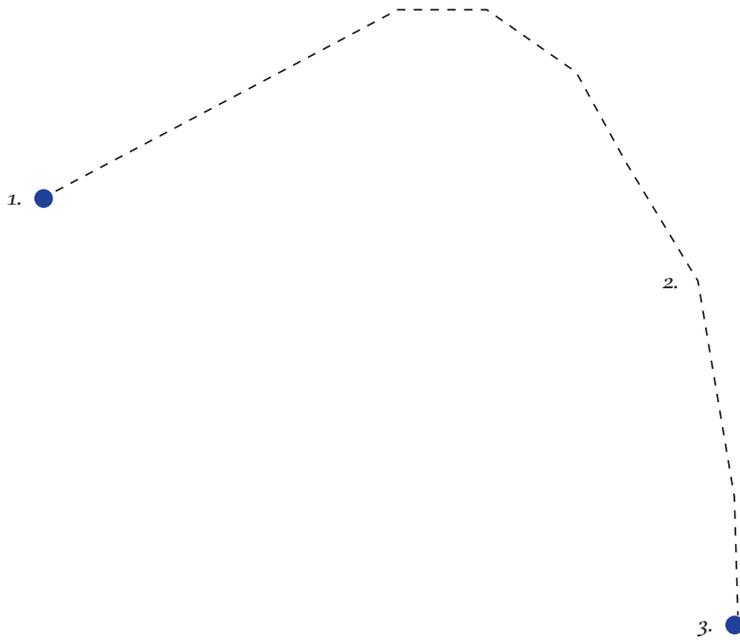


Fig. 4.6.  
Project diagram. Personal drawing

Fig. 4.7.  
Pictorial sequence. Personal photographs

27. Bosselmann, Peter. *Images in motion*. 1998 Print.



*A designer who compares, for example, a plan view of a place with a pictorial sequence illustrating a walk through that place has a much better grasp of dimension.* <sup>27</sup>



1.



2.



3.



4.



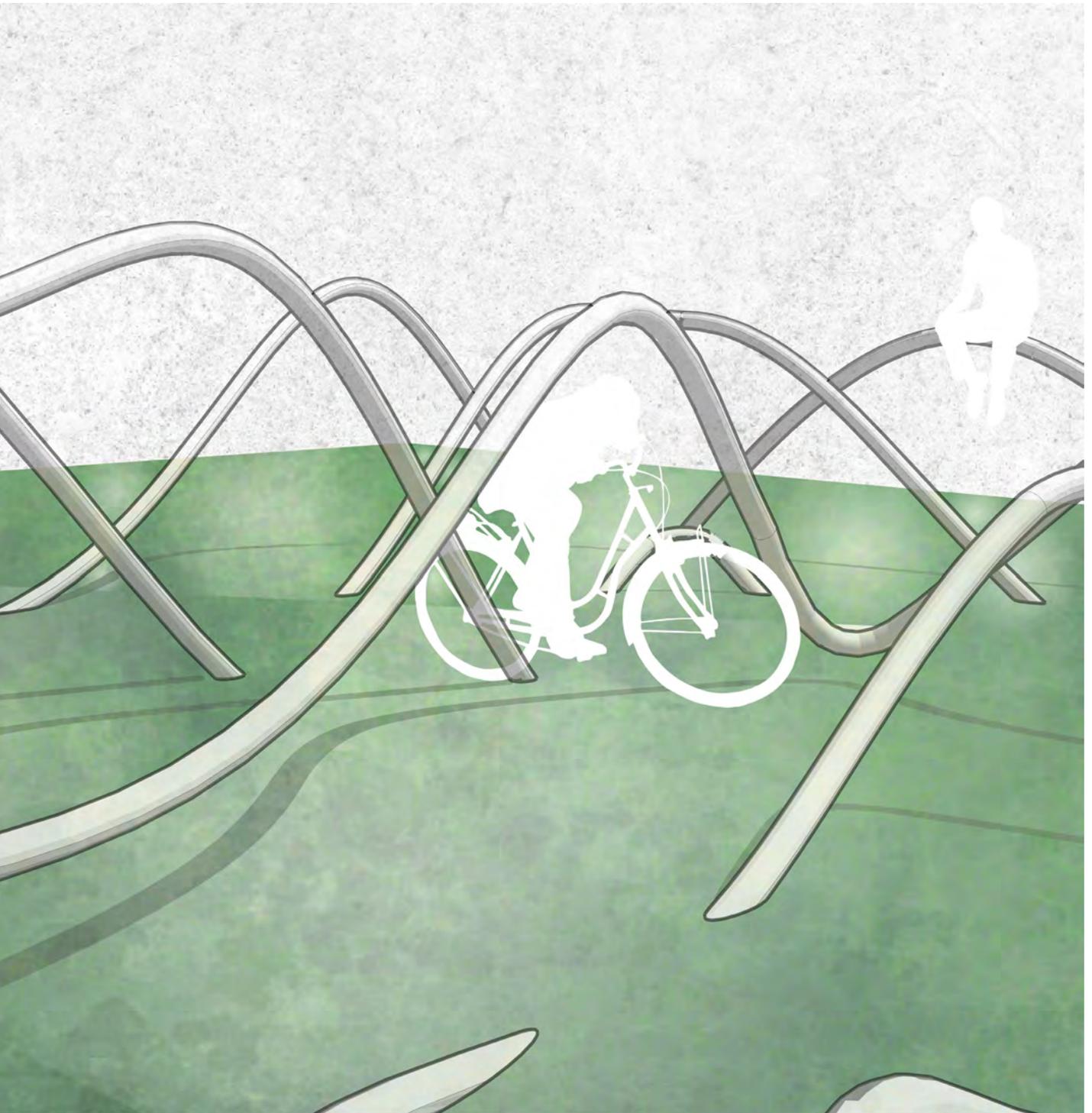
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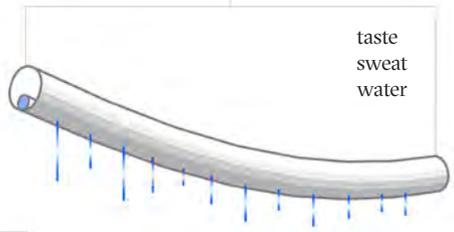
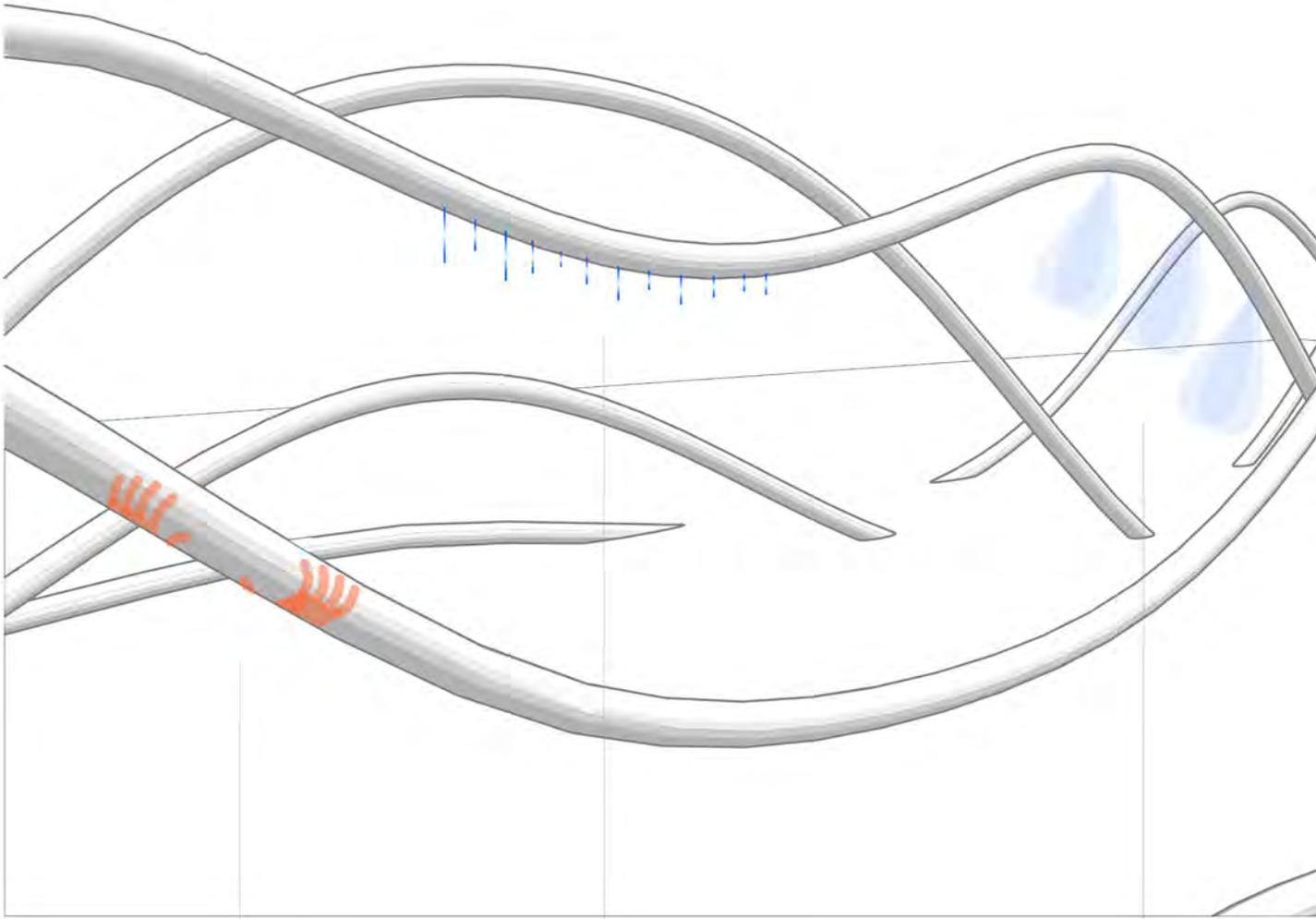


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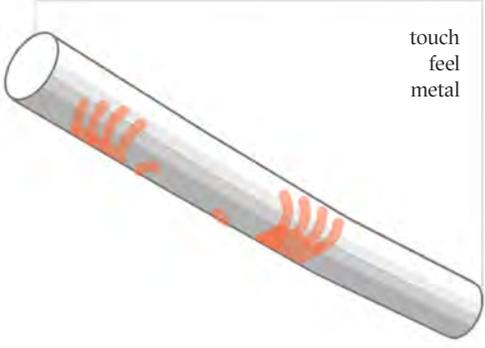
Fig. 4.8.  
Visualization. Personal drawing.





taste  
sweat  
water

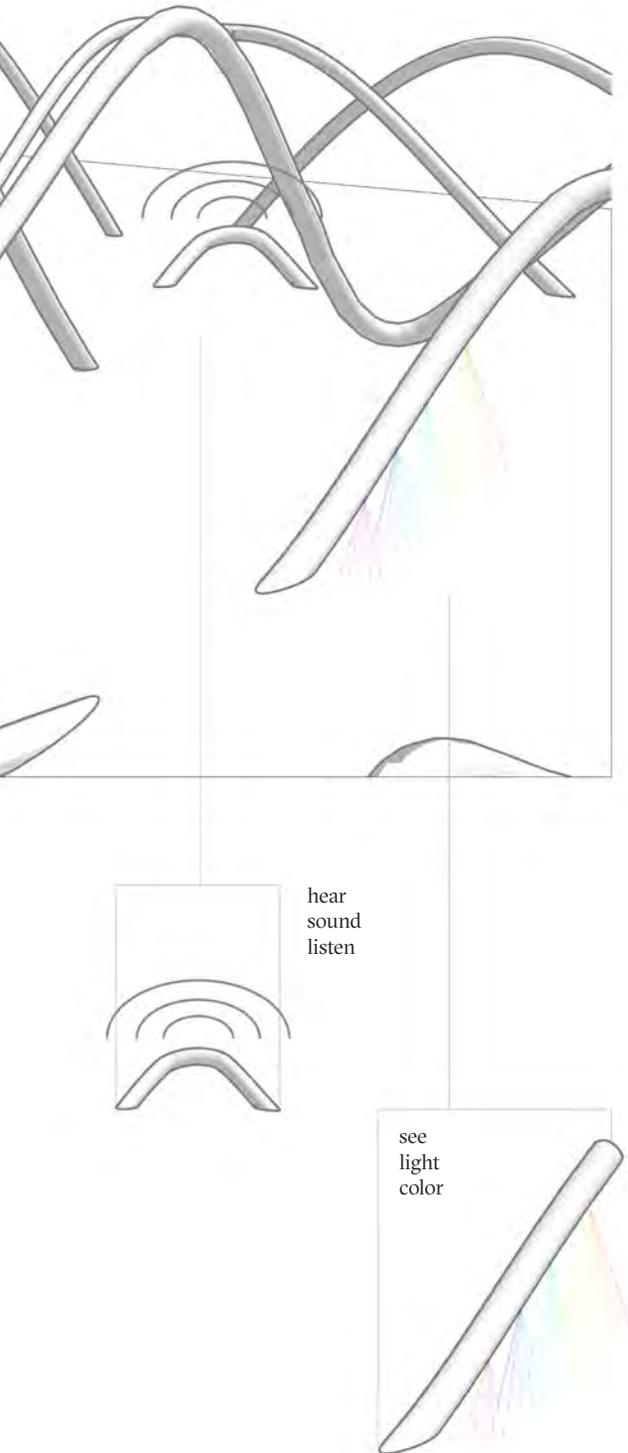
smell  
breath  
mist



touch  
feel  
metal



sensing a place

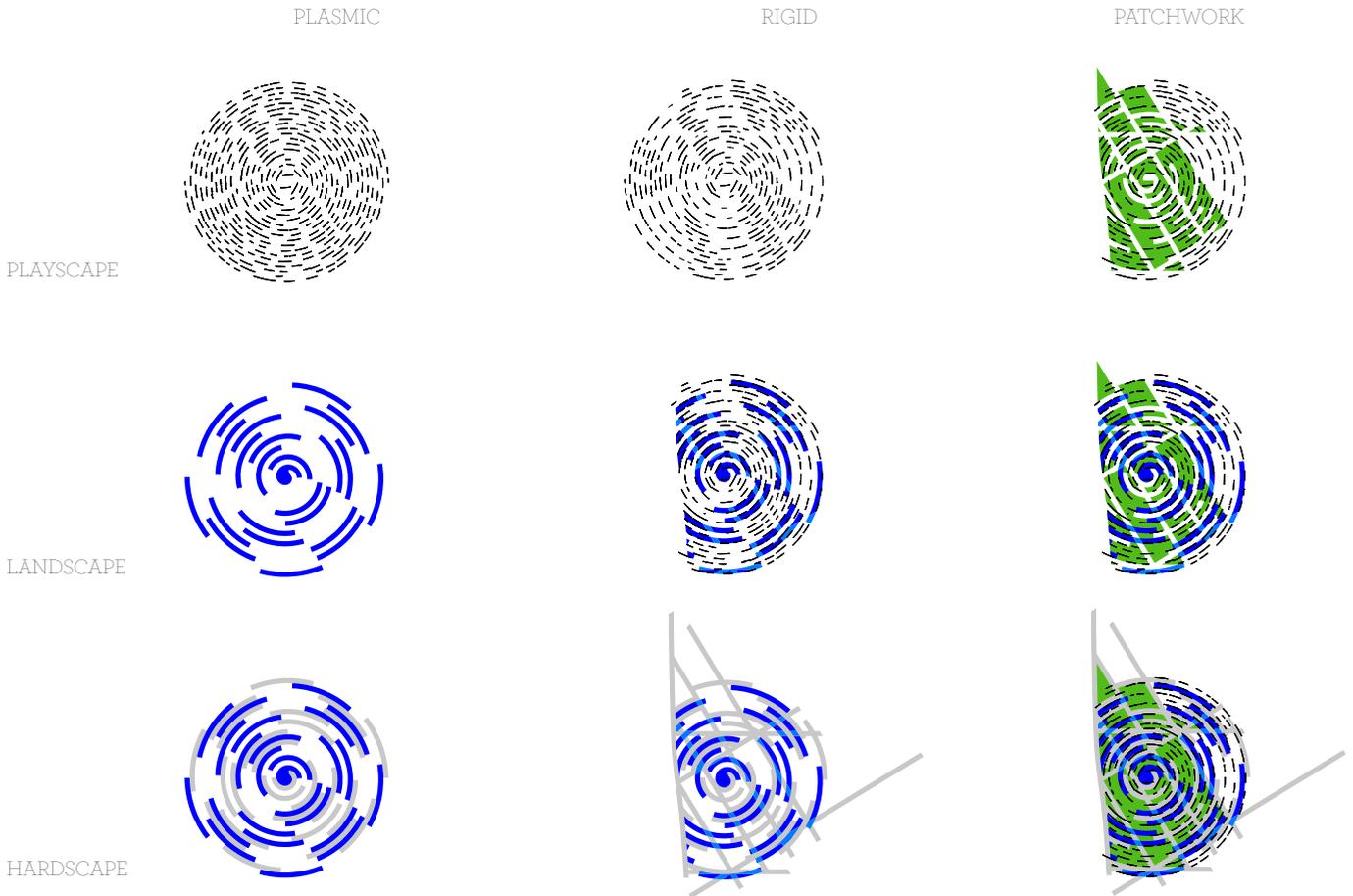


Having a rustic and tactile feel, the bent metal framework of the proposed design on Goose Island gives people a landscape of opportunities. Apart from the touch of steel and the feel of the industrial past, the hollow metal tubes carry a hidden set of wires and hoses with outlets spread across the site. In some places, if you listen carefully, sounds and music can be heard from within, whereas in other, water sprinkles or vapors out as mist giving way for people and plants to come alive depending on the seasons, more so people than plants during wintertime.

Likewise, depending on the time of day, the intensity and spectrum of light jetting out through holes in the metal can be sensed and interacted with.

The curved framework does not dictate a specific way of interaction, as the tubes have various applications. This leaves it up to the user to imagine and define its practice, be it bars used for 'benching' in physical exercise or used as an actual bench for sitting in relaxation.

Fig. 4-9. Schematic visualization. Personal drawing.



The grounds beneath the metal bars are laid out with landscaped grass, hardscaped surface and patches of ponds, all woven together in a circular tapestry inviting people to move through it and towards the center/periphery.

Mimicking the bend in the river and that of the off-splitting train track, the curved landscaped outlay is a centrifugal force, leading you in a circular gesture from water to land and vice versa.

In this special place where river meets steel, where the canal east of the site was dredged by man, the natural curved patches of playscape (metal bars) and landscape (ponds and grassy areas) are punctuated by an intersecting hardscaped grid (asphalt).

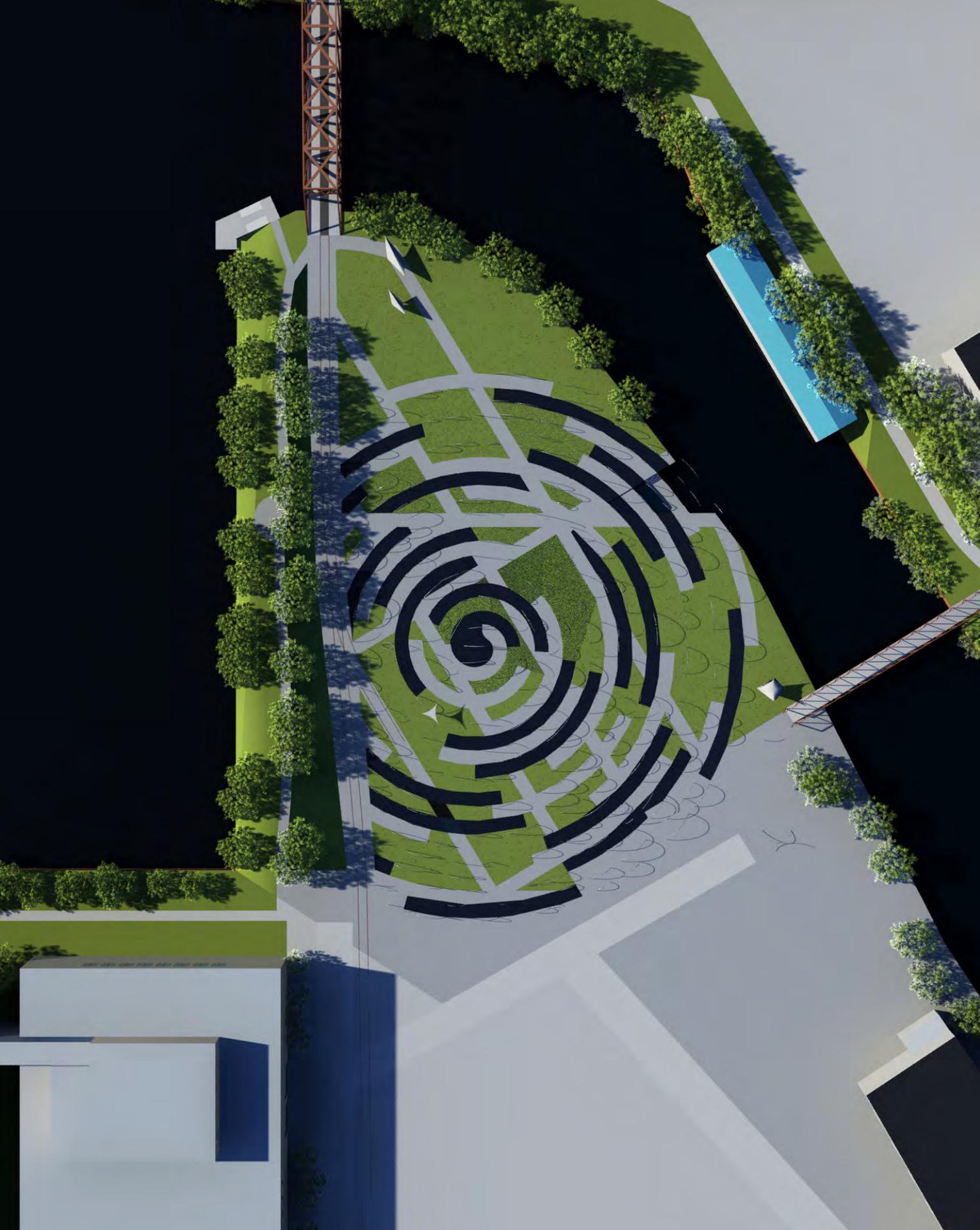
In industrial Chicago where the river formed the city and man formed the river, the site steps down towards

the surface of the plasmic river to the east and is cut by the rigid train tracks to the west.

In this historically harsh cross-over between natural and man-made, organic and urban, the project proposes a playful and traditional redesign of the outdoor space.

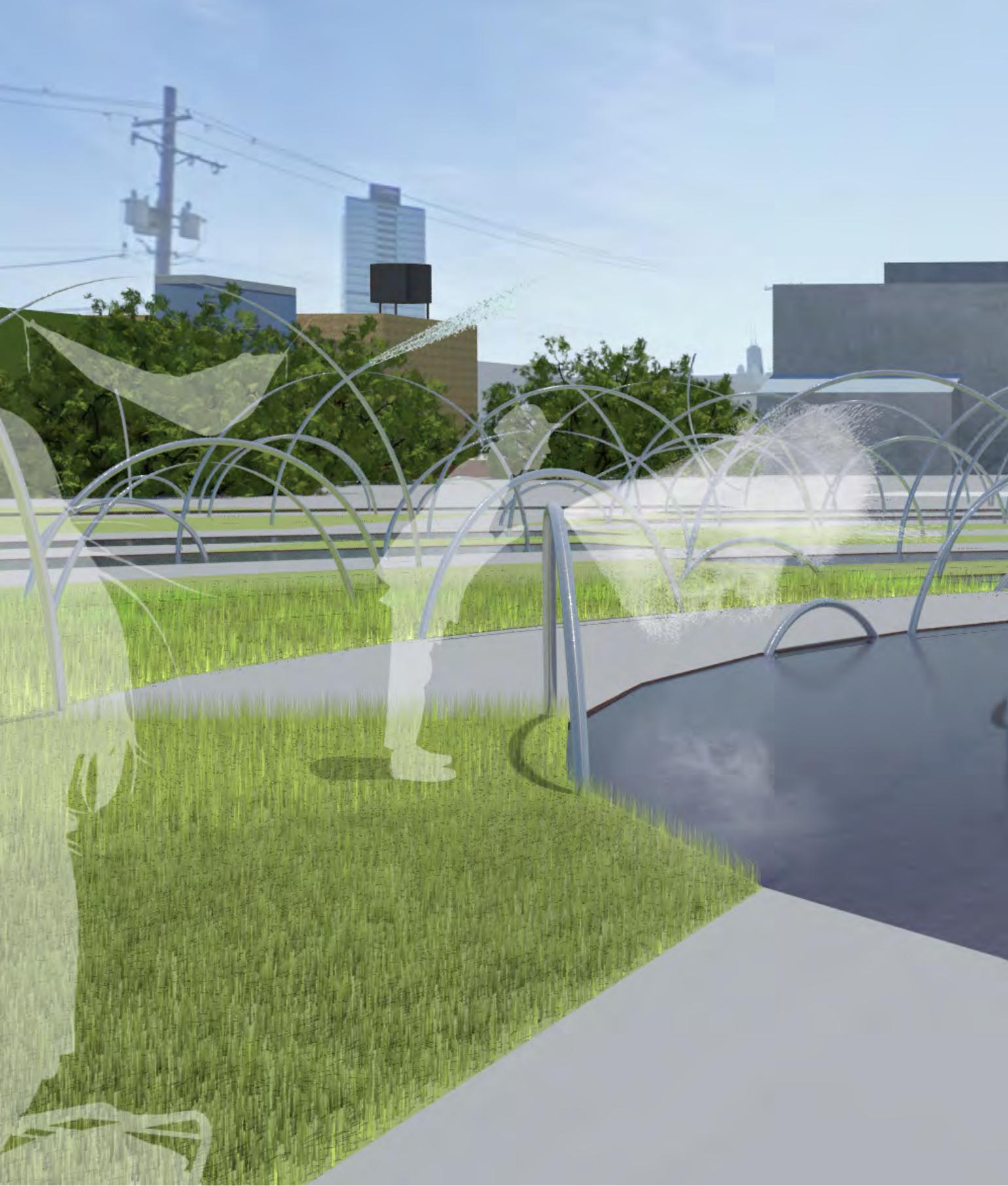
Fig. 4.10.  
Diagrammatic plans & view from above.  
Personal drawings

Fig 4.11.-4.15. (Next 5 pages)  
Personal renderings





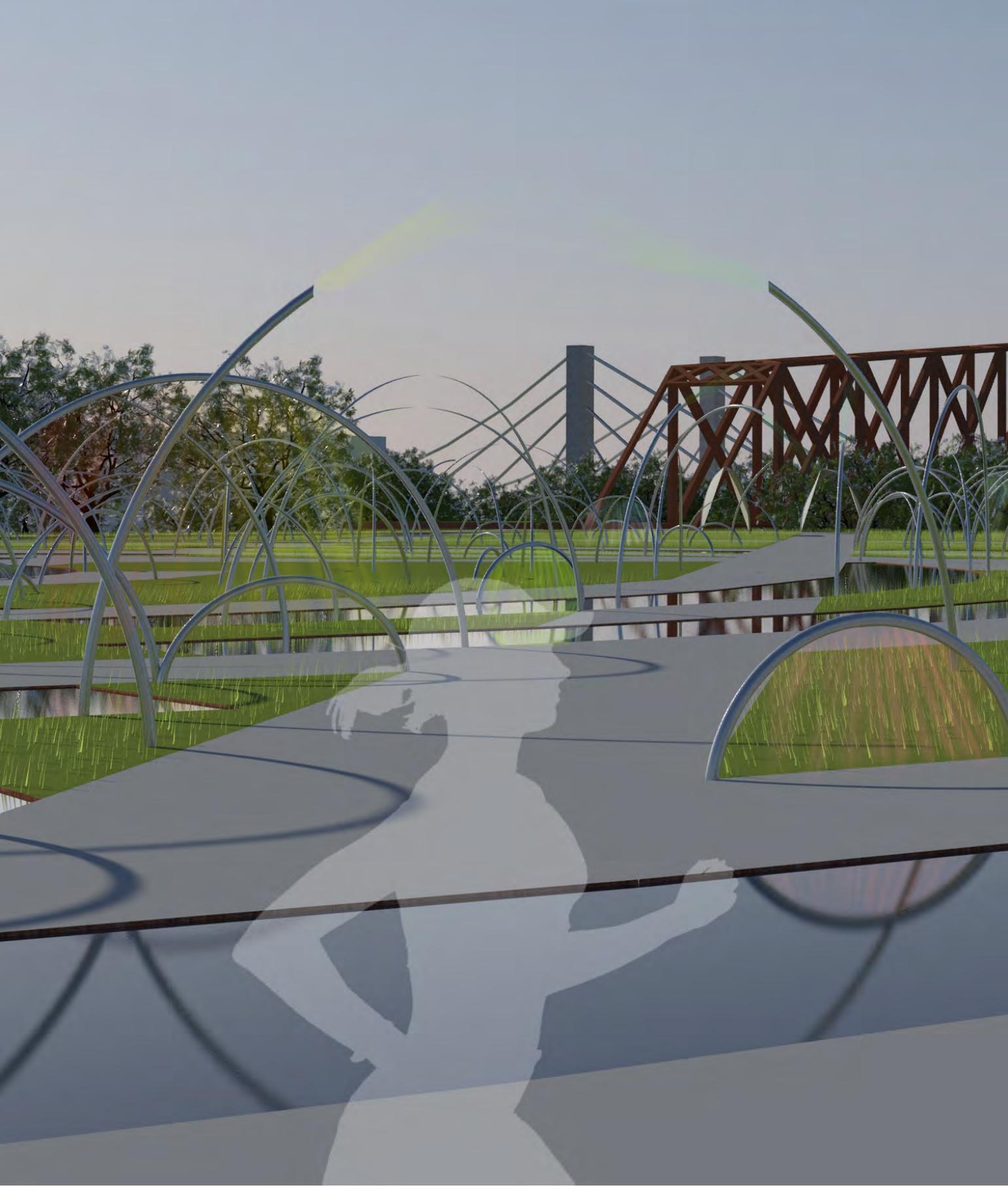


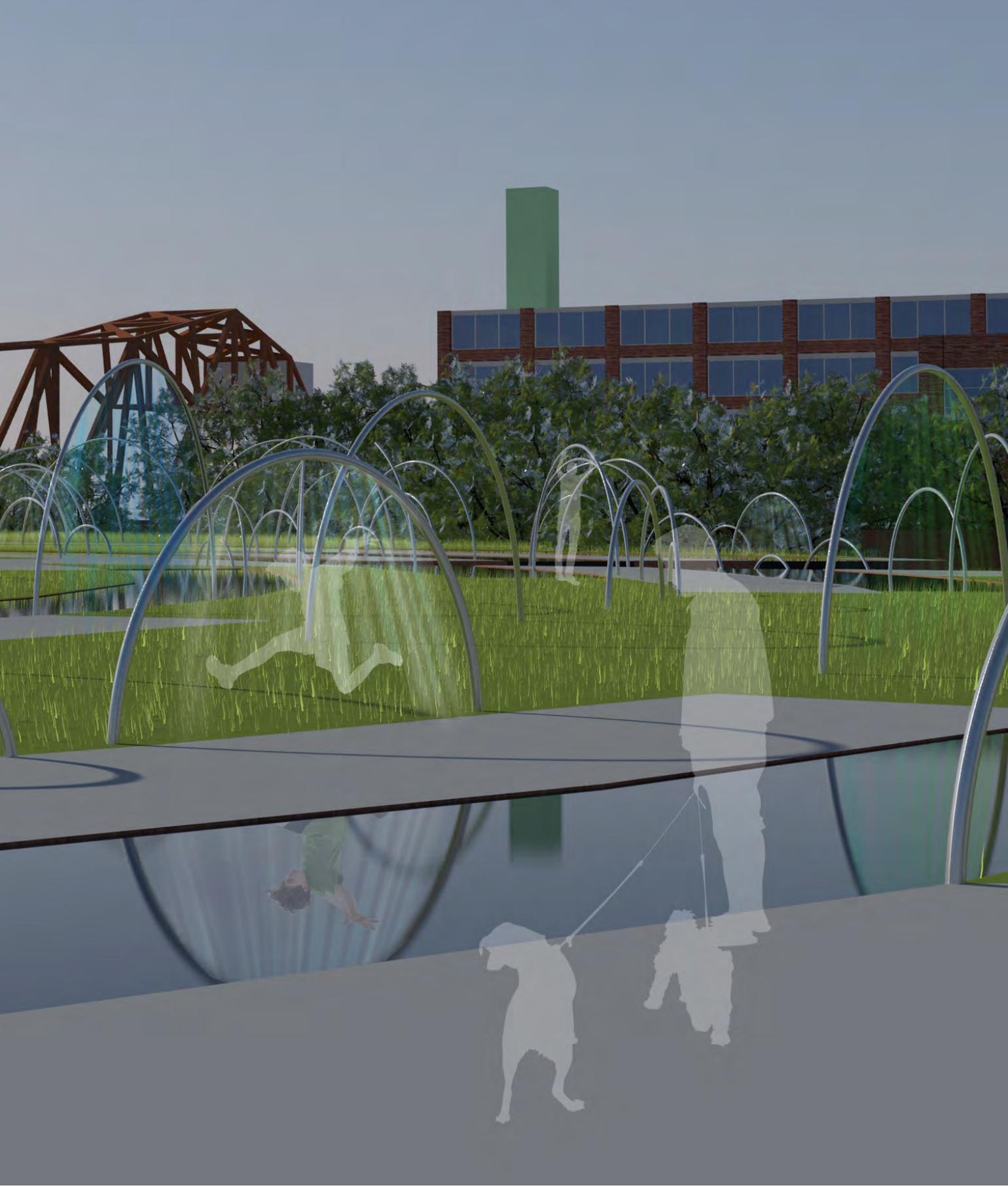






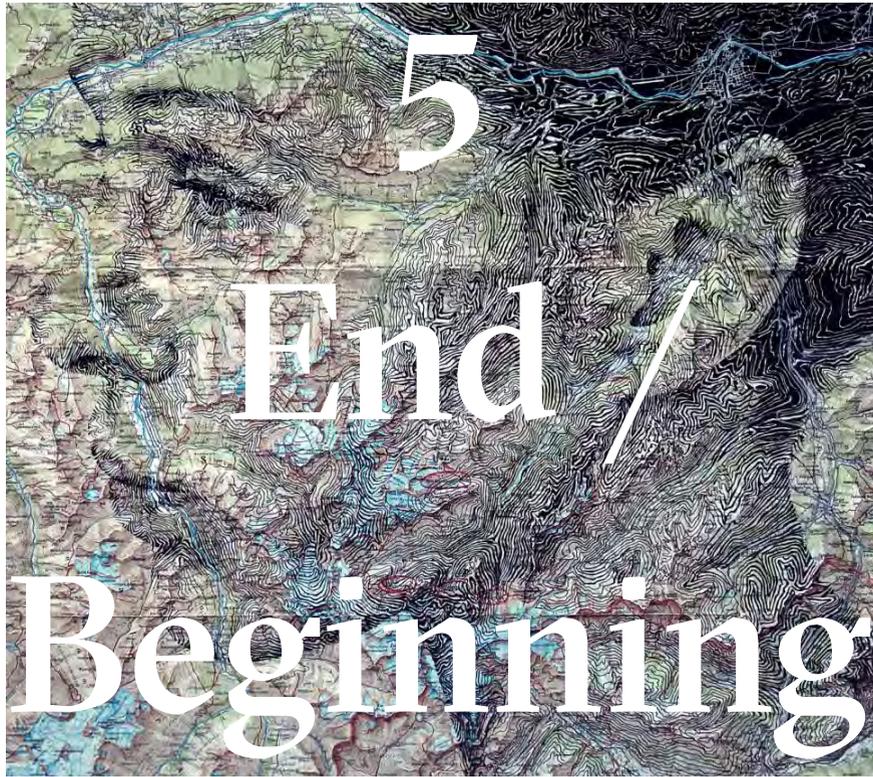












***Good public places enjoy connectedness, relatedness to immediate surroundings and to the broader community beyond. The space participates in a network, set, series, pattern that is larger than itself.***<sup>28</sup>

Through the study of and application of playful architecture on the north tip of Goose Island, the proposed design is an attempt to create a platform that sparks playful curiosity and promotes engagement of the city's inhabitants.

Centered on Goose Island and the urban riverfront of Chicago at large, the project site is but an outlet for urban design ideas in the exploration of what encourages and provokes interaction in people, creating a platform of shared experiences - 'triangulation' as William Whyte called it - in an otherwise inaccessible place.

And by doing so, insisting that this platform - as so many other inaccessible but otherwise great places along the riverbank - be made interconnected to each other and the larger city grid.

Fig. 5.1. Map of Innsbruck, Austria. Ed Fairburn. 2013

28. White, Edward T. *Path-portal-place*. 1999. Print

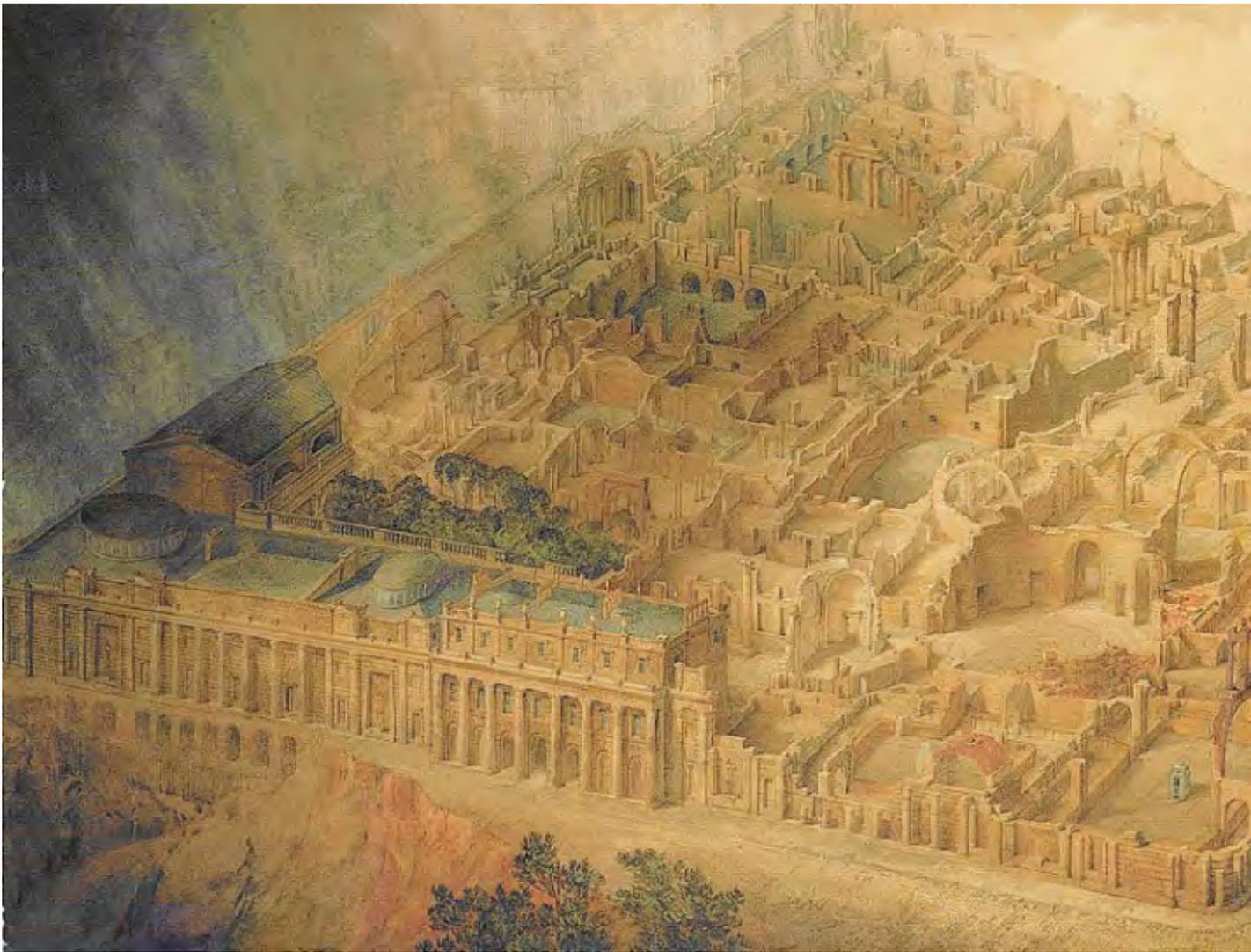


Fig. 5.2.  
Joseph Gandy's vision of the Bank of England in ruins, 1830.  
Image courtesy of the Sir John Soane's Museum of the Arts.



The North Branch's distinctive urban character is distinguished by its namesake waterway, which fostered the area's industrial development and nearby rail and expressway construction that all was a great industrial asset, but otherwise left the river and Goose Island inaccessible to the public.

As the area transitions to a more mixed-use employment center, compatible uses and more publicly accessible open space will be a key to its success. However, such ideas for the area are far from new but - they have been aired more than a 100 years ago, unsuccessfully.

*Urban design is four-dimensional – the fourth dimension being time.*

*Time impacts on almost every aspect of urban design – on the way the environment is perceived (i.e. over time and on the move); on the way places become imbued with meanings – over time; on how places last and adapt; how robust they are (i.e. on how places change over time); their morphological processes; and on the length of time that urban design processes take.<sup>29</sup>*

When presenting his vast renovations and extension of The Bank of England in 1830, the architect, Sir John Soane, showed the world a painting depicting and imagining the very same building in its future state of ruin. This is a rare example of an architect presenting the built environment, especially his own, as a future entity of flaws and imperfection. What is more interesting though, is his way of thinking of the future as a transitional one that cannot be defined but maybe better conceived through transitional drawings.



PAST \_\_\_\_\_



NOW \_\_\_\_\_



The design of the north tip of Goose Island builds itself into the transitional times of the island, creating an outdoor space of playful architecture in the midst of grand visions - which may or may not come to pass.

However, the proposed design hopes to ease the transition between such large-scale urban visions and the built environment of the city. By addressing the gap between the dreamt notion of tomorrow and the reality of today (and recollection of the day before), the design hopes to shorten the distance, bringing attention to previous design ideas through new ones. The design is a proposal of interaction and engagement in Chicago's future.

Fig. 5.3.  
Three aerial views of Goose Island looking south from 1960, 2016 and in transition, respectively



*Historical knowledge must be communicated to the public for its enjoyment and education. Words and pictures convey much, but real things make the deepest impression.* <sup>30</sup>

Bridging the gap between the grand plans for tomorrow and the unplanned living reality of today, the design leans on the industrial past and looks towards the politically contemplated future of this riverside location, gesturing towards an activation that bridges visions and reality, young and old, river and recreation, past and post.

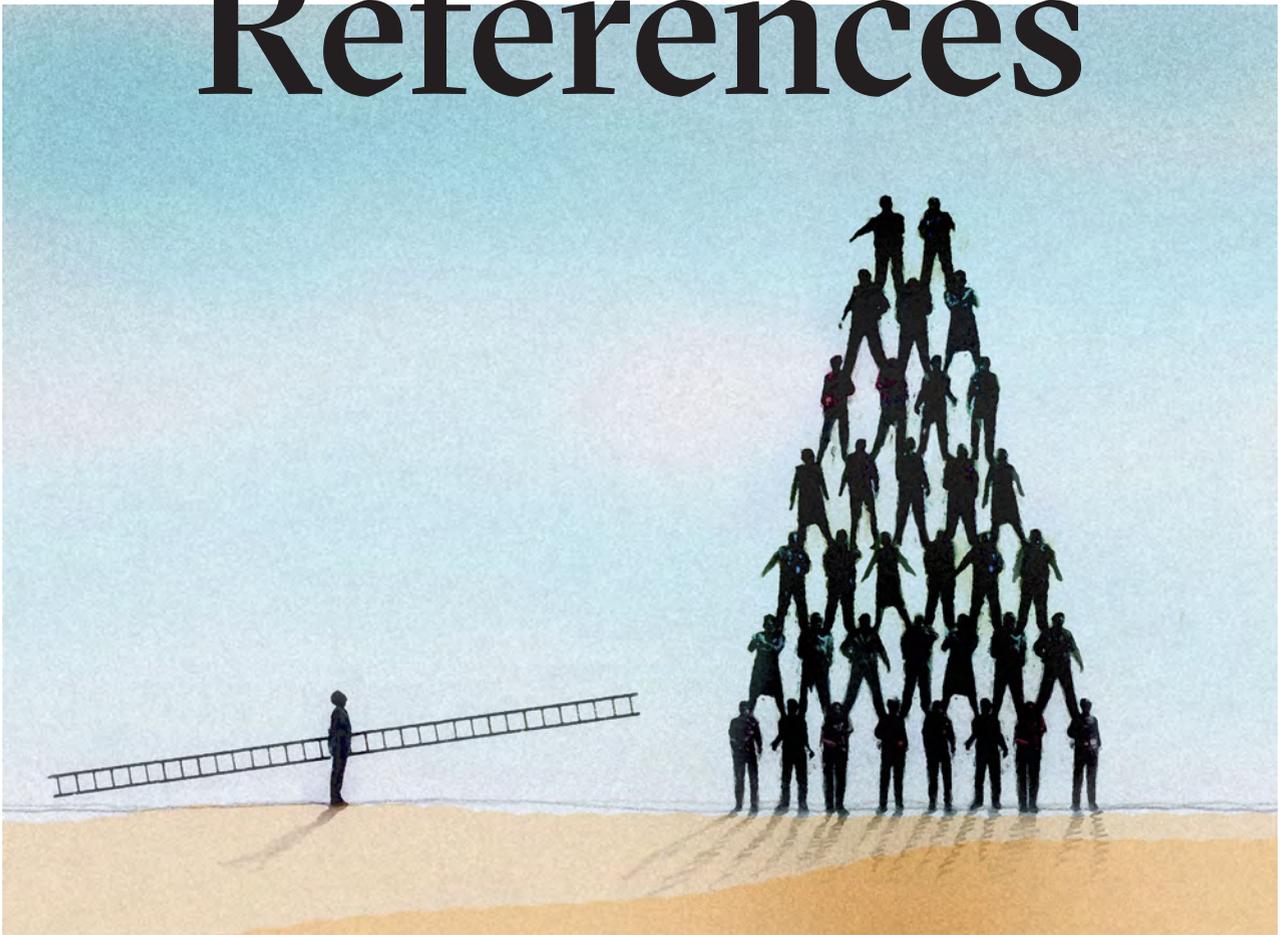


Fig. 5-4.  
Transitional design of Goose Island. Personal drawing on top of an existing visualization from  
*North Branch Corridor Framework Design Guidelines*.

30. Lynch, Kevin. *The presence of the past*. 1972. Print.

6

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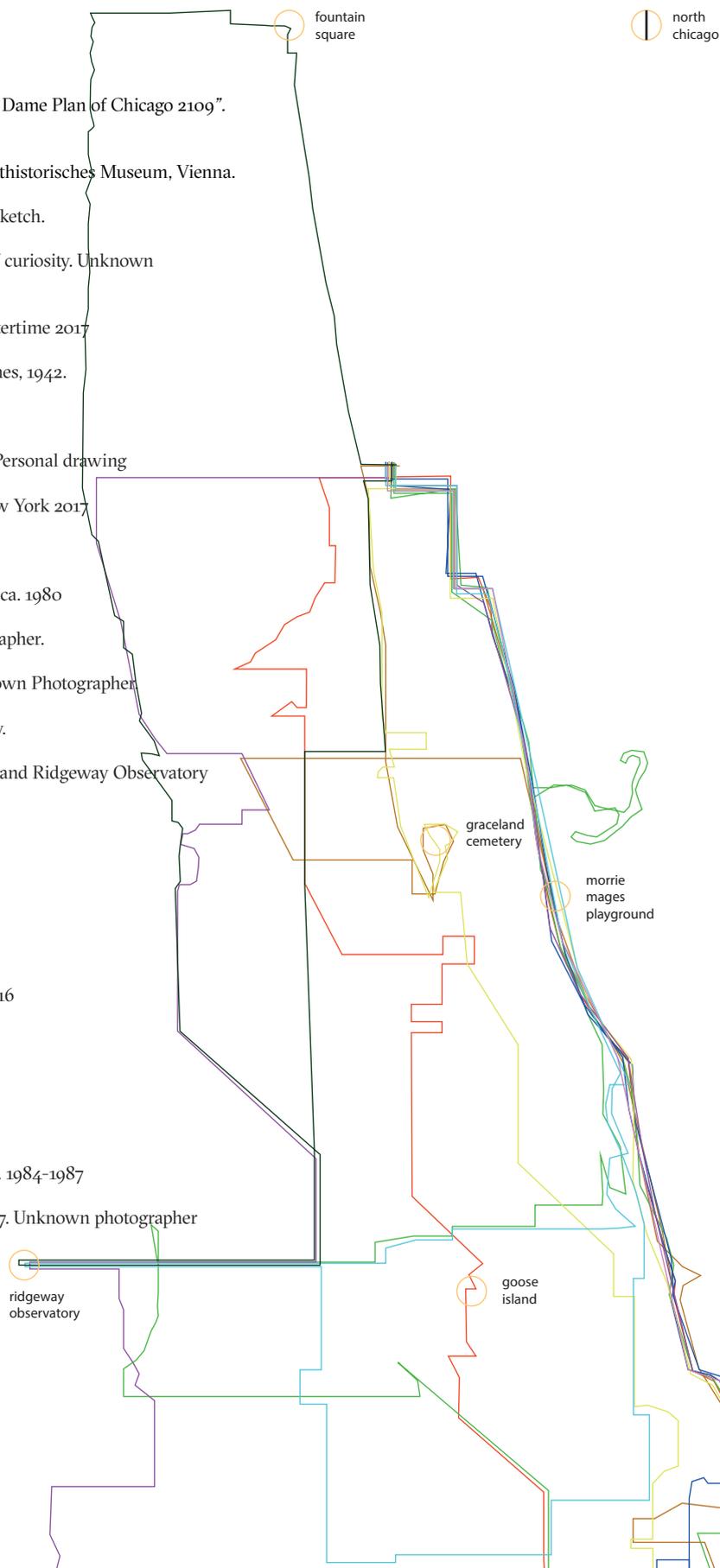
*What attracts people most,  
it would appear, is other people.*<sup>31</sup>

Fig. 6.1.  
The hierarchy of Human needs and design concerns. Unknown artist

<sup>31</sup> Whyte, Willam H. *The Social Life of Small Urban Places*. Project for Public Spaces. New York. 1980. Print.

# Image Citations

- Fig. 0.1. The Notre Dame Graduate Design Studio. "The Notre Dame Plan of Chicago 2109". 2009. Accessed July 28 2017.
- Fig. 1.1. Bruegel the Elder, Pieter. *Children's Games*. 1560. Kunsthistorisches Museum, Vienna.
- Fig. 1.2. Map of visited sites of interest in Chicago. Personal Sketch.
- Fig. 1.3. b/w photograph. New York alleyway with a shade of curiosity. Unknown photographer
- Fig. 1.4. Personal photograph. North tip of Goose Island, wintertime 2017
- Fig. 1.5. A sketch by Le Corbusier from *La Maison des Hommes*, 1942.
- Fig. 1.6. *Operating Architects*, Derek Bacon.
- Fig. 1.7. Neoteny, the retention of juvenile features in adults. Personal drawing
- Fig. 1.8. Boy looking, man cleaning. Personal photograph, New York 2017
- Fig. 2.1. Brodbeck, Mauren. *Extracoated*. 2008. Artwork.
- Fig. 2.2. Original drawing of *Plaza de Armas*. Miguel Angel Roca. 1980
- Fig. 2.3. Photograph. *Plaza de Armas*, 1980. Unknown photographer.
- Fig. 2.4. View of The 606 from Ridgeway Observatory. Unknown Photographer
- Fig. 2.5. Personal photograph. Kid running up the observatory.
- Fig. 2.6. Original plan drawing of The 606 Western Trailhead and Ridgeway Observatory
- Fig. 2.7. *The Rope Show*. UNO. 2015
- Fig. 2.8. *Vær i Vejret (Stay in Weather)*. Olafur Eliasson. 2016
- Fig. 2.9. *Labyrinth*. Gijs Van Vaerenbergh Architects. 2015
- Fig. 2.10. *Maze Washington*. Bjarke Ingels Group, BIG. 2015
- Fig. 2.11. *Construction site of metro station*. Brian Ulbrichsen. 2016
- Fig. 2.12. *Reflecting Gardens*. Jeppe Hein. 2017
- Fig. 2.13. *Meeting*. James Turrell. 1980
- Fig. 2.14. *Field of Light*. Bruce Munro. 2014
- Fig. 2.15. Original drawing of *Parc de Villette*. Bernard Tschumi. 1984-1987
- Fig. 2.16. Picture of *Parc de Villette*. Bernard Tschumi. 1984-1987. Unknown photographer
- Fig. 2.17. *Dance-O-Mat*. F3 Design. 2012
- Fig. 2.18. *My Playground*. Gustin Landscape. 2017



- Fig. 3.1. *Guérin, Jules*. Illustration of the *Plan of Chicago*. Burnham, Daniel and Bennett, Edward. Commercial Club of Chicago. 1909.
- Fig. 3.2. *Guérin, Jules*. Illustration of the *Plan of Chicago*. Burnham, Daniel and Bennett, Edward. Commercial Club of Chicago. 1909.
- Fig. 3.3. *Guérin, Jules*. Illustration of the *Plan of Chicago*. Burnham, Daniel and Bennett, Edward. Commercial Club of Chicago. 1909.
- Fig. 3.4. Photograph of Chicago Main Post Office in 1953. Unknown photographer.
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- Fig. 3.6. Personal drawings. The water systems of North America.
- Fig. 3.7. *California Cycleway, 1900* (courtesy Pasadena Museum of History)
- Fig. 3.8. Original cross section of the *Elevated bicycle track* from "To Pedal Up in the Air". Chicago Tribune. June 7 1897. Web. Accessed 28 July 2017.
- Fig. 3.9. Photograph of the swimming race of 1908 in the Chicago River
- Fig. 3.10. Site plan of the visualizations from *North Branch Corridor Framework Design Guidelines*. City of Chicago. Department of Planning and Development. May 2017. Print.
- Fig. 3.11. Personal drawing. Three aerial views of Goose Island looking south from 1960, 2016 and 2066?
- Fig. 3.12. Schematic diagram of the relation between time and ideas. Personal sketch.
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- Fig. 4.4. Model pictures. Personal photographs
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# Image Citations

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- Fig. 5.1. Map of Innsbruck, Austria. Ed Fairburn. 2013
- Fig. 5.2. Joseph Gandy's vision of the Bank of England in ruins, 1830. (Image courtesy of the Sir John Soane's Museum of the Arts).
- Fig. 5.3. Aerial view of Goose Island looking south from past, now and transition, respectively
- Fig. 5.4. Transitional design of Goose Island. Personal drawing on top of existing visualizations from *North Branch Corridor Framework Design Guidelines*.
- Fig. 6.1. The hierachy of Human needs and design concerns. Unknown artist
- Fig. 6.2. Personal photographs. New York 2017.

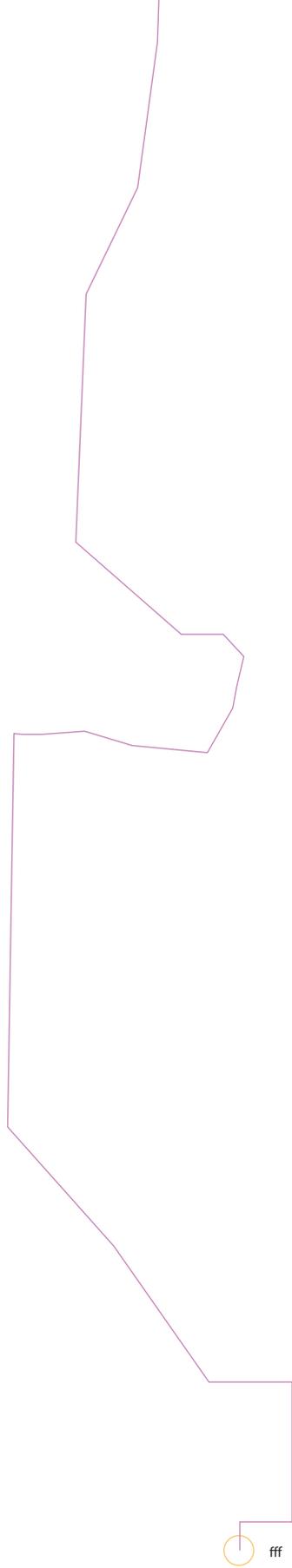
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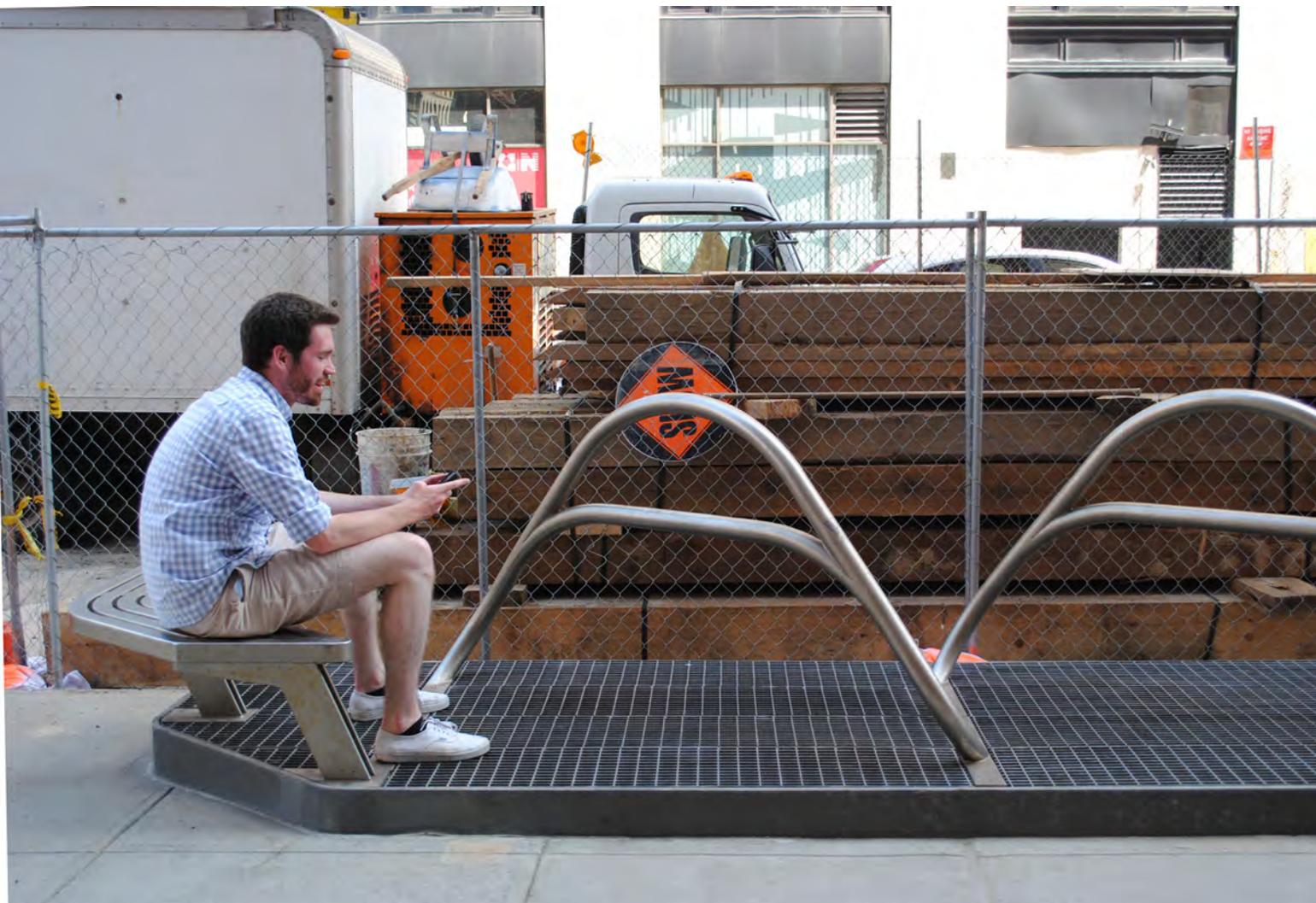
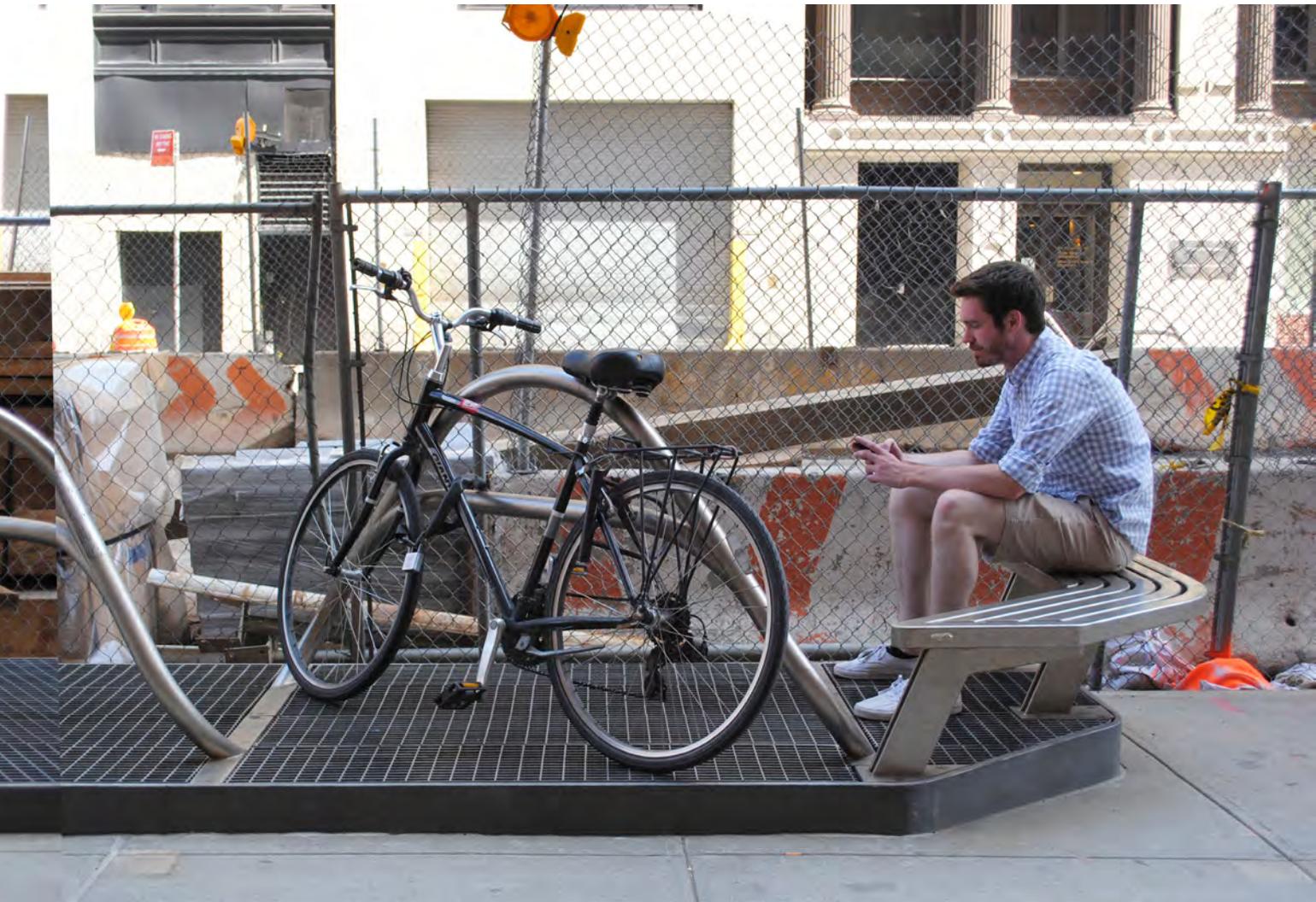


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*The opposite of play is not work,*

*it's depression.*<sup>32</sup>



