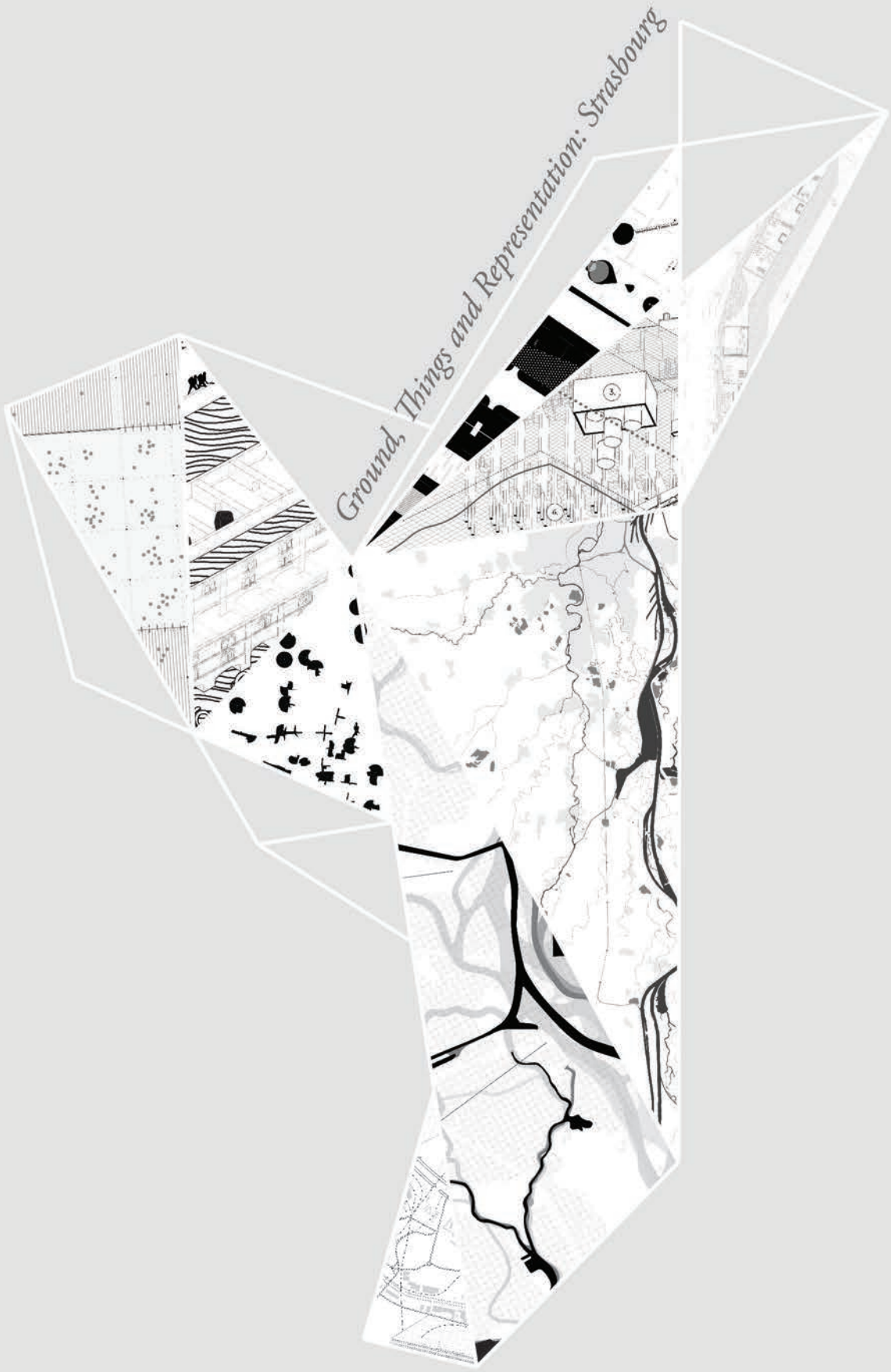
Ground, Things and Representation: Strasbourg

MSc3 GRADUATE STUDIO (AR3AP131)
MSc3 THEORY SEMINAR (AR3AP010)
Academic Year 2017/18, Fall Semester
TU Delft

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STRASBOURG

GROUND, THINGS AND REPRESENTATION

Theme

The Public Building graduation studio deals with the city as an intersection of geology, bureaucracy and civic sphere. The territory of the city is considered as a field of contradictory desires. Rather than pretending to resolve anything, the project is seen as an opportunity to give form to these contradictions. Rather than musing on the significance of the city in general, the studio is interested in the specificity of a particular urban-territorial condition informing design. That specificity is to be revealed by analysis of tendency, precedent, and the ground and systems underlying the territory.

Site

The studio in Strasbourg for the 2017-18 academic year is the third installment of a series that started in The Hague (2015-16) and moved to Luxembourg afterwards (2016-17). Strasbourg, as another mid-size European city and another bureaucratic and representational stronghold, will be the next step in this inquiry into the possibilities of architecture to engage which the question of accomodating disproportionately significant institutions relative to its dimension as a city. More specifically, Strasbourg invites speculation on the role the city itself can play in shaping institutions that have landed or will land there, beyond the Strasbourg that is simply the most entrenched EU-symbol, reifying the Franco- German compromise seen as the foundation for the EU-edifice.

Structure

The groundwork for the studio is formed by a research involving three moments of inquiry, analysis and drawing the territory in question. (1) The 'survey' produces first a field of knowledge across the territory: not just by producing a map to represent its geography, but to offer a drawn speculation in order to (re)discover reality and 'take measure'. (2) A second moment, 'systems', produces a more abstract, but specific, diagram of relationships projected on the territory, rendering evident the way it is appropriated by the different regimes acting upon it. (3) Lastly 'things' considers artefacts an sich indebted in a reciprocal way to the territory that accommodate them.

Theory

In parallel to the studio program, theory seminars aim to (1) deepen theoretical thematics, (2) clarify the terminology and method used, and (3) frame the studio within historical and contemporary discourse. These seminars result in an individual theory essay.

Filip Geerts

CONTENTS

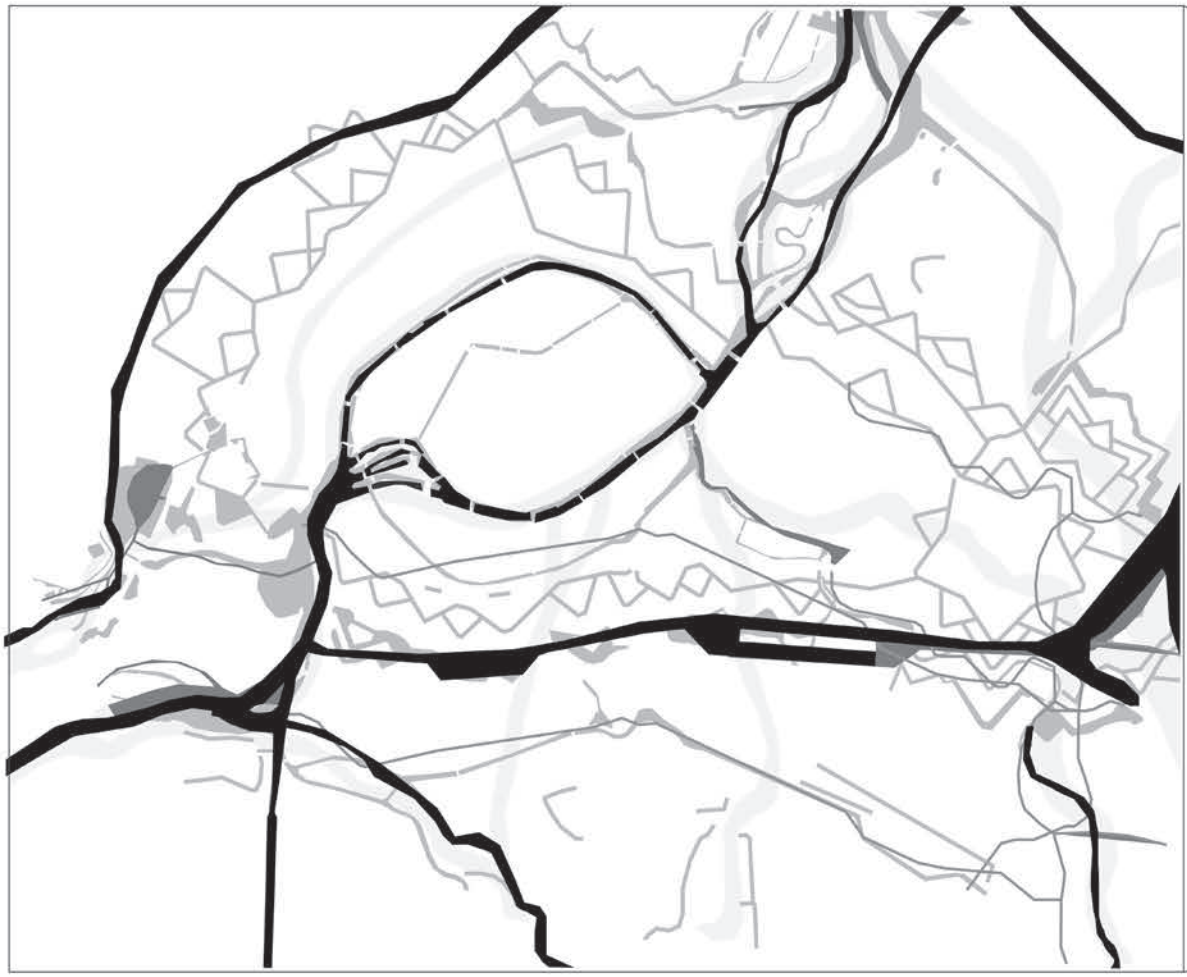
This book collects the research output of the Strasbourg graduation studio as a joint, open-ended effort, presenting an equally broad and nuanced reading of the city. Structuring the material according to particular findings and areas of interests, the book is divided into four major themes able to comprise different scales and levels of abstraction: Landscape, Field, Border and Flux. However, in the above table, one can trace each contribution back to its original segment within the overall course structure (survey, systems, things), as well as to the individual author.

LANDSCAPE

TRACING THE MAN-MADE

The city of Strasbourg is characterised by its relationship to its water, consisting of a set of interconnected canals between the River Ill and the Rhine near its confluence in the lowland "Upper Rhine Graben" – a major rift between the Vosges Mountains in France and the Black Forest in Germany. The network of rivers and canals in its territory are heavily modified by the interventions of man. Originally, the Rhine was widely braided with islands, sand, gravel flats and floodplains, which created a highly diverse system of habitats. Now, virtually all of the water systems have been canalised and regulated by locks and weirs to connect Strasbourg with other port cities and to control the flows and flooding of the rivers - shaping the ground upon which Strasbourg is built: the landscape that is Strasbourg.

Not only does the Rhine mark the border between France and Germany - it also provides the city access to fluvial trade with other port cities and, through Rotterdam, the world. Although Strasbourg is France's border city on the Rhine, the city itself is not situated on its banks. Instead, the port of Strasbourg is located on the Rhine – in-between the city and the German border town of Kehl. In the past, the port was located in the central areas of the city, yet, in time, moved closer towards the Rhine - making what is now its second-largest river-port. This movement lead to a recent trend of a number of waterfront conversions in the city, starting yet another chapter in Strasbourg's complex geography.



2013

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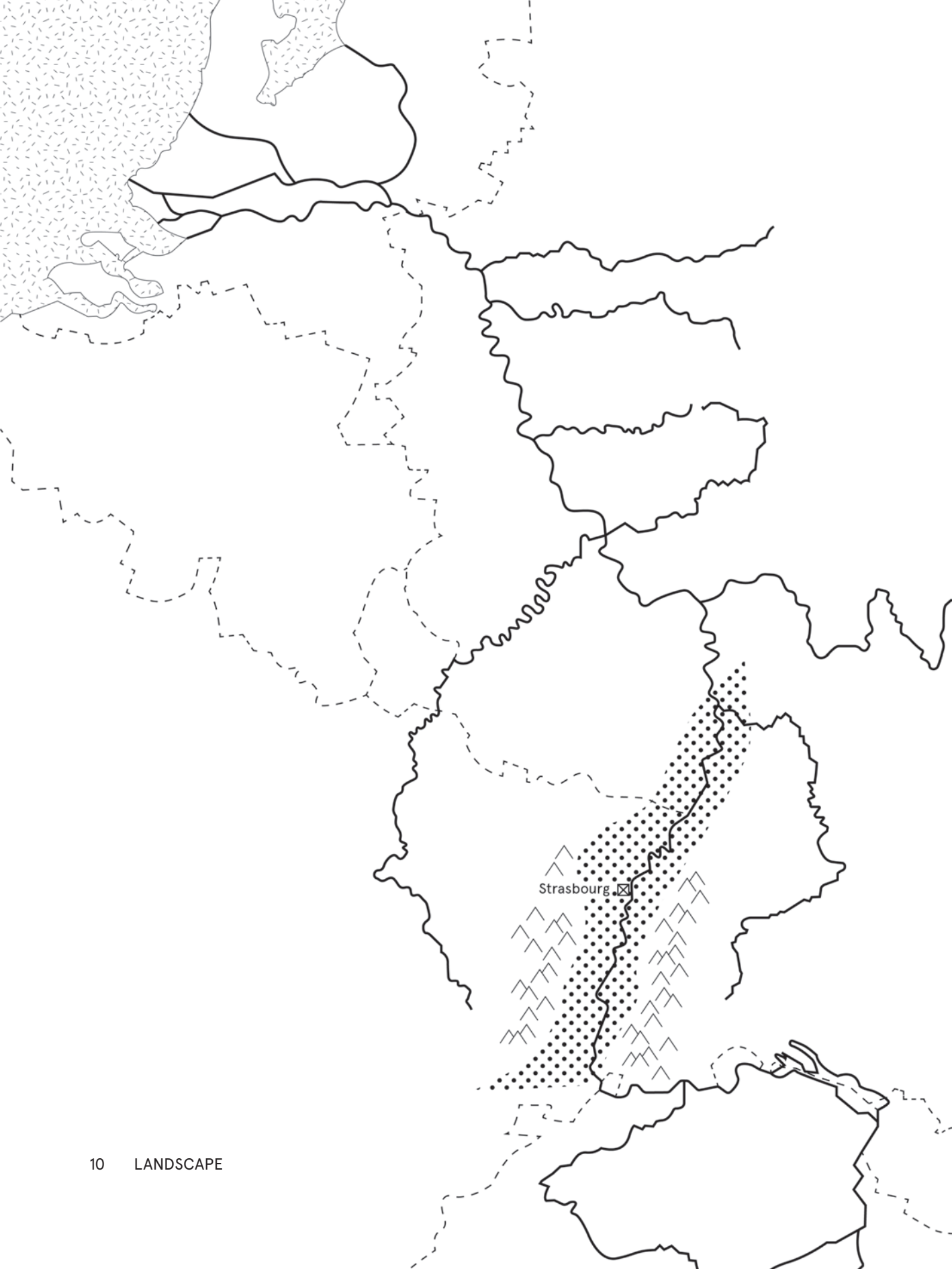
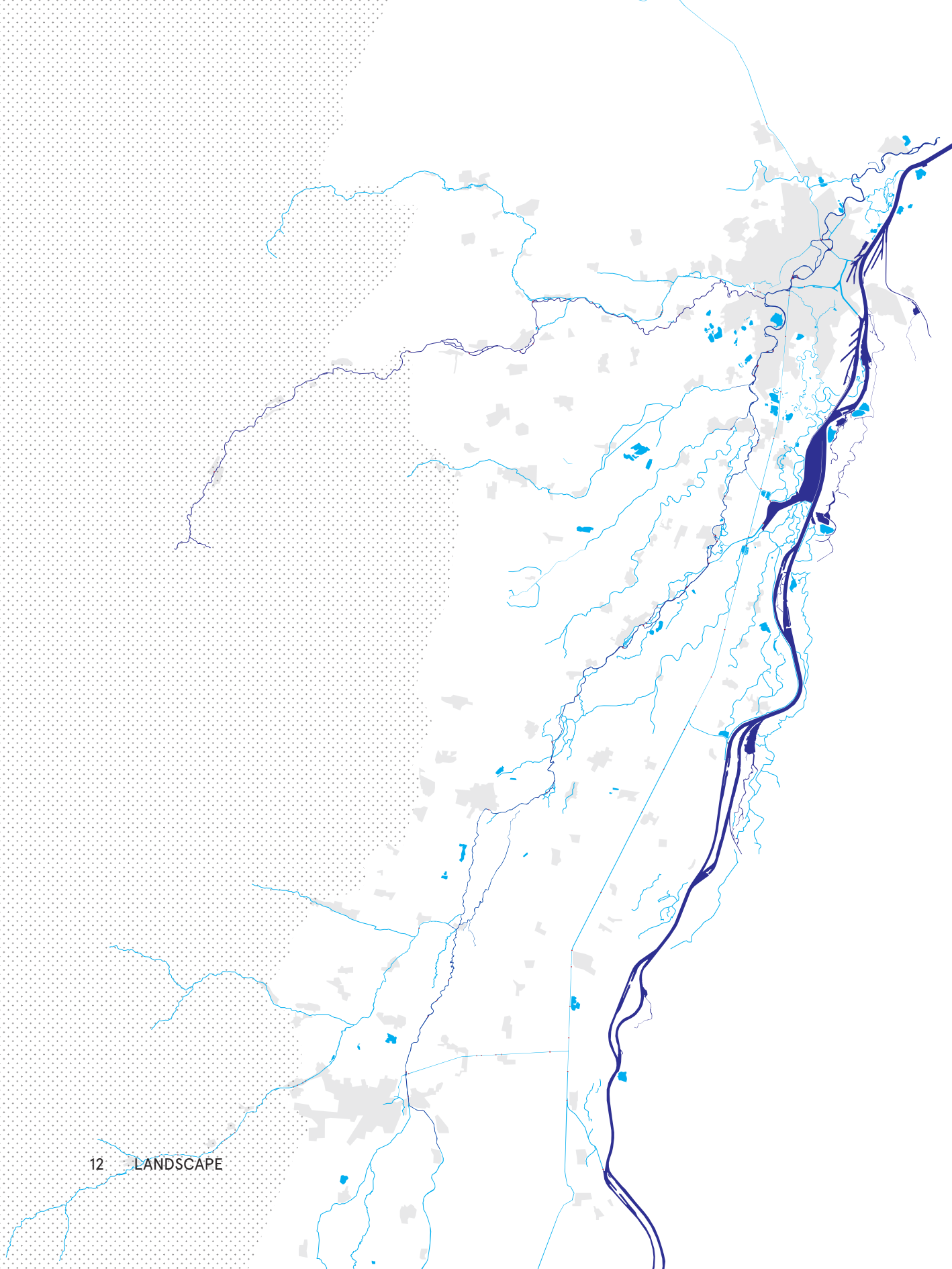

Strasbourg

UPPER RHINE GRABEN

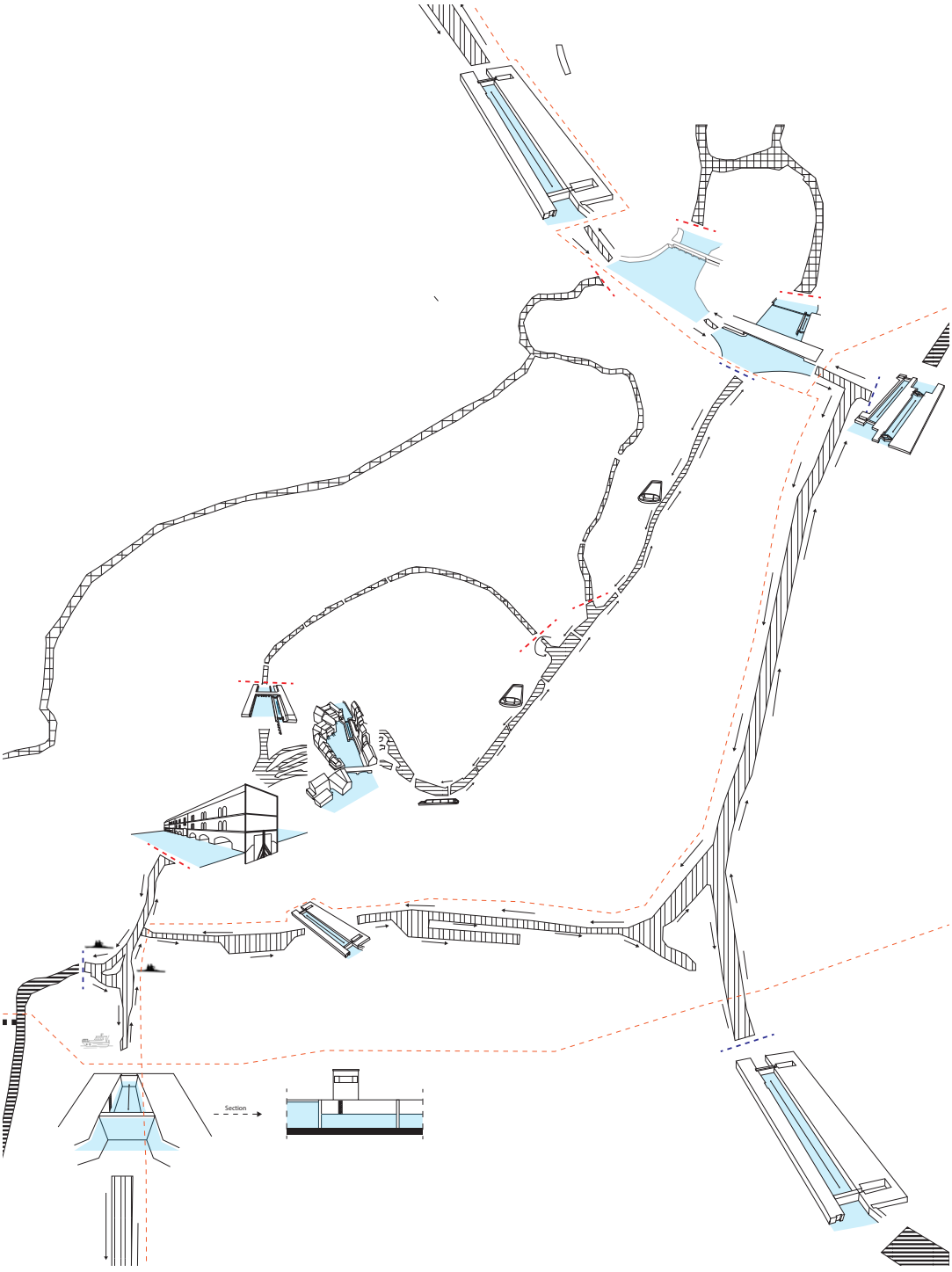
Strasbourg is in the middle of the 'Upper Rhine Graben' - a major rift between Germany and France. It came into being when the Alps were in their early stages, and coincided with volcanic activity. Graben, which means 'ditch' in German, result from downward displacements of the crust, raising its parallel crust areas. In the case of the Upper Rhine Graben, the crust 'sank' partly due to its underlying aquifer. Parallel to it, low mountain regions were formed, now known as the Vosges Mountains in France and the Black Forest in Germany, with altitudes up to ca. 1500m.

Although there is very little seismic activity in the Upper Rhine Plain, it has been recorded in the past. One major earthquake that has been recorded in history is known as the 1356 Basel earthquake, which levelled the city of Basel and all surrounding castles and churches within a radius of 30km. While it is not entirely clear if this earthquake was due to seismic activity within the graben or in the Alps, there is concern, today, for the Fessenheim Nuclear Power Plant, which is located on the graben.



HYBRIDITY OF THE CANAL SYSTEM

The extensive network of the canals surrounding Strasbourg provides an in depth overview of the man-made canals and the natural river systems. With the extensive growth of the urban fabric the water system continued to adapt, creating intricate lock systems that control the flow of the water. As urban structure continued to develop the canalization of existing natural water systems occurred, resulting in the current situation in which the difference between natural and man-made structure is fading resulting in hybrid systems. While the canals pass along the towns and cities with locks being introduced in order to control the water, another level of control is introduced where water is being diverted towards the larger rivers such as the Rhine. The large scale of the map also shows the origin of the canals as they initially were used for trade and to obtain raw materials from queries. The greater overview makes the system more comprehensible; as the smaller canals from the mountains slither towards the larger systems the canal merges into the system.


Section

SYSTEMIZATION OF THE CANALS

As the urban fabric became more complex the water system followed, as it transitioned from a trade orientated system towards a recreational system. While certain canals were closed up over time, the remaining canals were systematically divided into areas in which certain activities were prohibited. The preexisting locks such as the Barrage Vauban and Pont Couverts besides managing water flow also controlled the entrée of specific boats. As recreational activities became more prominent within the city, certain level of control was needed. The map provides an overview in which each canal contains a specific function, while locks provide a moment of transition and are therefore control gates within the system. Movement of the water traffic is another measure of control, which is highlighted in the system as certain canals have become abandoned while others are systematized to the point that it functions like other infrastructures.


200 m

FLOODPLAIN AREA

The intricate system of canals in Strasbourg despite transitioning into a controlled system in which locks and water retention basins control the flow of the water system. There remain flood prone areas within and around the city of Strasbourg. The series of maps focuses on a complex region where the embankments along the canalized Ill River function as flood plains. The edges along the flood area provide moments of tension, where public buildings such as a hospital are placed along the border of the area. The regulations of building near flood prone areas and how the edges function remains a question, where the boundary keeps being pushed.

- Water
- Greenery
- Buildings
- Schools
- Depot CTS Tram-bus
- University hospital
- Shops


46. CARCASSONNE — Le Canal du Midi

THE HYBRIDITY OF CANALS AS THEY TRANSITION

MERVIN HARTOG

Introduction

Historically canals were an important factor during the development and growth of cities. The canal systems of today only represent a fraction of the numbers that once drove the economic growth, they were a prerequisite to further urban growth and trigger the industrialization of cities. Canals were an infrastructure that dictated the movement of bulk raw materials like coal and ores, which were not affordable without the usage of water transport. The usage of these raw materials dictated the industrial development leading to the growth of new industries, economies of scale and raised the standard of living. The larger ship canals that withstood the advancement of the urban development and its surrounding infrastructure have pertained some of its original function. Being predominantly used by bulk cargo and ship transportation industries, while the smaller inland canals that once pertained significant importance in the overall network have either been filled in, abandoned or have been repurposed.[1]

The overall replacement of the canal system was a gradual process, where the shipments through canals were slowly being substituted by a faster, cheaper and less geographically constrained system, which was embodied in the form of the new railway system. It was this flexibility that allowed for a more direct routing from one station to the next. As new transport continued to develop the canals began to lose the ability to compete with the new systems, slowly switching to recreational purposes while lock and dam systems were maintained for flood control. The significance of the canals within cities will be questioned throughout the essay, as the relationship of the water system and the urban fabric has changed through the course of history.

Strasbourg, a city containing an intricate canal system was initially the Roman military settlement Argentoratum. The location was a strategic point, being an island that was surrounded by the Rhine, Ill and Bruche rivers. The city continued to expand over time, leading to developments in the existing water system.[2] The development in the canal system around Strasbourg was dictated by the needs of the city, being initially a military settlement the fortification was integral part of the city. Canals such as the Canal de la Bruche were dug in order to obtain raw materials. Whereas smaller trenches were formed around the fortification areas as a buffer zone, as the city developed these trenches were covered over time.[3] While some of smaller canals remained, many canals related to the fortifications were filled over time. The function

1
R. Wilde, The Development of Canals in the Industrial Revolution.

2
The Editors of Encyclopaedia Brittanica.

3
E. Claerr, Les principaux canaux alsaciens

of the remaining canals changed from a navigational and trade purpose to recreational activities.

The canalization of existing rivers along the digging of new canals has been an ongoing trend. An example of this would be the Rhine River, which experienced canalization over time in order to straighten areas and create artificial beds that improved the navigational purpose of the river. It is the continuing act of tampering with existing rivers and artificial canals, which has made the clear distinction between natural and man-made water structures a grey area. The cases that will be discussed through the essay are examples of canal and river systems that have adapted and changed due to external changes. They provide a wide scope of different scenarios in which the notion of the canal is questioned and needs to adapt in order to survive in the new system of today's society. The clear border between man-made and natural water systems has faded as hybrid systems grow due to the continuous adaption of the water network. This led to the question of:

To what extent have canals been adapted into the modern day urban landscape? With new modes of transport and the continuing growth of cities, do canals still possess a purpose within the city?

Canal du Midi – Recreation

With the canalization of natural rivers the clear distinction between man-made and natural water systems has faded over time. However when we look at the Canal du Midi, which was one of the first canals dug in France, it can be considered a prototypical example of the notion of a man-made canal. The Canal du Midi is a canal that links Toulouse to the Garonne and was dug in the 17th century.[4] The project was initiated with the purpose of linking the Atlantic and Mediterranean, providing an inland route that in turn avoided the treacherous route around the Iberian Peninsula. It was in the 19th century that the Garonne Canal was dug which extended the Canal du Midi, linking the Atlantic with Mediterranean.[5] The canal became a popular route for trade, leading to the adaption of boats in order to travel along this route. Freighters were even specifically designed in order to travel through the canal. This in turn also opened up cities such as Toulouse to trade.

fig. 1.

When we look at the Canal du Midi in comparison to the Rhine River they possess similar purposes. However unlike the Rhine, the Canal du Midi is an artificial channel that contained an extensive system of locks as it travelled through the country. The canal is considered a summit-level canal, which meant that it connected two river valleys and that the canal rises and falls.[6] Traditionally cities were built alongside rivers, however a man-made canal has the advantage of creating an entire new route, linking cities alongside.

The excavation of Canal du Midi was a pivotal moment in history, being a canal that became an integral part for inland trade. Allowing larger cargo to be transported without the need to travel around Spain. As new modes of transport were presented the Canal du Midi began to struggle, as the introduction of the railway system brought a cheaper and more flexible transport system. Losing its initial purpose while being such a large-scale project, the need for repurposing was essential.[7] Unlike smaller scale canals, this canal connected multiple cities and traversed along entire regions. Taking advantage of the mesmerizing changes in landscape as one follows the canal from east to west. The introduction of recreational activities such as bicycle routes and boat tours put the canal back on the map, it also meant that no major changes were needed. The canal also functioned as a reservoir for agriculture during dry seasons; the state had irrigation pumps installed along the canal. The

4
D. Edwards-May, Canal du Midi.

5
C. Mekerji, Impossible Engineering: Technology and Territoriality on the Canal du Midi, p. 15.

6
C. Marsh and E. John Davies, Canals and Inland Waterways.

7
Mekerji, p. 79.

insertion of this function along the canal system was one of the primary reasons for maintaining the canal after losing its initial commercial function. This along with gaining the status as a World Heritage Site by UNESCO meant that original state of the canal was preserved and maintained.[8]

The Canal du Midi is in essence a prototypical example when it comes to the historical changes that a canal experiences. Being initially an element that improved a city's trade possibilities along with other factors. The introduction of railway and road systems meant that its initial advantage began to fade. Being this entire man-made entity, containing an extensive succession of locks that move through valleys and different landscapes. The entirety of the project pertained a significant value, as urban fabrics have merged alongside the embankments of the canals. As mentioned before the canal opened up possibilities for trade in cities such as Toulouse.

The canals in Strasbourg transitioned in a similar fashion, being initially important transport routes in order to obtain raw materials along with smaller canals that functioned as buffer zones along the fortification.[9] However as new modes of transport were introduced and the fortifications broke down. The function of the canals needed to change or be removed. The expansion of the city contained repercussions for the surrounding canals that once were the peripheries of the city. Currently the canals have become more of a dividing factor, creating segments in the city that are connected by bridges. While the Canal du Midi being on a grander scale, meant that it did not divide cities, but rather passed through landscapes were settlements would be positioned alongside it. The canal remained a element that connected cities through the medium of water, as private boats and tourist boats moved from one city to the next. The shift towards recreational activities meant that canals could still function and remain a defining landscape feature within or outside the city.

Lowell – Industrial Heritage

The case of Canal du Midi shows a transition of a canal system where no physical changes were needed in the existing structure. While irrigation pumps were integrated into the system, the original framework remained and continued to be maintained.[10] The city of Lowell, Massachusetts provides a system of canals that adapted over time in order to become part of the intricate industrial system of the city. The canal system was initially part of a transport route, starting with the Pawtucket Canal that mitigated and increased the flow of timber and transport of agricultural products. However as demand dropped the flow of transport followed. The function that it originally held as a transport route began to shift over time. A complex canal system was introduced that interlinked with the original system. Francis Cabott Lowell initiated this idea in order make use of the potential

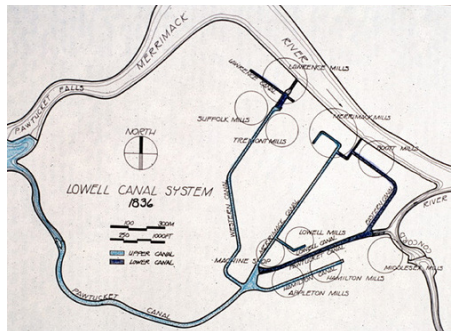


fig. 2.

power that the Pawtucket Falls possessed. The complex canal system was meant to harness the power of the Pawtucket falls along with the surrounding rivers. The original Pawtucket Canal became the feeder of the system that started in 1822. As the system expanded more canals were added, branching out from the original canal in order for the water to drive the machinery of the mills. The textile mills were built alongside the canal, providing an integrated system. The usage of the canals put Lowell on the map as one of the first great industrial cities in United States.[11]

The synergy between the canal system and the textile industry in the city meant that the city placed a heavy reliance upon the canal system. The growth of the textile industry in Low-

8
S. Priwer and C. Phillips, Frameworks, Dams and Waterways, p. 24.

9
Claerr.

10
Priwer and Phillips, pp. 66-67.

11
A. Lorenzo, Hidden Waterways of the Lowell Canal System p. 47.

ell depended on the efficiency of the canal system. However overtime the city lost its status, as neighboring cities began to grow. Due to the one-sided nature of the canal, which was pushed by the city. The loss of importance of the textile industry had a heavy impact on the canal system. However the integration of the canal system into the urban fabric as a source of power shows a high level of synergy and dependency on the system. While being a delicate system the level of interaction between land and water is quite high. The canal system like the industrial elements of the city are defining element of the urban fabric. The level of importance was to such a degree that the historic districts were preserved, introducing the Lowell National Historical Park and Preservation District.[12] The industrial structures of Lowell contained a lasting heritage, which included the canal system.

> Becoming a historical monument despite losing its function in the industrial system and shifting towards recreational purposes has led to the complete preservation of the system. The historical significance provided the opportunity of maintaining the original system, however unlike the case study of the Canal du Midi in which a new working function was implemented. The canal system in Lowell has become more of a museum piece rather than a system that has been revitalized. While tours are organized through the canals the, the economic significance that it once pertained as an industrial system has been lost.[13] However the canal remains a cultural aspect of the city, containing historical significance for locals and visitors.

Valencia River - Park

While canals have changed throughout time, being affected by the surrounding urban fabric, losing its initial function as a transport route. The discussion of canals being repurposed has been evident globally. However in Valencia one of oldest cities in Spain the existence of a river caused for immense problems, which eventually led to a plan to divert the river. The city of Valencia initially had the Turia River going through city, however after experiencing major damage during a flood in 1957.[14] The city embraced the concept of diverting the river in order to reduce flood risk. The issue of flooding has been a problem globally, as cities as discussed previously tend to position themselves near a source of water. Valencia undertook a major shift by diverting the river around the southern periphery of the city.

The diversion of the original water system meant that the old riverbed dried up. The remnants of the riverbed remained within the city, this blank canvas that lacked any function provided an opportunity for the city. This led to the creation of the 'Jardín del Turia', a landscape project that provided a new park tracing the original riverbed. When traversing through the city, the remnants of the riverbed are evident, while its original function had been lost the original morphology remains. Having a deep embankment crossing through the city, while bridges cross over the new park.[15] When we look at the levels of interaction, the aforementioned river that crossed through the city could be considered a barrier or a dividing element. It the repetition of the bridges that provide a connection, the park offers a soft transition as one crosses from one urban landscape to the next. The levels of interaction between people on the public space increased, while the river may provide a platform for private boats. The new park contains a multitude of different elements such as sports fields, walking routes, fountains and event spaces. It is this sense of diversity that allows for the public to not only see the park a scenic element like a river, but a public space

fig. 3.

12
Lorenzo, p. 44.

13
H. P. Friesema, Lowell National Historical Park, Management Plan: Environmental Impact Statement, p. 10.

14
Valencia Bonita. They Plan to Transform the Turia Riverbed into a Large Green Corridor.

15
B. Phelps, How Valencia Turned A Crisis (and a River) Into a Transformative Park.

that can be explored.

However while the reformed riverbed integrated itself within the city, the diversion of the original Turia River creates two zones that are affected by the project.[16] Unlike the previous aforementioned projects where the main structure remained, here the entirety of the canal, which originally flowed through the center of the city, is now moved along the southern edge. The cost that are linked with such a project may question whether other measures could control the water system by introducing dams, water retention basins or other measures. By diverting the river, the problem is simply shifted towards the edge of the city while future repercussions remain rather unclear. The canal also disassociates itself to a certain degree, being initially closely linked with the city center of Valencia as it meanders through the city as it enters the sea.

River Aire – Renaturation

Besides change in function of canals there has been an ongoing trend of renaturation of canalized rivers. In Switzerland such an example can be found in the Aire River. The Aire River was gradually canalized over time in order drain agricultural lands and remove accumulated sediment. The system slowly lost its initial form and became a man-made structure.[17] However in 2001 a competition was introduced in order to restore the canal to its former state. This example shows a form retracing the development of the canal, instead of adapting to the current landscape. The revitalization of the Aire River aims at going back to its initial nature as a river. The project is divided into different phases, which started in 2002 by introducing two flood retention basins on the existing floodplains and restoring the channel to a meander band that it was originally connected with. The project also inserts artificial elements such as concrete steps along the banks of the canal in order to stabilize certain point within the canal system.[18]

Unlike canals that were dug in order for navigational and trade purposes, this canal was a natural element. However interference of the urban fabric created changes. Whether renaturation is the correct way of repurposing this canal becomes a question. As the river initially flowed through valleys, which historically contained farming areas. The introduction of dykes and artificial straightening of the channels increased the flow of the river providing a higher gradient while draining surrounding agricultural land. However while this occurred the problem of flooding was simply moved further down stream. Solutions during this time period were short term as they simply looked at a single problem and added elements to prevent it. An example would be the positioning of houses in the floodplain downstream of the Pont des Marais in 1987. The risk of flooding was reduced by diverting the canal, however instead of removing the houses and buying out the owners.[19] The state decides to implement an engineering solution in order to maintain the houses. While this may be the answer in certain cases, it is evident that canalization of the Aire River was initiated in order to benefit the urban fabric while the repercussions on the natural environment had less importance. These problems have now come forward which led to the concept of renaturation of the Aire River.

fig. 4

The concept of renaturation of canals is rather dependent on the location, as the Aire River is located outside of the border of the city of Genève. Hence the surrounding environment does not include high-density housing, which allows the canal system more wiggle room when it comes to for instance restoring the meander band that was artificially separated. However when we look at canalization in urban areas where roads and building blocks surround canals. Here the concept of reintroducing the

16
Phelps.

17
M. Kondolf, Liberty and Human Access for a Peri-Urban River: Restoration of the Aire, p. 18.

18
Kondolf, p. 20.

19
Kondolf, p. 19.

"natural" elements that were lost over time becomes harder to implement. However the measures mentioned in the different phases of the new project, despite prioritizing the canal, the elements introduced remain rather artificial. Elements that 'control the river' and provide a 'visually inviting habitat', these are aims set by the new project. However renaturalization refers to the act of returning to the natural state of the element. The project contradicts this definition and instead tries to rejuvenate the Aire canal by implementing specific design elements. These elements provide a new level of control upon the river system in order to reduce flood risks while also returning some of its natural shape as a river.[20]

Hybridity of Natural and Man-Made

Throughout the essay the four case studies are dissected in order to understand the transition of the canal systems as its function within the urban fabric is questioned. The hybridity of the canals where natural elements are canalized over time to the point in which the original structure faded away is another theme throughout the essay.

The Canal du Midi was a case study where the transition of the canal function was rather minimum. However while the canal remains a historic element, the economical significance that it once possessed as a trade route has been lost.[21] This was similarly the case in Lowell where the canals were a driving force for the city, propelling it ahead of other townships during the industrialization period. The transition from an element that once had economic significance too a heritage site meant that it ceased to function to a certain degree. While the canals continued to be maintained and were not abandoned, the canals became a scenic element. While both the Canal du Midi and the Lowell canals lost their stances as economic driving forces, the Canal du Midi still remained a canal that continues to be used for recreational purposes. Whereas the canal in Lowell transitioned into a more stagnated state as a heritage site. [22] In the case study of the Valencia River the diversion of river and the canalization of it around the periphery of the city was justified by the situation around that time period. Being confronted by flooding and the damage it caused, however by moving the river the significance it once had was lost. Valencia was also associated with the Turia River, hence similar to the canals in Lowell there was historical value associated with the river. This case study shows a rather excessive change in a water system, where diverting the river provided an opportunity to revitalize the dried-up riverbed.[23] Whereas the new canal disassociates itself from the city, becoming a border along the southern periphery. Lastly the Aire River case study in Genève was an example of renaturation where sequentially new design elements were introduced in order for the canal to return to its former state. However it was the initial canalization of the river that caused problems regarding the river's ecosystem and flooding.[24] The revitalization project of the Aire shows continuity in the adaption of the canal, however the hybridity of the canal becomes more apparent in this system. The clear distinction between natural and man-made water systems has becomes a faded line. Canals continue to adapt within and around the urban fabric, as they remain a prominent feature within the cities. They connect cities on a larger scale and while the function of a canal may change the historical value remains a important feature.

20
Renaturation de L'Aire, Geneve, Superpositions.

21
Mekerji, p. 15.

22
Lorenzo, p. 47.

23
Phelps.

24
Kondolf, p. 18.

Claerr, E., Les Canaux, [website], 2010, http://www.crdp-strasbourg.fr/data/patrimoine-naturel/eau-01/canaux.php?parent=16 (Accessed 17-11-17)

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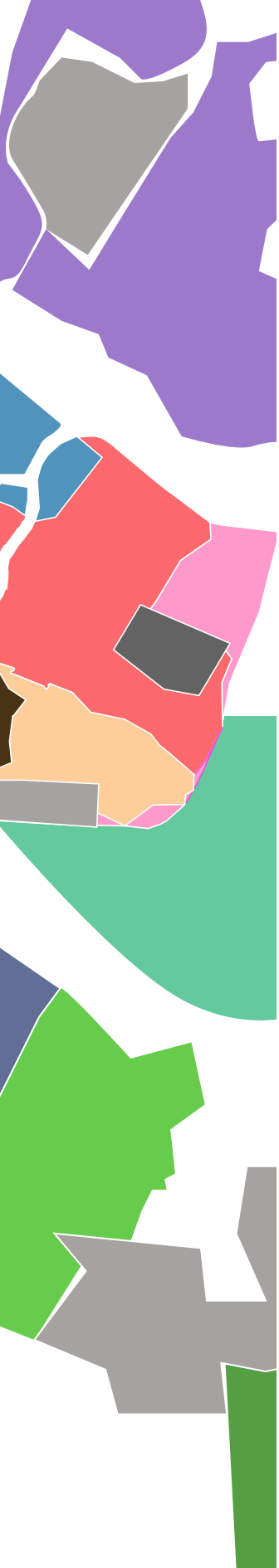
Figure 3.
Phelps, B., How Valencia Turned A Crisis (And a River) Into a Transformative Park, Metropolis, 30 June 2012, http://www.metropolismag.com/cities/landscape/how-valencia-turned-crisis-river-into-park/ (Accessed 03-12-17)

Figure 4.
Kondolf, M., The River Chronicles, Zürich, Schweizer Heimatschutz, 2014.

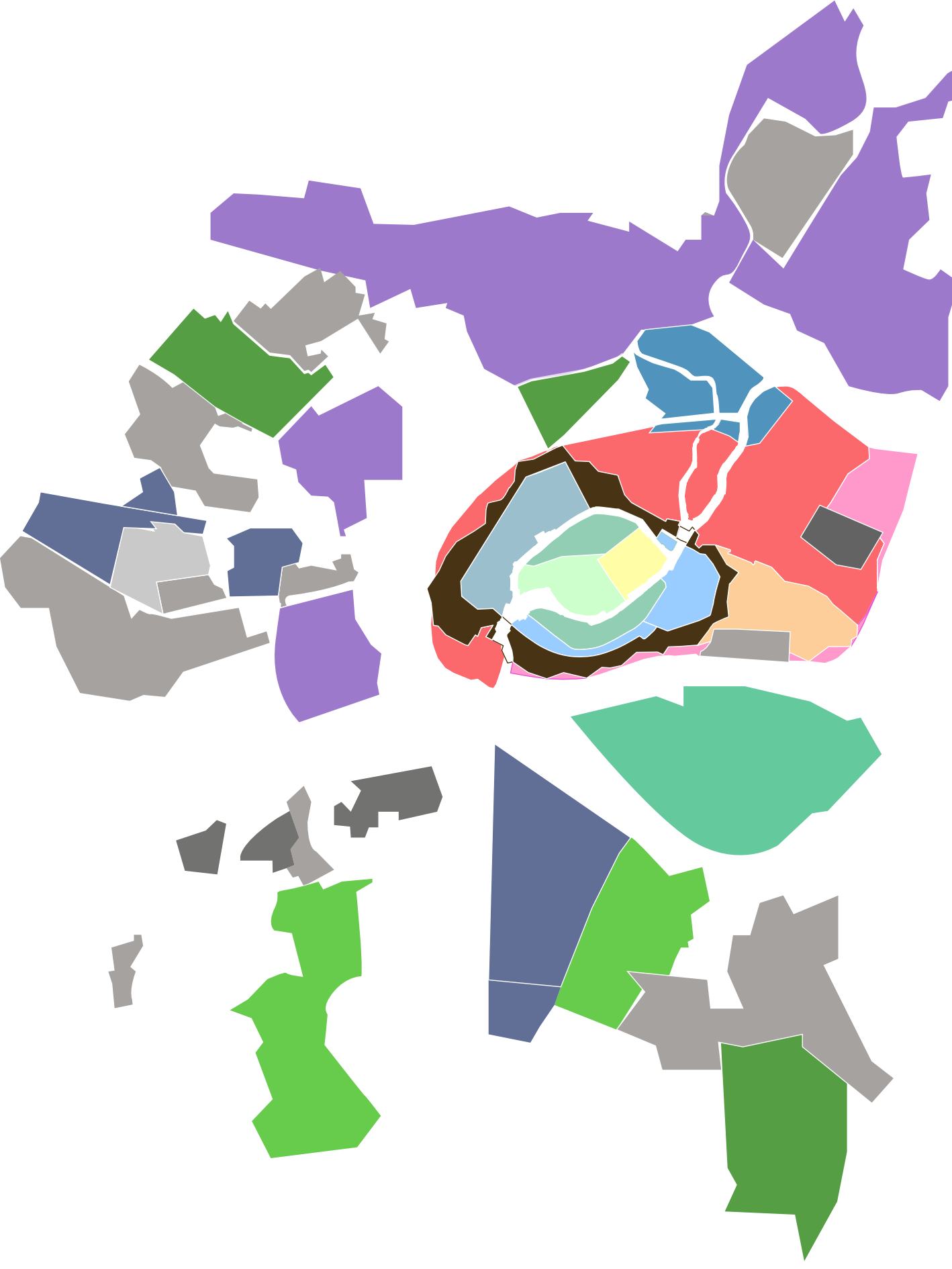


FIELD

LAYERS, TEXTURES, GRAINS

Strasbourg has a long history of changing ownership due to its border location between France and Germany. It influenced big urban changes that the city undergone throughout centuries. Some districts were remodeled; some were demolished and built over by the new powers at play.

This chapter offers analysis on the urban field of Strasbourg. The variety of the mappings represents different layers present in the city, and facilitate the understanding of the contemporary context. Drawings analyze different systems and networks such as transportation or surveillance systems – ingredients that shape the city's morphology. Masterplans such as the Grands Ensembles or the development of the European district highlight the variety of the urban conditions present in Strasbourg. Analysis of the non-existing ingredients such as former fortification site or subterranean structures gives insight into the past which help to understand the contemporary conditions. A part of the mappings portray the specificity of experiencing city's tissue in a phenomenological way. They cover different events or occasions. The city as a space for protests or sequencing of the route for the MEP's attending plenary sessions in the European Parliament unveils different angles of understanding of the urban field.



Roman empire
1 c. BC: Camp of Argentorate

Medieval town
since 1100: 1st extension
1200-1250: 2nd extension
since 1370: 3rd extension
1404-1476: 4th extension

Fortifications
1630-1675: Fortified remparts
1681-1700: Vauban

Faubourgs
1784: Robertsau
1850: Schiltigheim
1862: Cronenbourg
1890: Koenigshoffen Est

Neustadt
1887: Neudorf
1900: Cronenbourg
1910: Neuhof Stockfeld

Laforgue plan
1870: Citadele's destruction
1871-1914: 5th extension
1935-1937: 6th extension

Grands ensembles
1953: Cite Rotterdam
1957: Molkenbronn
1958: Cité de Ile
1959: Neuhof- Meinau
1960: Cite des Hirondelles
1960: Esplanade
1962: Cronenbourg
1969: Hautepierre
1970: Elsau

1950-1998: Quartier Europeen

Garden cities
1960: Meinau
1962: Ostwald
1980: Kable

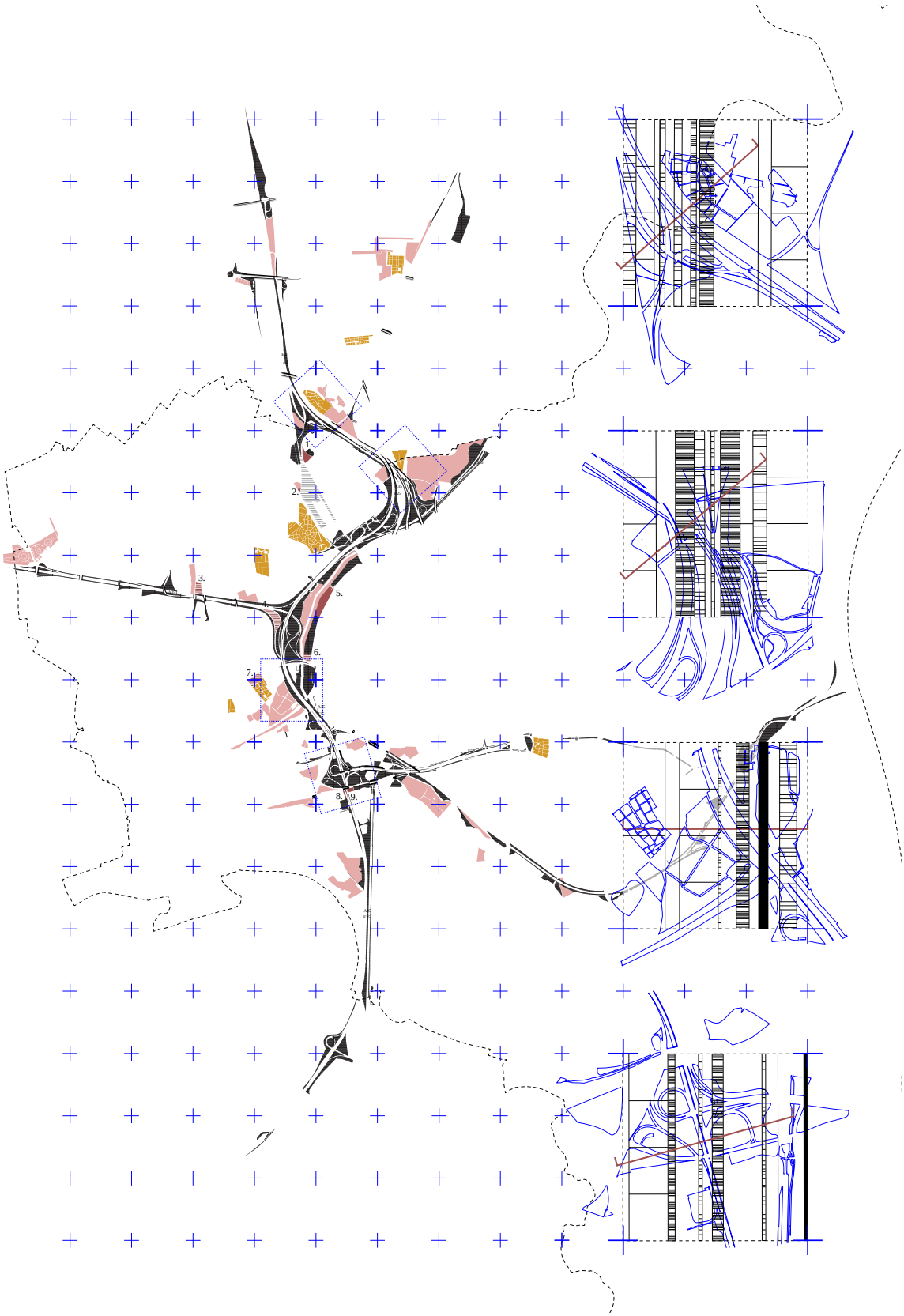
Commercial zones
1970: Plaine des Bouchers
1985: Hautepierre-Sud

Fortified remparts

Vauban's fortification

Former canals

Excision of the city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TRACES OF PASSING

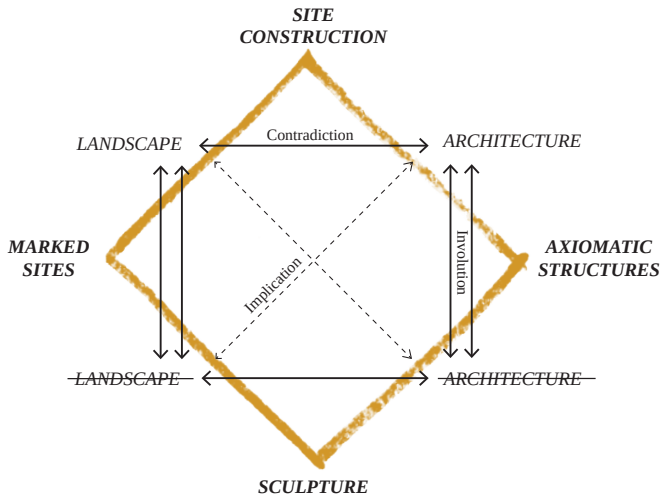
Questioning a conception of the contemporary city as a smooth 'organism' of seamless infrastructures, this map identifies places where the scale of the network translates poorly to the scale of the immediate territory – creating carefully carved islands of 'useless' residuals – as well as sites which resist the regular rhythm of ever-circulating bodies and goods. Such a reading highlights not only the actual thickness of the multi-modal transportation border that bypasses and bisects Strasbourg, but rewrites the landscape as an archipelago of disparate, coexisting tempos and spatial intensities.

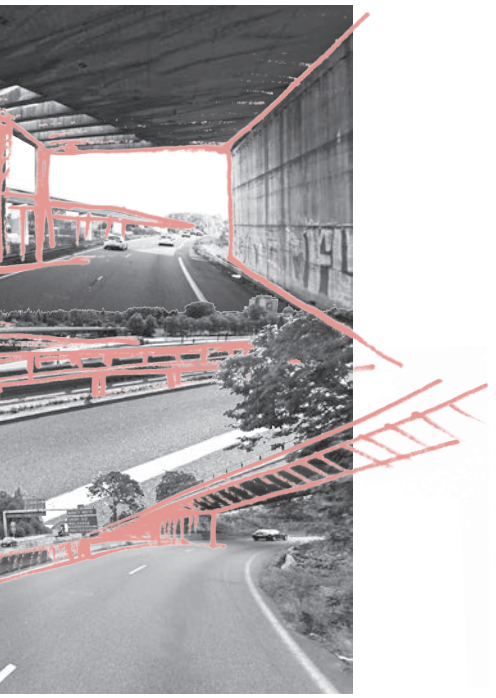
This friction becomes even more tangible at certain points, where local residuals and heterotopias intersect with the territory of the European Union and its supposedly 'open borders' – points appropriated to serve as legal and illegal migrant camps. These precarious settlements, whose inhabitants are not only travellers by culture but literally required to circulate in order not to disturb the status quo, become traces of that which is not allowed to leave a trace.

1 Municipal Insertion Camp for Romani migrants 'La Villette' (opened Sept. 2017)
2 Illegal Romani migrant camp
3 Former illegal Romani migrant camp (evacuated in 2015)
4 Former illegal Romani migrant camp 'Petite-Forêt' (evacuated in 2012)
5 Municipal Insertion Camp for Romani migrants 'Espace 16' (opened Aug. 2012)
6 Former illegal Romani migrant camp (evacuated in 2015)
7 Former illegal Romani migrant camp (evacuated in 2015)
8 Illegal Romani migrant camp
9 Illegal Romani migrant camp, 'L'Écluse'

Rhythm/intensity
Allotment garden
Cemetery
Residual
Post-industrial
Migrant camp
Overpass
Eurometropolitan area

1


SITE
CONSTRUCTION
LANDSCAPE
Contradiction
ARCHITECTURE
MARKED
SITES
Implication
Involution
AXIOMATIC
STRUCTURES
LANDSCAPE
ARCHITECTURE
SCULPTURE



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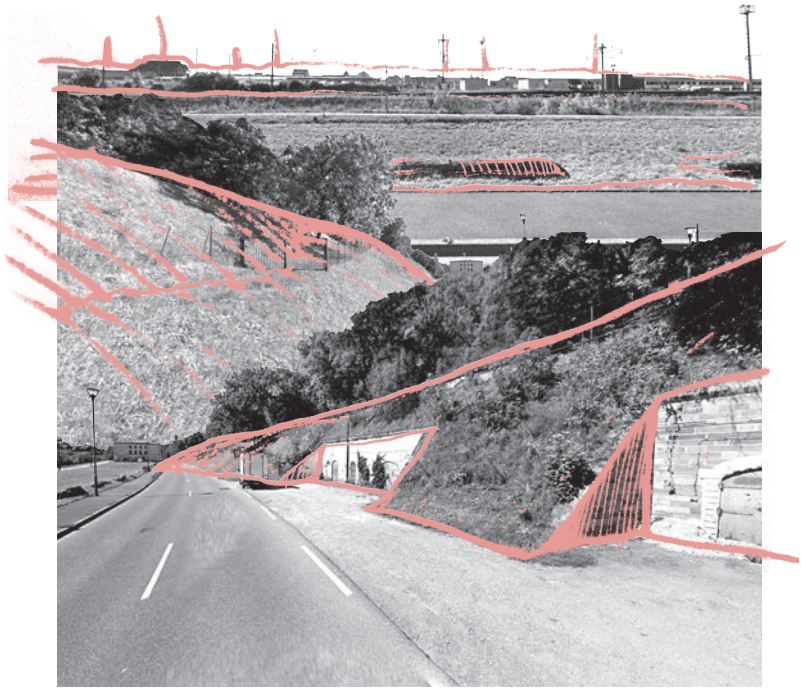


3

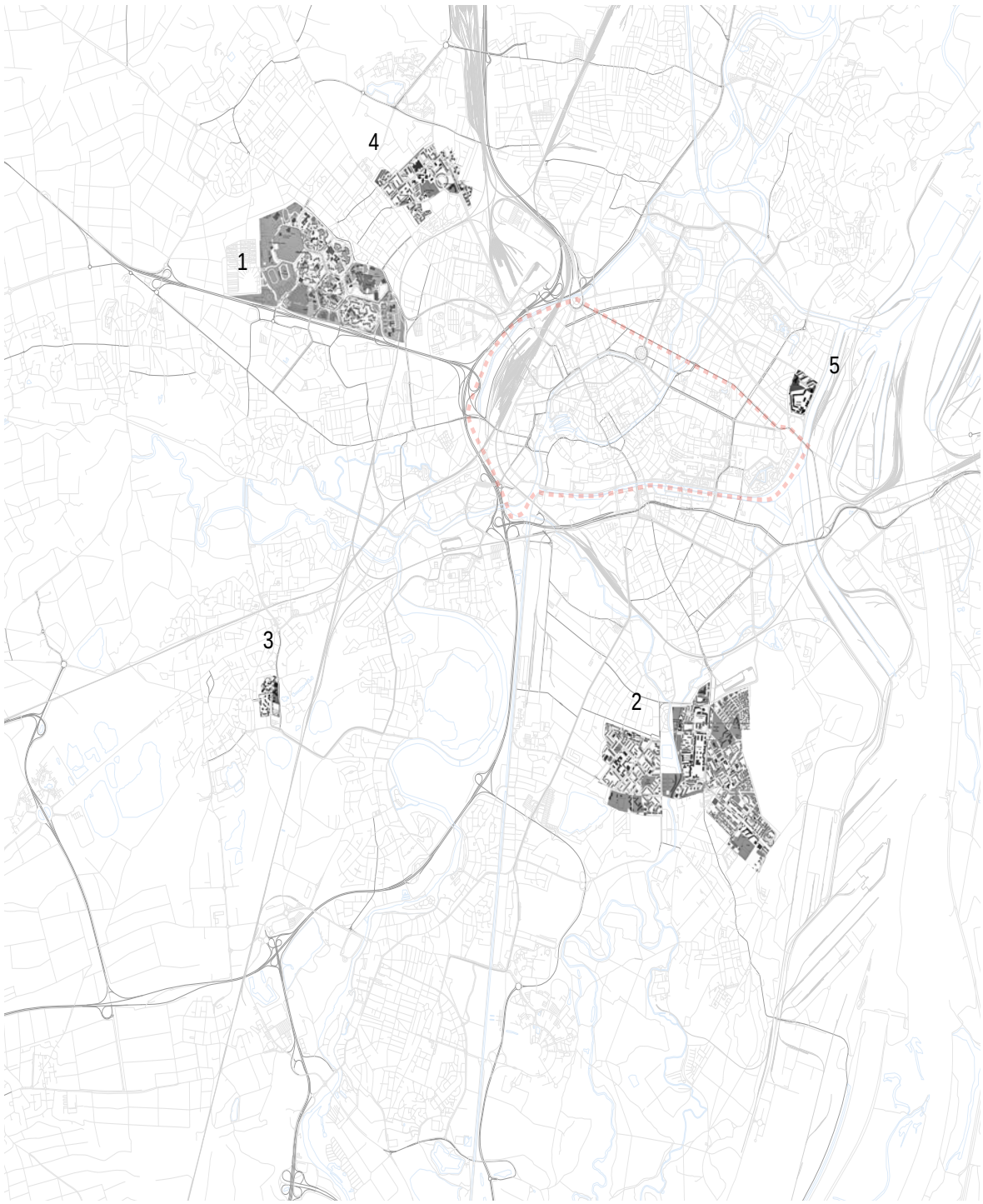
CONSTRUCTED SITES

Just like Rosalind Krauss believed that 'sculpture' was too blunt a word to describe postmodern threedimensional art, 'site' and 'building' are too vague to portray the existing and potential conditions of the predominantely infrastructural zones of Strasbourg. Krauss' so called 'expanded field' matrix produces new categories by crosspollinating seemingly exclusive conditions through relationships of contradiction, implication and involution. Here, views from the road within and adjacent to large traffic intersections are analysed according to said matrix, affording a more nuanced reading of a seemingly homogeneous infrastructural landscape.

1
Marked sites. Montagne Verte.

2
Axiomatic structures. Porte de Pierre.

3
Site constructions. Porte Blanche.


4
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5
3
2

1

2

3

4

5

STRASBOURG'S SENSITIVE DISTRICTS

A QP (or QPPV) stand for Quartier Prioritaire: Priority District. Those are districts that faces critical social problems due to different reasons. The QP's are defined by the National institution: 'Politique de la ville'. It aims at reducing the social inequality and favorze Social cohesion and mixity within those 'sensitive' areas.

In france there are 1500 QP's and we will see that a lot of them seem to have similar histories, phisical aspects and landscapes. The main criteria in order to Label a district such as QP is the concentation of poverty. They go together with a matching environment, the one of the 'grands ensembles' resulting later in what we call Cites: the ghettos.

1
Hautepierre. Cité jardin which needs more importance and a reorganisation of the car-roads accessing the city centre.

2
Neuhof-Meinau. Neuhof: creating new activities aside the new tramway.

3
Hirondelles. QP being reconstructed in its totality since 2008. A tabula rasa is promising exceptional results.

4
Cronenbourg. Old 'cité ouvrière' built on an ancient 'faubourg'. It aims to renovate two main entrances, rue de Loess and rue de Hochfelden, in order to improve integration with the city centre.

5
Cité Rotterdam. 'Grand ensemble' not considered to be a QP, but it shares architectural features. Thus, it is interesting to look at as a 'succesful' plan.

PALIMPSEST HAUTEPIERRE

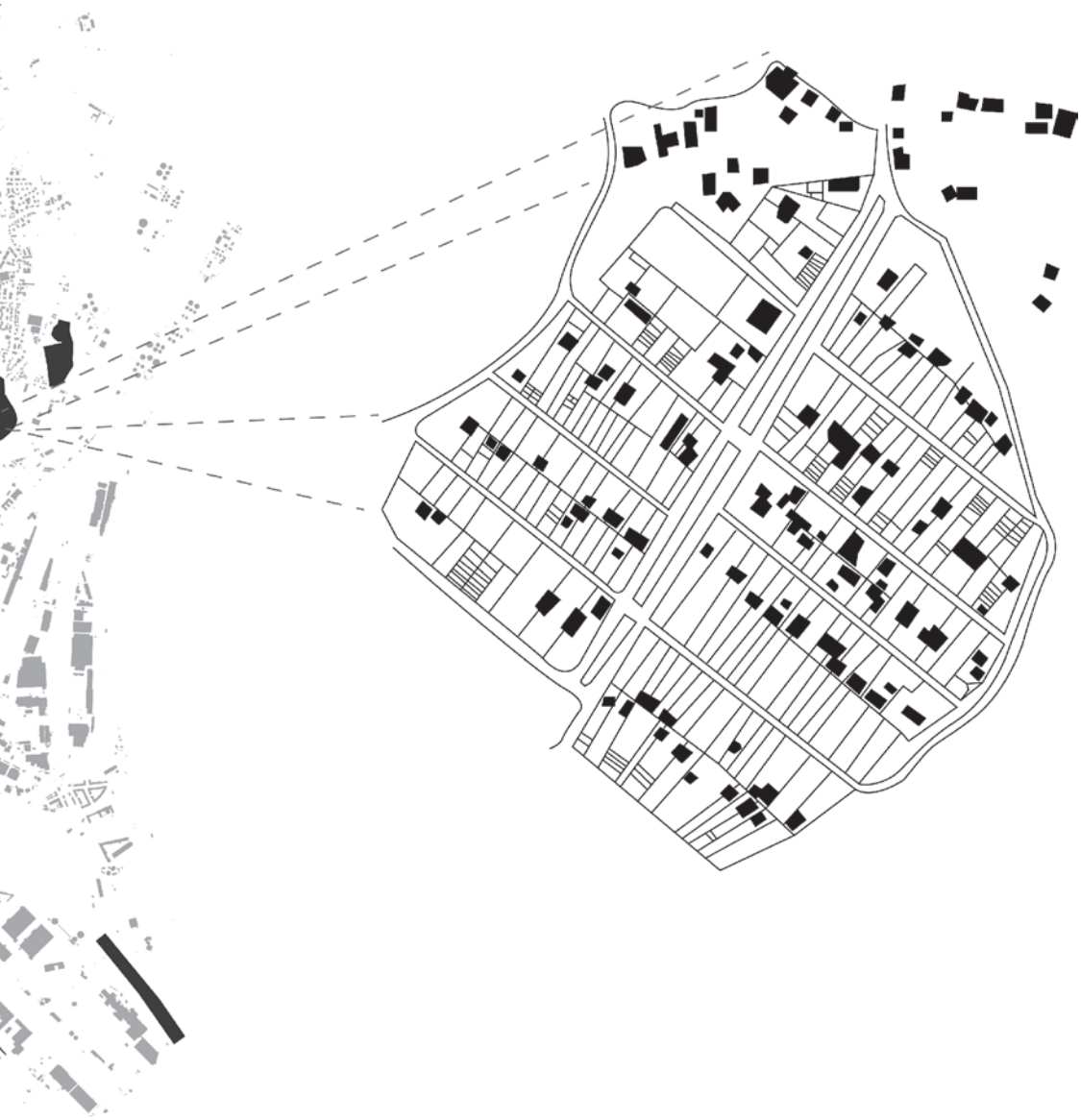
The territory of Hautepierre has known a difficult building process. Indeed, a major difference between the original plan and the actually built district is striking. Bu juxtaposing the two, we can clearly see how the internal logic that aimed at creating different 'cells' whithin a hexagonal 'honeycomb' like grid. Each cell had a certain degree of independency as they all had their own school. Besides that they also served the entire plan because each cell hosted a specific activity (Youth House, Super market,...) for the whole plan. This is far from having been realized. The results proved to be 'bad' in the sense that it has been for a long time an isolated 'banlieue'. Despite the changes that has been made en terms of renovations, Hautepierre does not reflect its underlying ideal.

Built Plan:

- Pedestrian path
- Dwellings
- 'Quartie residentiel'
- 'Habitations pavillionaires'
- Commersialisation
- Grands ensembles
- Independent builidings

Original Plan:

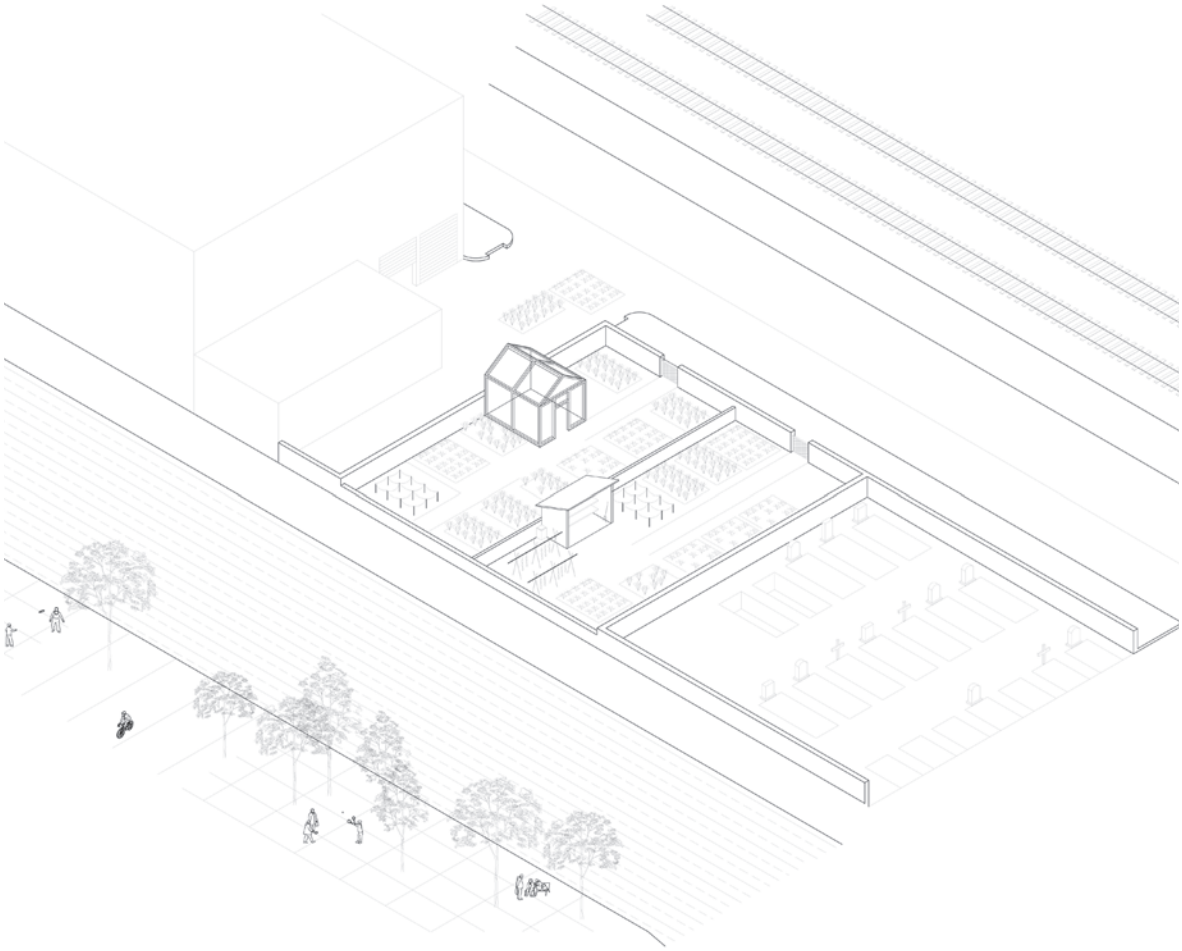
- Pedestrian zone
- Buildings
- Car zone

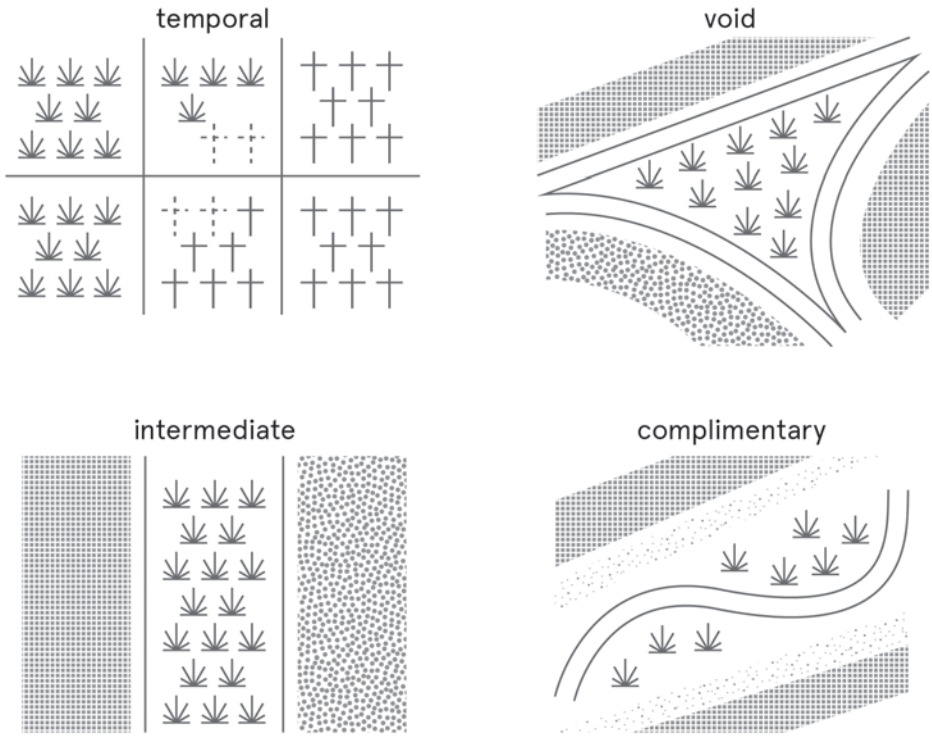


CITY POCKETS

All over the city are allotment gardens, used by families; schools; or enthousiasts - they are scattered in surprisingly vast quantities around the perimeter of the city centre of Strasbourg.

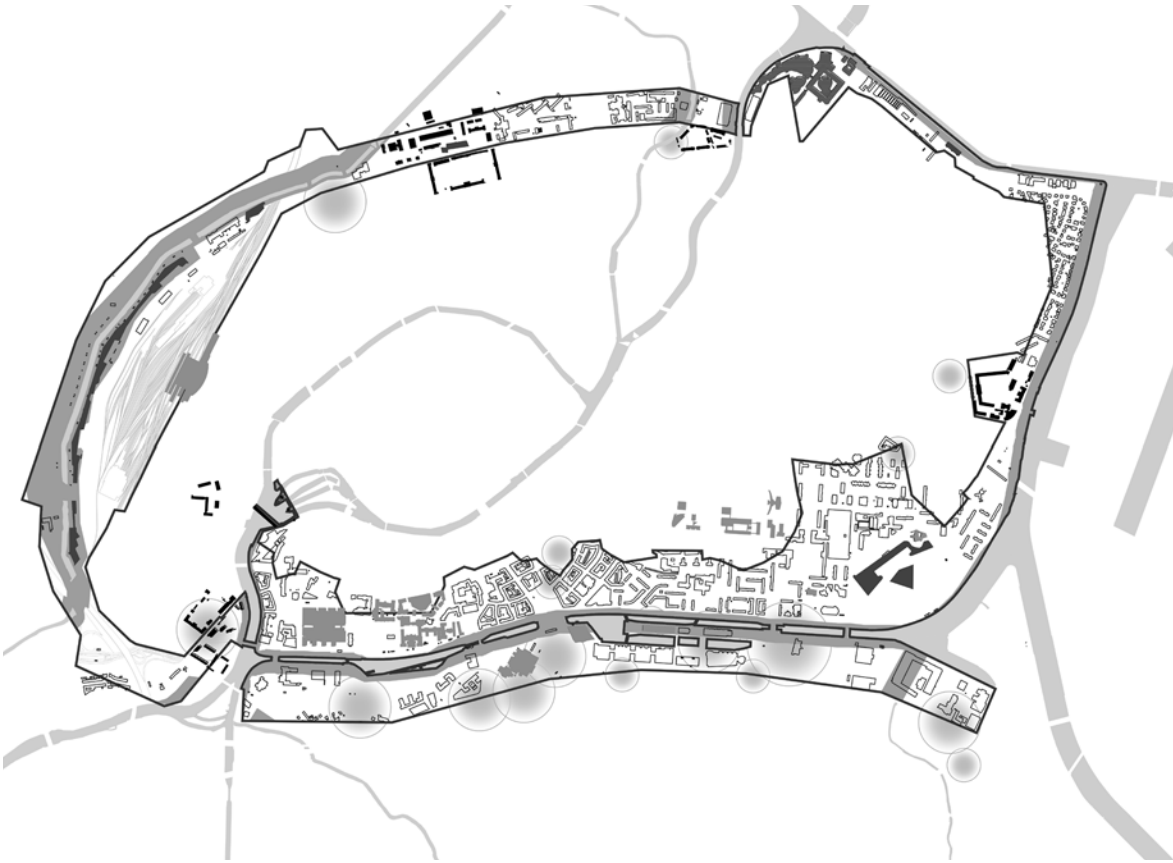
These “city pockets” are, almost without exception, similarly designed. Their efficient use of space, as seen in its flexible grid of small, linear plots with tiny sheds, provides as much people as possible with a small garden for practical comfort. Their grid varies in size, yet accommodates itself to its surroundings.





IN-BETWEEN CONDITIONS

The allotment gardens are situated in places in-between different conditions of the city and its urban configuration. These pockets may be temporal, waiting for other functions to replace them over the course of time. They may be intermediate, placed in-between different functions as a buffer zone. They can be found in voids that are in-between different types of infrastructure and buildings. They may be complimentary, used by a variety of actors of the territory and improving its surrounding environment.



central station

opened: 1841
rebuilt: 1883
modernized: 2007

NCH
(the new civil hospital)

opened: 2008

city of music and dance

opened: 2006

André Malraux media library

opened: 2008

University of Strasbourg

opened: 1538
divided: 1970s
fused: 2009

City And Eurometropole Strasbourg

EPIDE
employment agency

opened: 2007

palace of Europe

opened: 1950
rebuilt: 1977

EU administrative offices

opened: 1980

Très-Sainte-Trinité church

opened: 1966

citadel of Strasbourg

built: 1685
partially demolished: 1870

Ponts Couverts

built: 1250
partially demolished: 1870

Barrage Vauban

built: 1690
modernized: 2010

Training Center
for Intelligence Service

built: 1945
opened: 2006

Turenne Barracks

built: 1893

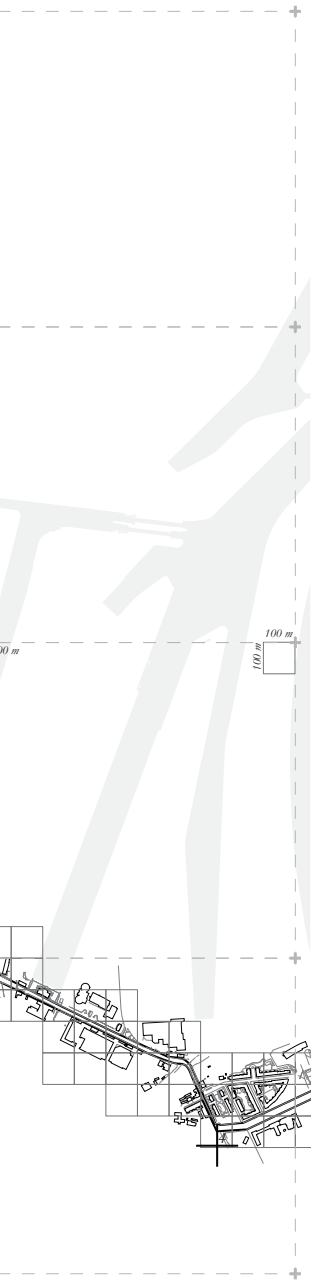
ZONE MILITAIRE

Strasbourg is a city that was always on the edge between France and Germany, thus has a turbulent history. The changing ownership of this city and its border location dictated a need to build extensive fortification systems. First their construction, extension and later demolision shaped a particular zone within the city, in some sense architecturally chaotic.

In this mapping the starting point of the investigation was to mark the former fortification and military areas. Those shaped an outline that contains a number of the most important public buildings in Strasbourg. Together with a glossary of those buildings this survey provides the understanding of the zone that connects old town with the contemporary neighborhoods.

SURVEILLANCE OLIGOPTICON

This map of Strasbourg depicts all camera locations and ranges, minus all obstructions of view. In the last few years, the municipality of Strasbourg has aquired and installed 300 high-tech video surveillance cameras at around 30.000 to 50.000 euro each. This development is a symptom of the militarization of the french public space in the aftermath of the Paris attacks. This huge financial commitment is justified through use of traffic surveillance and police surveillance. Recently, both systems have been merged into one and are both conrolled from a controlroom in the CUS building (the building on the bottom-right side).



CAPACITY FOR PROTEST

The selection of public spaces used by local citizens for protesting was based on observation, articles, short movies, media reports and historical photographs. The mapping of types of public buildings allows to highlight the relations between public spaces and adjacent institutions. The quantitative survey aims to measure Strasbourg capacities for hosting mass protests. The map is divided into the grid, easily translatable into the amount of people who could potentially fit within, according to a chosen multiplier.

The safe capacity level is estimated to be at 2 people/sqm, a walking crowd starts losing its fluency at 2.7 people/sqm, a dense protest is usually characterised by the amount of 4 people/sqm. A very dense standing crowd reaches 4.7 people/sqm. Above that, the maximum density becomes critical.

Relations between main squares and their capacities.

Important Places:

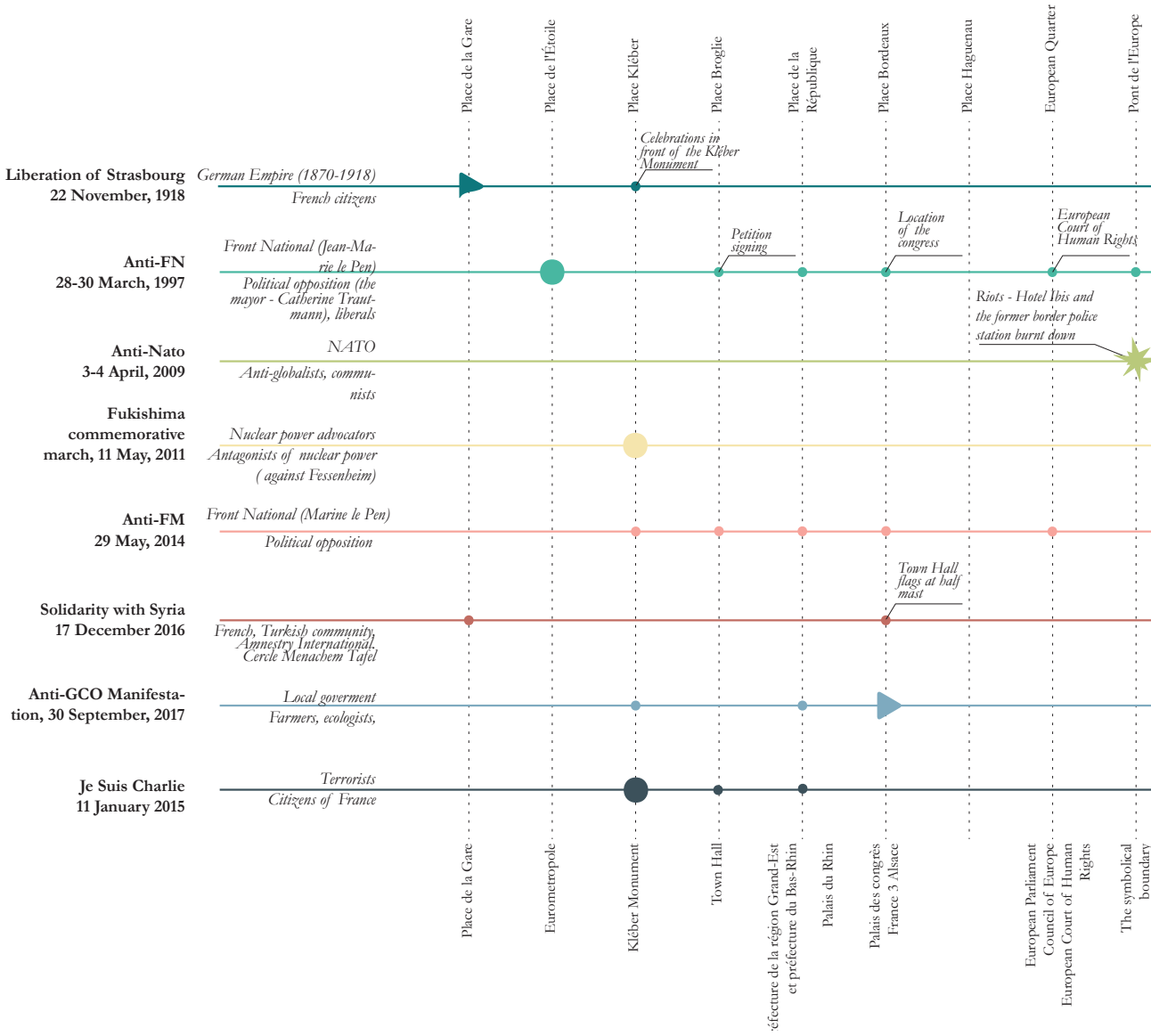
1 Ancienne Synagogue - a place of memory - the beginning point of the anti-FN protest in 1997 (50.000 participants)
2 The monument of Kléber
3 Cathedral Square - the place of liberation manifestations in 1918
4 Anti-NATO riots in 2009 (Hotel Ibis and the border control building)

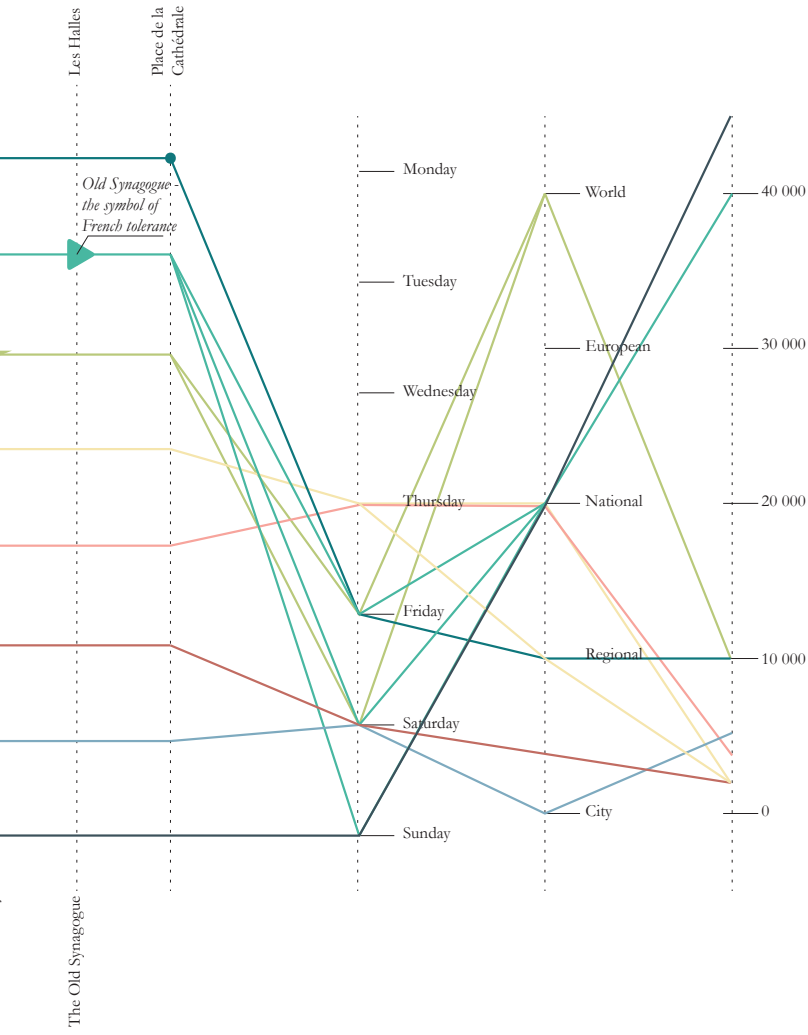
Institutions:

1 Strasbourg Eurométropole
2 Préfecture administrative d'Alsace et du Bas-Rhin
3 Town Hall
4 European Parliament
5 Council of Europe
6 European Court of Human Rights

Public Building Types:

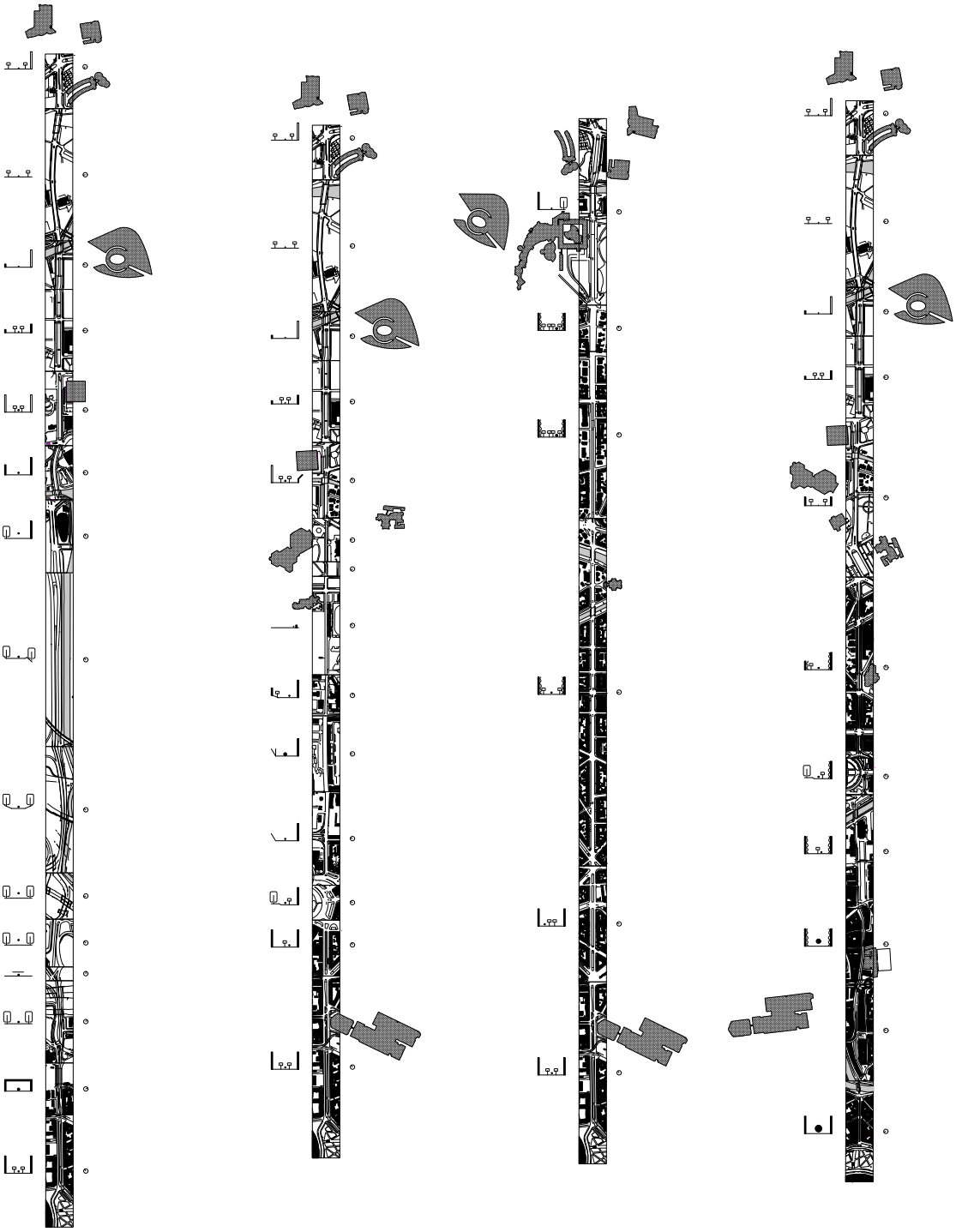
Organisation
Education
University
Culture
Church
Media
Military
Law
European Union
Administration
Government


Place de la Gare
Place de l'Étoile
Place Kléber
Place Broglie
Place de la République
Place Bordeaux
Place Haguenau
European Quarter
Pont de l'Europe
Liberation of Strasbourg
22 November, 1918
German Empire (1870-1918)
French citizens
Celebrations in front of the Kléber Monument
Anti-FN
28-30 March, 1997
Front National (Jean-Marie le Pen)
Political opposition (the mayor - Catherine Trautmann), liberals
Petition signing
Location of the congress
European Court of Human Rights
Anti-Nato
3-4 April, 2009
NATO
Anti-globalists, communists
Riots - Hotel Ibis and the former border police station burnt down
Fukishima commemorative march, 11 May, 2011
Nuclear power advocators
Antagonists of nuclear power (against Fessenheim)
Anti-FM
29 May, 2014
Front National (Marine le Pen)
Political opposition
Solidarity with Syria
17 December 2016
French, Turkish community, Amnesty International, Cercle Menachem Tafel
Town Hall flags at half mast
Anti-GCO Manifestation, 30 September, 2017
Local goverment
Farmers, ecologists,
Je Suis Charlie
11 January 2015
Terrorists
Citizens of France
Place de la Gare
Eurometropole
Kléber Monument
Town Hall
Préfecture de la région Grand-Est et préfecture du Bas-Rhin
Palais du Rhin
Palais des congrès
France 3 Alsace
European Parliament
Council of Europe
European Court of Human Rights
The symbolical boundary



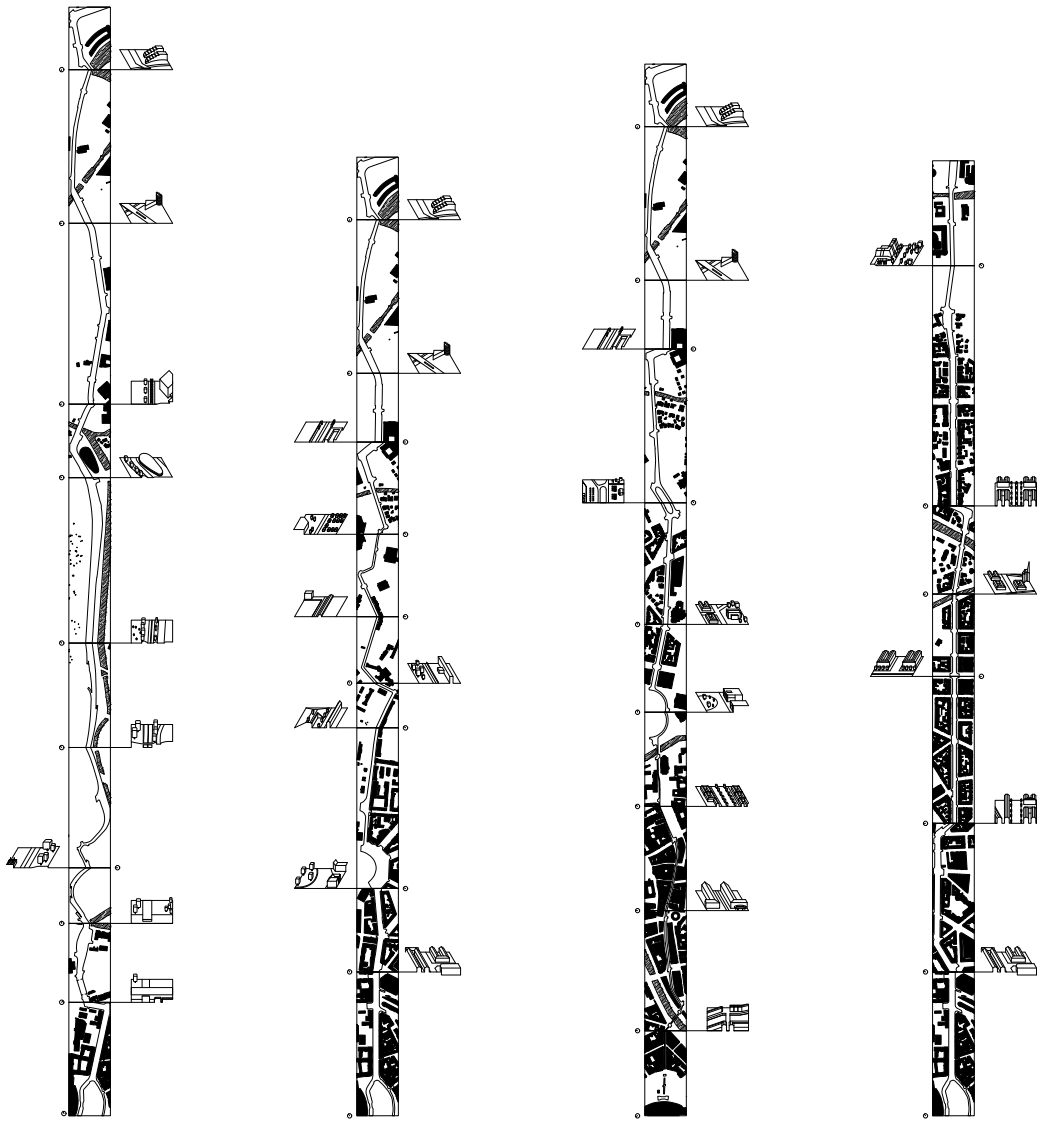
PROTEST SEQUENCING

The graph analyses the relations between squares in Strasbourg (time-distance) and depicts preferable sequences of public squares used during public manifestations and marches.

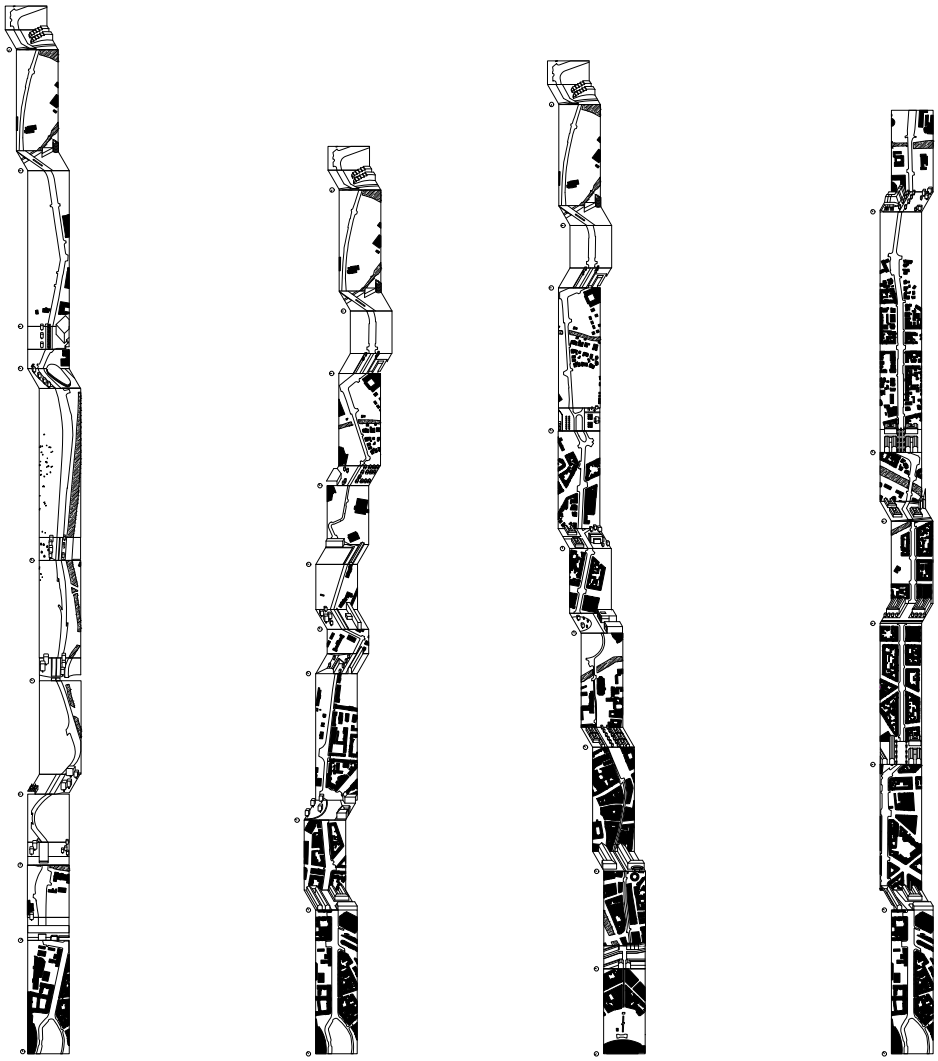


LINES OF CONTRASTING SPATIAL EVENTS

Once a month 751 MEP's travel from Brussels to Strasbourg for a plenary session. Two chartered trains drop them at the station and then they must make their way either by coach or taxi. The MEP's tend to be brought down a specific route which is slower than what google maps suggests. The opposite survey maps linearly each of the four routes. The each bar ends at every turn on the path. Surprisingly they all traverse an unravel different layers of development. Ones perception is altered per route by the effects of parallax seen in the shifting plans of the major landmarks. Finally, each strip contains its own unique spatial conditions and sequence.



Further studies of the ability for a path or a line to act as an ordering tool by cranking each bar at every change in spatial condition. Each unique spatial condition is then depicted in axonometrics.



The last iteration redraws the axonometrics integrated into the line to make a more perceptually fluid experience.

Decision to make Strasbourg the headquarters of the Council of Europe

1949

Opening of the Council of Europe

1950

Opening of The European Court of Human Right

1965

Opening of the Palace of Europe (replacing the Council of Europe's building)

1977

1953

No major construction in the European district

Urban Planning

1950

Planning Goals:
Postwar reconstruction and the development of Strasbourg as a French metropolis
– city's transportation planning concentrated on connections within France
– traditional urban planning concepts
– French government focused on post-war reconstruction,
– simple gestures towards Europeanism (renaming the bridge the "Pont de l'Europe" as a sign of French- German amity)

MID 1960'S

National attempts at decentralizing planning powers and improving the standing of regional cities
– Strasbourg advances to the status of regional capital
– city gains more control over its extended urban area
– decentralizing urban planning allowed in the long term to pursue city's goal of becoming European parliamentary capital

1973

Regional masterplan SDAU do not address the presence of European organizations in Strasbourg,
– role of European quarter was marginalized,
– European district was not linked to the planned metro or tramway network.

Opening of administrative buildings for the Parliament

1980

Opening of the new European Court of Human Rights

1994

Opening of the new European Parliament

1998

European District of Strasbourg put on the European Heritage List

2015

1982
French Decentralization

1980

Henry Bernard prepared development plan for the European district
– until 1980's the absence of assertive urban planning was interpreted as lack of interest in presence of European organizations or international businesses
– late 1980's bring interest in a European Strasbourg
– since 1985: preparation for the new European Court of Human Rights (initial project cancelled as it did not represent European human rights' values)

1989

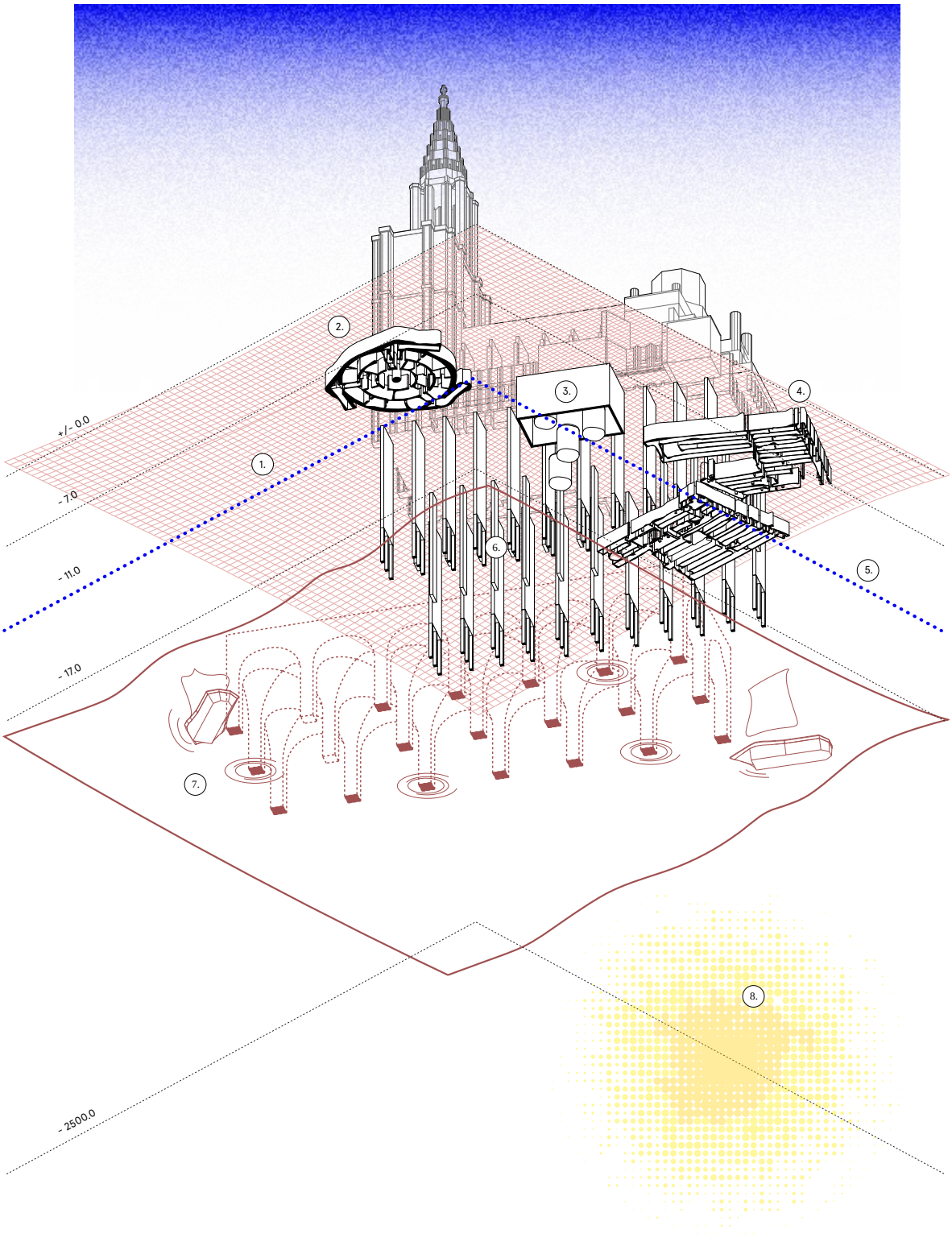
Strasbourg chances in the headquarters competition's study made by French government
– results negative, setback for Strasbourg

1990

Strasbourg organizes international competition for European Parlament design
– role as a symbolic building, granted twelve major meetings of parliament per year
– in 1990's regional planning became transnational in its goals

2014

– EU admits that the monthly Strasbourg sitting, which lasts just four days, costs an additional £93 million a year. The Conservative Party in Europe, which is leading a campaign to abandon it, estimates the cost a little higher at £130 million, or about £928 million in the seven-year cycle of an EU budget.


+/- 0.0
- 7.0
- 11.0
- 17.0
- 2500.0
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STRASBOURG SOUTERRAIN

Apart from the complex service networks such as sewage, water and gas – their exact locations kept secret and thus sabotage secure – the underground is a curious geography of real and fantasy artifacts and natural phenomena. These serve as recordings of cultures, concerns and conditions which, despite being hidden from sight or even nonexistent, appear oddly iconic. Without any immediate connection, they still belong together by the simple function of being subterranean. In this illustration, the elements are arranged according to their relative depth rather than horisontal relations, facilitating an unconventional reading of the urban fabric.

1
Gare Centrale. Strasbourg's only subterranean tram stop. 1994.

2
Underground miliary hospital. Place des Halles, 1937 - ?

3
Le Caveau du Futur; time capsule. Bunker with artefacts for future archaeologists. 1995.

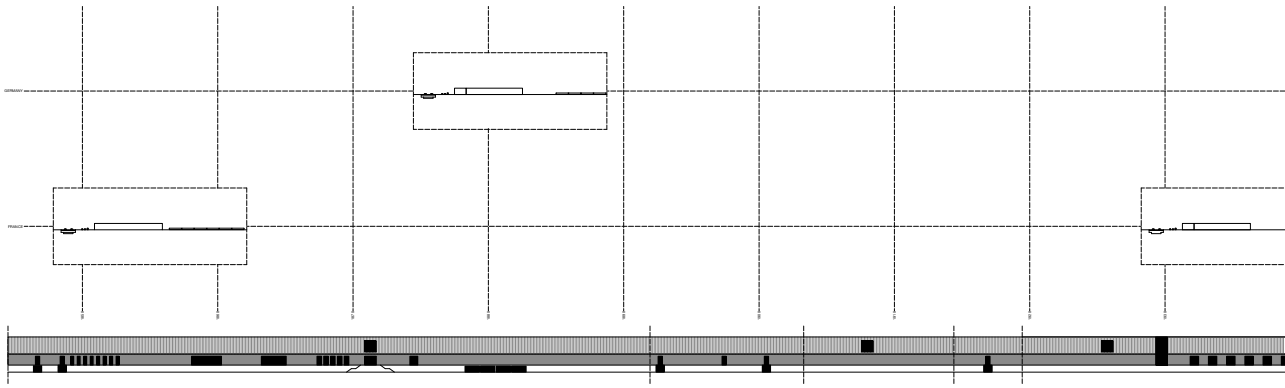
4
Old wine cellars. Rue d'Epernay, Rue de Champagne. Late 1800's.

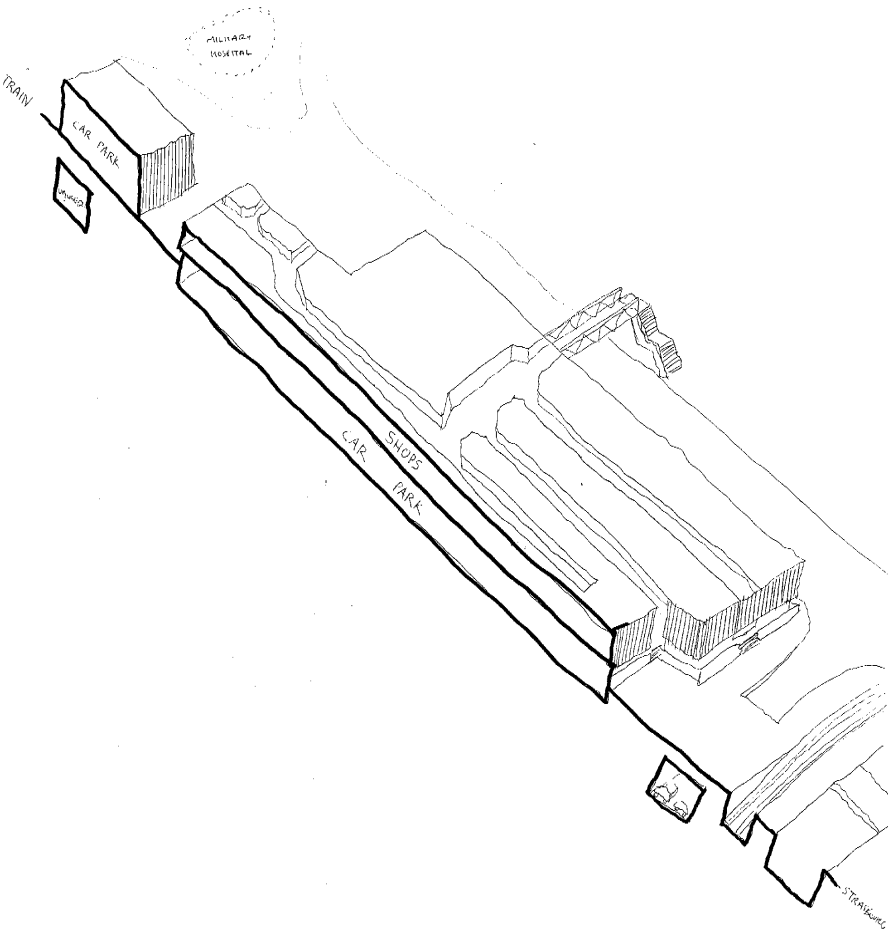
5
Water table. Fluctuates between 132.20 and 134.70 m.

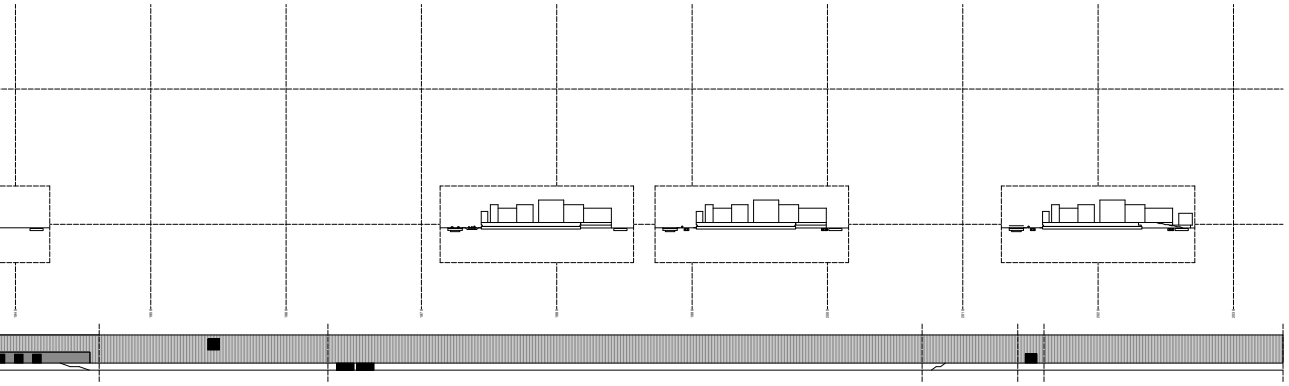
6
Medieval foundations of the Cathedral. Brick and wooden poles, resting on clay and silt layer just above the water table. 1015 - 1028.

7
Kindelsbrunnen. Mythical underground lake populated by infernal creatures.

8
Deep geothermal heatwells. Water temperature of above 150 degrees Celsius.

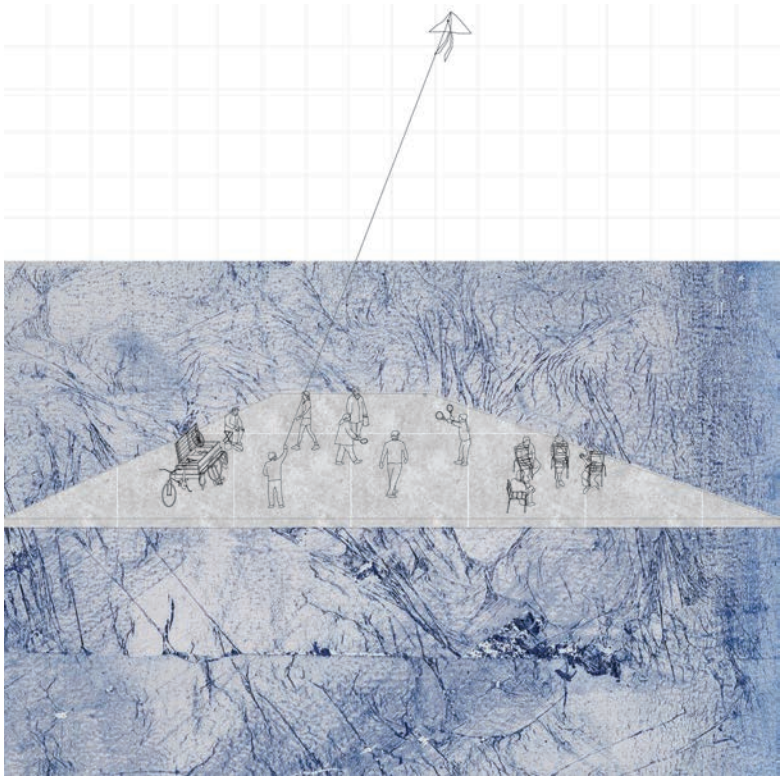



MILITARY HOSPITAL
TRAIN
CAR PARK
SHOPS
CAR PARK



PLACE DES HALLES

Above lies a fold out elevation of Place de Halles' plinth along with the sites historic sectional timeline. The site of Place de Halles began as the Marais Vert train station along with a gas plant. Germany then seized control of Strasbourg in 1871 and built 'La Gare Centrale', repurposing Le Marais Vert as covered market. In 1974 the Market was demolished to make way for the new shopping centre, completed in 1979. Unlike its surrounding context, Place de Halles accommodates a series of towers on a large concrete plinth. On the river edge the tram passes underground along with the road. A disused car tunnel also begins at Halles and ends on the other side of the railway with a connection to the Halles car park. Lastly an abandoned underground military hospital lies underneath the bus stop in Halles.



THE STRUCTURED IN-BETWEEN

ARJAN SCHONEVELD

Introduction

The notion of the residual in-between is but one of many terms used to describe spaces within the urban fabric of the city that are situated between different conditions in place and time and are commonly inactive in their role within the city. The subject of spaces such as that of the residual in-between has, since the turn of the century, increasingly prompted both architectural discussions and projects, as can be observed by a decent number of publications that deal with the subject matter in recent years. In Terrain Vague: Insterstices at the Edge of the City, for instance, Patrick Barron describes a great many terms used by an equal amount of architects and critics for similar, if not the same, types of spaces, such as: "derelict land;" "zero panorama;" "wasteland;" "drosscape;" and "brownfields," among many others.[1] Consequently, many cities, such as Strasbourg, have started discussions on, and found use for their in-between spaces that were once considered as wastelands but have since been structured and appropriated.

The subject of this paper has been shaped by the finding of many allotment gardens in Strasbourg's in-between spaces. These spaces often lack a certain idiosyncrasy as they are homogenous in their structuring independent of their sites, despite their potentiality to express the characteristics of the in-between spaces on which they are placed. The purpose of this paper is therefore to explore the thematic of the in-between space and how its structuring can create unique spatial experiences generated by their external restrictions, by examining similarly used notions, such as terrain vague and interim spaces, and their relation to and position within the city by researching several case studies that have dealt with this predicament. While each in-between space is obviously different and every intervention of its structuring is, of course, distinct; observing these case studies provides an understanding of any distinctive qualities that result from such interventions by unlocking the dormant potentials of the inactive in-between, while retaining or enhancing the oftentimes overlooked positive effects they distil on their surroundings.

Finding the In-Between

The industrial heritage and complex political history of Strasbourg has made it a city of a multitude of distinctive characteristics and identities. As the administrative capital of France's Grand Est region and as the country's gateway to Germany – crossed by the river Ill and flanked

1
P. Barron, Introduction: At the Edge of the Pale, p. 3.

by the Rhine – the city of Strasbourg is marked by infrastructure and functional zoning that surrounds the historical Grand Ile and Neustadt like ivy around a window. Similarly to many cities in Europe, the industrial revolution has scarred Strasbourg with canals and railroads that continue to serve, albeit it nowadays to a lesser extent, the industry of the city and its port. These industrial zones and its infrastructure grew simultaneously in mostly linear patterns which enveloped more and more land. Later, highways would intersect the urban structure of Strasbourg so to better connect the city to the rest of France and abroad, with industrial zones shifting towards locales that were logistically better suitable.

These concentrated infrastructural networks and industrial zones around the old districts of the city created gashes in the urban fabric of Strasbourg that are found in countless distinctive shapes and sizes. In Strasbourg, they are alongside highways to separate the city's residents from the continuous noise of its traffic; amidst various pieces of infrastructure that were planned separately at different moments in time; between distinct functional zones that distance the industrial and the residential; or on sites abandoned by the shifting of industrial zones – they are spaces in-between different conditions and intensities within the city that initially served no clear purpose. They can be characterised as the by-products of both urban growth and shrinkage; of establishment and migration and of urban planning then and now. However, while many of these in-between spaces within the confines of Strasbourg may be considered to conform to terrain vague; "Seemingly abandoned or overgrown sites – where the landscape has gone to seed and been left to its own devices, is in suspended redevelopment, or is being furtively inhabited or otherwise used, under the radar of local authorities,"[2] many other, originally similar spaces have already been structured to allow for certain public activities to happen. And, while these spaces utilise their condition as in-between by providing the people of Strasbourg small-scale plots of land for social and recreational garden use, these once seemingly organic spaces have succumbed to the systematisation of grids that equally divide their territory for the purpose of providing the residents equal amounts of happiness. They pay tribute to German landscape architect Leberecht Migge, who in the early 20th Century, in Marxist fashion, advocated for "a garden for everyone" and idealised that "Europe and the whole world need [collective] gardens" to provide "a little time and leisure" after all the hard work that had been done to make the country "prosperous."[3] With the emergence of an increased awareness of treating such spaces and incorporating them within the city, consciously, together with a better sense of responsibility for the (city) environment in recent years, the success of the structuring of these spaces (most of which have been created years prior) can be questioned. While they share the same territory for the same functions, they are still made up of tiny plots of individual land, structured in a dense grid and most often bordered by hedges to assure a certain degree of privacy. While they are social to some extent, they are mostly not for everyone. Even the exceptions, that accommodate plots for schools or families, are for these groups, only. How then, do these gardens express the qualities of a terrain vague?

Understanding the In-Between

The origin of the term terrain vague, as introduced in the previous chapter, can be traced back to architect Ignasi de Solà-Morales, who used it to "refer to marginal islands and oversights in the landscape."[4] He found the term through the field of photography, in which terrain vague are "Empty, abandoned [urban] space[s] in which a series of occurrences have taken place [that seem] to subjugate the eye of the urban photographer."[5] They are urban spaces that have been left to the effects of nature and time and, in their transformation, fascinate and induce a certain experience. However, by using the notion of terrain vague at heart, we seem to renounce the spaces that are similarly in-between, yet are, conversely, not wholly abandoned. For example, where de Solà-Morales finds his terrain vague in "areas of antiquated infrastructure and former industrial sites,"[6] simi-

2
Barron, p. 1.

3
L. Migge, Garden Culture of the Twentieth Century, p. 194.

4
Barron, p. 4.

5
I. de Solà-Morales, 'Terrain Vague', p. 25.

6
Barron, p. 7.

larly potential spaces can also be found in areas of infrastructure or industrial sites that are still actively used, such as those in Strasbourg. Admittedly, while these spaces are typically in relatively good shape (compared to the wastelands that are the terrain vague) and experience more activities on their peripheries and may thus not fully incorporate the entire range of qualities the terrain vague comprises, they can still be appropriated in comparable fashion with equal ambition. They retain the capacity to build on the ambiguous role of the terrain vague that, whilst, on the one hand, is commonly inactive for but a few adventurous people as it is left inaccessible and as a wasteland; but possesses a great potentiality in its role within the city due to its conditions and proximity to its surroundings, on the other. This ambiguity shares similarities with Foucault's heterotopia, which he describes as an "external space" in which we live, wherein "a set of relations ... delineates sites which are irreducible to one another and absolutely not superimposable on one another." To Foucault, they are "real places" that "are something like counter-sites, a kind of effectively enacted utopia in which the real sites, all the other real sites that can be found within the culture, are simultaneously represented, contested, and inverted." And, while this description may be confusing, his defined principles that constitute his heterotopia are less so – for in his second principle of the terminology, he expresses that heterotopia have "a precise and determined function within a society and ... can, according to the synchrony of the culture in which it occurs, have one function or another."[7]

Such spaces, as found in Strasbourg and that share the ambiguity of the heterotopia and the terrain vague, can possibly be characterised as leftover spaces. For Erick Villagomez, who uses the term residual spaces, they are "a natural result of modern urbanization and the complex interaction of social, technological, and economic processes that drive contemporary urban growth." He argues that in medieval times, people did not leave land unused for it was "too valuable" and that since the past century, during which many countries experienced "unprecedented material wealth and technological progress ... this legacy of spatial utilization [has] been forgotten."[8] Villagomez identifies eight "spatial types" of residual spaces: "Spaces Between, Spaces Around, Rooftops, Wedges, Redundant Infrastructure, Oversized Infrastructure, Void Spaces, and Spaces Below,"[9] and, while many of these residual spaces are the (by-)products of urban demolition or governmental regulations as may be the case of the terrain vague; they can similarly result from careless urban planning which either did not (or could not) take all containing space into account – resulting in unused, usually green or else paved spaces that fill in the gaps of the larger whole that was the urban plan.

What sets the qualities of these spaces apart from regular public spaces, such as streets and squares, is that these residual in-between spaces have greater potential for the city. For geographer Yi-Fu Tuan, "the built environment clarifies social roles and relations," and whilst "People know better who they are and how they ought to behave when the arena is humanly designed rather than nature's raw stage,"[10] Karen Franck and Quentin Stevens argue that when "In urban public spaces ... people pursue a very rich variety of activities not originally intended for those locations," these spaces become loose. And while such spaces can provide "accessibility, freedom of choice and physical elements that occupants can appropriate, ... people themselves must recognize the possibilities inherent in it and make use of those possibilities for their own ends, facing the potential risks of doing so."[11] Although Franck and Stevens note that all public spaces can become loose, the dormant qualities of spaces that share their characteristics with those of the terrain vague can be unveiled more successfully, for they are almost always less active than regular public spaces like streets or squares, and their conditions and placement within cities are oftentimes undeniably unique. According to Carole Lévesque, French philosopher Henri Lefebvre implied similarly that "the creation of an ideal community could only be pursued through the study of everyday life, in everyday urban settings, or what he called 'experimental utopias'" and that the "everyday life harbored within itself the possibility of its own transformation, and so we ought to support and help

7
M. Foucault, Of Other Spaces: Utopias and Heterotopias, p. 22-27.

8
E. Villagomez, Claiming Residual Spaces in the Heterogeneous City, p. 81.

9
Villagomez, p. 83.

10
Yi-Fu Tuan, Space and Place: The Perspective of Experience, p. 102.

11
K. Franck (ed.) and Q. Stevens (ed.), Loose Space: Possibility and Diversity in Urban Life, p. 2.

12
C. Lévesque, Welcome to Bachoura, or the Found City as Insterstice, p. 39.

what is already there to come out and grow."[12] Furthermore, such spaces have the potential to activate something which Tuan calls the "identity of place," which is achieved "by dramatizing the aspirations, needs, and functional rhythms of personal and group life" which, in turn, creates "deeply-loved places ... [that] can become vividly real."[13]

Learning from the In-Between

To understand what the potential qualities and conditions of such residual spaces that are made loose entails, it is important to understand how this loosening has been achieved in different situations in different places. As mentioned earlier, residual spaces in cities began to surface when urban planning was made a common practice. In these early days of urban planning, there was still much land available, which meant that initially, these residual spaces were not much of a concern. A consciousness in the architectural practice emerged when, after the Second World War, the young Dutch architect Aldo van Eyck found that reconstruction plans for Europe's destroyed cities, often based on the functionalist model, "led to a clear neglect of existing conditions and left behind what was wrongly considered minor spaces." This prompted him to look "carefully at the city" so to recognise "both the qualities and the large number of neglected spaces" and, consequently, to insert "the idea of the in-between as a transformative strategy."[14] Over the years, van Eyck activated hundreds of such in-between spaces by transforming them into playgrounds which could be seen as the formal beginning of such interventions in modern history.

One notion of spaces like terrain vague that can be appropriated is what Krystallia Kamvasinou and Marion Roberts call interim spaces. These spaces are "vacant land temporarily available owing to stalled developments."[15] As these spaces are recognised as being impermanent or in a transitory state, they disregard any and all possibilities for a lasting, built, solution. Consequently, instead of constructing a building that would later need to make room for another, minimal interventions are oftentimes executed in order to exploit the potentials of the site. Such interventions often take the form of parks or allotment gardens, that "can help develop a no-go area into a well-valued community space, acting thus as a catalyst for putting a neglected urban space back on the map." However, Kamvasinou and Roberts recognise that, even by allowing such functions to perform on terrain vague which may "lose their special charm and (unmanaged) nature," by retaining the characteristics of the terrain vague it is imperative to acknowledge them as "official vessels for change." In other words, interventions on the terrain vague would benefit from "ongoing transformations" – a part of their nature.[16]

Heike Rahmann and Marieluise Jonas raise the valid question whether or not a "designerly response" is even possible when dealing with the transformations of the terrain vague. They worry that "economic and commercial imperatives inevitably mean that a designerly response finds itself in opportunistic domains." For them, a solution finds itself in "embracing the distinct character of roughness, ugliness, and otherness" so to "challenge conventional notions of the aesthetic and functionality of parks, industrial sites, and vacant land in metropolitan cities." Such projects, similarly to the aforementioned interim spaces, are to find a "sensitive balance between space and time" by setting "the spatial framework in which natural processes occur, while the site is in constant transformation, unpredictable and unfinished, providing the possibility for a different kind of environmental and spatial experience."[17] One project that does this exceptionally well is Space & Matter's "De Ceuvel." In this project, a polluted plot of land in Amsterdam is transformed by the placement of retrofitted houseboats that are separated by plants that help naturally sanitise the soil and are connected by a bamboo boardwalk. The special conditions of this terrain vague allowed for the Dutch architectural office to create such a unique project, which otherwise would have stayed derelict until the completion of the land's sanitation, or until much money was invested to do this artificially, after which the land would be as a tabula rasa – fit for any project.

In Japan, Atelier Bow Wow observed with-

13
Tuan, p. 178.

14
C. Lévesque, Terrain Vague: Interstices at the Edge of the Pale, p. 39-40.

15
K. Kamvasinou and M. Roberts, Interim Spaces: Vacant Land, Creativity, and Innovation in the Context of Uncertainty, p. 187.

16
Kamvasinou and Roberts, p. 198.

17
H. Rahmann and M. Jonas, Void Potential: Spatial Dynamics and Cultural Manifestations of Residual Spaces, p. 96-97.

in the metropolis of Tokyo a uniquely different way of treating in-between spaces than possibly any other place outside of Japan. In this densely-populated country where buildable land is limited, as was similarly the case in the medieval European city, a great number of "amazingly small buildings" can be found "between streets, along widened roads and spaces between tracks and roads." They are, what the laboratory of Yoshiharu Tsukamoto at the Tokyo Institute of Technology, together with the office of Atelier Bow Wow, call; pet architecture – reminiscent of their small sizes compared to their surroundings and sometimes even humorous characteristics.[18] They share less features with the terrain vague and more with the residual in-between, as they are in unison with the residential or commercial urban fabric. Consequently, they are less concerned with the temporality and unpredictability of the terrain vague, despite the fact that Japanese houses have very short lifetime expectancies (and, even if the house is to be replaced, it will be replaced by another house). Yet, the restrictions they are subjected to, imposed by government regulations and the physical footprint of their plots, result in a seemingly infinite amount of distinctively unique buildings that are more concerned with the spatial qualities that can result from said restrictions. For these buildings, that are as pet architecture, have inspired a generation of Japanese architects that value "the various negative spaces that exist in the city" and equate them with "actual spaces," so to make the creation of a "completely new space" possible. An example can be found in Ryue Nishizawa's Moriyama House, which "dismantles the concept of lot" by "enfolding various void-like exterior spaces into the architectural plan itself" and continuing the work "into the subtle exterior space of the surrounding area."[19]

The Conscious In-Between

Earlier in this paper, a question was raised regarding the expressive qualities of the found allotment gardens that are situated in a number of Strasbourg's residual in-between spaces. While the social implications of private or shared allotment gardens in these spaces of the city are unquestionably advantageous for its inhabitants, they are individually structured and face inward – their soil used solely by their respective users. All in all, they refrain from activating the full potentials of the terrain vague or the residual in-between. While there is no uniform answer to how such spaces should instead be articulated, observing their deficiencies on the one hand and understanding how similar spaces can be expressed successfully, on the other, may help any future endeavours in architecturally appropriating those spaces that are commonly overlooked and disregarded. Being conscious of the distinctive qualities that the in-between can express – be it in the city as is the case in the work of Aldo van Eyck; in the temporality of the site as in Space & Matter's De Ceuvel; or in the building such as in Nishizawa's Moriyama House – will benefit both the in-between space and the city in which it is situated.

18
Tsukamoto Architectural Laboratory and Atelier Bow Wow, Pet Architecture Guide Book: Living Spheres, p. 1, 8-9.

19
K. Kitayama, Changes in Urban Areas of Tokyo at the Beginning of the 21st Century', p. 23, 25.

Barron, P., 'Introduction: At the Edge of the Pale', in M. Mariani (ed.) and P. Barron (ed.), Terrain Vague: Interstices at the Edge of the Pale, New York, Routledge, 2014, pp. 1-23.

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REDISCOVERING THE ZONE

MALGORZATA WYSZYNSKA

"In the airy fern stream, on the forest glade,
Where the meadow turns into the forest's shade,
Lies the wanderer's body, the body of no use.
He wandered the world from the clouds to the blues,
While waiting impatiently to mourn his soul
He desired to see the green spirit's sprawl.
Then the green demon with its omnisylvan breeze
Embraced him when he stopped to rest under the trees,
And lured with its incessant blossoming haste,
Enticed with its panting lips of a laughless taste,
Charmed with fragrant under blossom ruinery,
And tempted him deeper into the greenery!
Over the coasts of the worlds he ran for hours,
Taking soul and breath away from the flowers,
Till he waded deep in full of berries grounds,
In gloomy daze of clovers, in stillness mounds,
In duskless thicket, in dull non-crack of dawn
In a place where the last gale noises are gone.
So he lies dead in the endless depths unseen,
Shady as a forest– the drowned in the green".[1]

Introduction

A zone can be understood as a strip of land or a part of a city that has a specific set of characteristics. It can also be a space of particular restrictions that remains in opposition to the outer world. Shaped by forgotten events or a result of the strict official policies that are long gone it can remain invisible until you find your way inside. Maybe is it a rendering of a common neglect? Or is it a carefully arranged spectacle of different natural and man- made conditions? Either way zone has its own narrative that sets it apart from the rest of the city. It has its peculiar set of guidelines that can be only sensed empirically.

In "Stalker" by Andrei Tarkovsky zone is not only highly protected and feared, but it is an alien space supposed to grant the deepest, unspoken wishes. It is the last hope for its visitors. Placed within a neglected and poor city, it conceals natural landscapes. Tall grasses together with trees and bushes expropriate everything that is manmade (fig.1). The rules of how to behave inside the zone are known only to the few called stalkers that lead volunteers in and out.[2] The space remains a mystery leaving in awe everyone that dares to visit it.

In Bolesław Leśmian's poem "The drowned" forest is the foreign land, a zone of a mystery, where the wanderer explores and eventually looses herself. The nature is personified, animated by itself and the wanderer that follows it. Visually arresting, zone is a space that releases strong emotions: of fear, delight, or bliss. It is

1
B. Lesmian, The Drowned, Meadow.

2
A. Tarkovsky, Stalker.

about the contrast that you fall into and cannot let go of it. Wood versus concrete, petite versus big that makes a space different. It lures you in, giving no choice but to explore.

fig. 1

Zone militaire can be understood as a site occupied by fortification, bastions and other military facilities. Those were surrounded by a non- constructible area to allow clear view for the defenders. When the facilities were no longer needed or demolished spaces left behind were soon inhabited by poor, creating a new type of zone around the city.

In case of Strasbourg the area between central part of the city and the modern districts that surround it from the outside was also occupied by the zone militaire. Created by the former fortifications and barracks, it was surrounding the old town from the XVIII century till the second half of the XX century. It created a void in the urban development of the city. As the zone is more or less gone; it is interesting to trace how different trends of urban design influenced the area. The moments the grid starts to disappear, where it was reinforced, what are the ratios between the parts with different spatial organizations.

Rediscovering the Zone

As city grows throughout the years its districts are shaped by the different powers at play. Transformation of the city in time may result in spaces that lie "in between". It occurs especially when a selected part is designated for a function that insulates it from the outside world, for example a military base. It may happen that after the building (military base) is gone the city tissue is already well detached from the area. There are streets that used to be fortification and organically became a part of the city's tissue as well as abandoned land fields excluded from it. Is it worth to explore them? Is there a possibility of transforming them by using Open City concept's ingredients?

The concept of the Open City relies on the promise of "emancipated existence" strictly related to the urban program and "a space of opportunity".[3] It touches upon the idea of individual freedom and economic prosperity, which links it directly to "the emergence and transformation of the modern society".[4] Richard Sennett mentions in his article "Boundaries and borders" that there is a paradox visible in the contemporary cities with a history reaching many centuries back. Their contemporary districts fail in comparison to the old city's tissue. He criticizes modern urban planning techniques. Sennett claims that modern technologies, instead of being a tool for experiment, are used as a controlling device. There is a clash between the city and the architecture practice, where architecture imposes a totalizing order on a city which is by its nature "resistant to the notion of the whole".[5]

There are issues such as insulation or goals such as recreating engagement and identification with public spaces that contemporary cities face. The solution for such problems could be insurgent citizenship. The notion of the insurgent citizenship can be understood as a reaction to the dehumanized and unfriendly public sphere in the city.[6] Citizens try to reclaim their right to their town by taking over devastated urban peripheries and transforming them into friendly, public zones. Unlocking of the existing resources fits within this narrative and can be understood as a way to allocate new functions within existing structures. It is about constructing the commons by rediscovering and renegotiating the meaning of public realm. "Przyjaźń" barrack housing neighborhood in Warsaw, Poland was developed in the 50's for the Soviet builders of the Palace of Culture and Science. Initially a gated community, it contained two types of wooden, Finnish houses that were a payment for

3
A. Eisinger, The Open City and Its Historical Context. A Historical Assessment of the Limits and Potentials of a Concept, p. 36.

4
Eisinger, p. 37.

5
M. Gandelsonas, The City as the Object of Architecture, p. 131.

6
J. Holston, Spaces of Insurgent Citizenship, p. 10.

the coal sold to Finland. It was a peculiar set of wooden housing that was never seen before in Warsaw. The area was surrounded by beautiful greenery and contained an extensive list of social facilities such as cinema, library, and service points. After completing the construction workers moved out and the neighborhood was transformed into a university city with students and academic staff moving in. While the surroundings were transforming into a high-rise housing district "Przyjaźń" neighborhood remained a picturesque, green enclave with a tight- knight community. No longer gated it is seen as a perfect place for a walk or rest, becoming truly a public space not only for the local residents.

The question arises whether the relation between urban space and form should not emphasize built form anymore as the main design goal. The contemporary city tissue differs from the historical town planning and is dominated by space. This shift in the spatial characteristics requires moving the focus point to the post- urban strategy. Albert Pope said that "given the continued interrelation between contemporary space and form, it is possible to draft an "oblique" urban strategy that aims indirectly at the primary target of space through a secondary intervention of form".[7] The vital priority is the humanization of urban models, as it may be hard to find a permanent way to lead urban practice. The idea of a zone can help to engage people with their surroundings. There are different morphological elements it consists of that can help in rediscovering the idea of a zone for the inhabitants.

Morphology #1: Grid of the City

Streets are truly the most democratic spaces of any city. They are the most stable and basic urban form and are resistant to a change that city continuously face. The continuity of the grid is infinite.[8] It allows for numerous varied routings and plans. Pope claims that city without a street grid does not exist. He believes that the cities that opened up in terms of the buildings and space began to shot down as an organism. In his book he examines the transformation of the cities from the pre- war open systems to the post- war fragmented, closed, and suburban spaces. He points towards 20th century planners to show how lack of grid resulted in anonymous and dehumanized urban spaces. As the erosion of the grid occurs simultaneously with a disappearance of the city, the city never fully disappears. Where there is no grid it is exchanged by what Pope calls a ladder. It represents the closed centripetal organization. The ladder offers one planned routing and the virtual elimination of cross- purpose. It is a linear connection between two points.

In Strasbourg the organization of the city is centrifugal as it was developed pre- war. Continuity of the grid was broken by the barracks occupying the ring around the old town. Demolished in the second half of XX century the zone was soon urbanized to recreate the grid connecting the center with the outskirts.

Grid stimulates the creation of variety of systems within the city, of a wide spectrum of complexity. Transformation of the society has been very hectic and fast. It is hard to tell what the proper urban model for the contemporary city is. Modern urban experience relies strongly on the transportation systems. It is targeted, discontinued and results in the grid erosion. Zone needs indefinite number of possible routings, so it is crucial to reinforce the idea of a street as the democratic and open space within it. Focusing on the non motorized means of transportation would allow exploring the space without following rigid, planned transportation system lines.

Morphology #2: Threshold

As there is a zone there has to be a border that divides what is external and what belongs within it. In "Stalker" there is a clear physical border that separates two worlds- gate protected by guards as well as mental border created by fear of people. Space inside the zone is taken over by nature which vividly sets it apart from the poor, industrialized city. This is important to understand that the border does not have to be a tall, brick wall that clearly separates inside and outside. Border can be understood as the space where two worlds overlap. It is a space where integration processes take place. Border is not really a border as it does not completely separate

7
A. Pope, Ladders, p. 50.

8
Pope, p. 55.

excluded from either. It becomes a "in- between" space.

Foucault called those heterogeneous spaces heterotopias – "places that do exist and that are formed in the very founding of society – which are something like counter-sites, a kind of effectively enacted utopia in which the real sites, all the other real sites that can be found within the culture, are simultaneously represented, contested, and inverted. Places of this kind are outside of all places, even though it may be possible to indicate their location in reality".[9]

Elements such as gates, doorbells, doors, thresholds were meant to precisely distinguish what is outside and what is inside. Nowadays those elements are often marginalized or at least they do not divide the space so distinctly. George Simmel mediated on the nature of a border. In his essay "Bridge and door" he relied on the idea of a door and their flexibility in expressing the changing edge of what is private and what is public. When open, doors clearly invite to enter the space behind them. Remaining closed they explicitly imply you are not welcome behind them. At the same time doors join and divide space. Similar role relies on the window. It is meant to let you glimpse outside connecting external and internal.[10]

The threshold of the zone and its configuration can be used to trigger different behavior. The setting of the elements on the border may indicate if passerby is welcome to enter or not. Urban elements such as city gate or fences can direct you through the border of the zone, while street lamps may indicate where to enter. Accumulation of the objects unusual for the area may also become a gate to the zone. Massive blocks of stone, as seen in Peter Eisenman Holocaust Memorial in Berlin, by being so different from its surrounding captivate people and push them to explore the memorial. They create the border and the zone itself. By placing stone blocks on a regular grid with openings in between this urban sculpture invites to walk into its realm.

Morphology #3: Experiencing the Zone by Walking

Walking can be understood as a cognitive tool. The act of walking triggers the whole surrounding: it starts to transform and change. Being on foot is firmly embedded in the architectural practice. Architecture can make us move in a specific way. During the designing process it is decided which parts of the building should be accessible by foot and which should remain closed. As the observer we perceive buildings by passing them, walking around them, and crossing through them. We recognize different qualities of the urban form when passing it from afar. We can admire its full shape, see how to fits into the surrounding. From a close-up perspective we notice different, fragmented elements of the form. In his book "Walkscape" Francesco Careri states, how the relationship with territory is formed and evolves from walking. He claims that walking has a generative quality for architecture and landscape, but it is forgotten by the designers. Giving examples of artists such as Gordon Matta- Clark, who created site- specific artworks that could be perceived by walking, Careri shows how the concept of a stroll as a creative tool was not forgotten by artists. He mentions Italian expression andare a Zonzo which means "to waste time wondering aimlessly". He wonders how its meaning transformed as the modern city changed and does not resemble the city as was known when the phrase was coined. As mentioned earlier we can recognize pre- war and post- war cities. Post- war cities are a sum of unexpected urban relations, with a different dynamic. He mentions that "to design a nomadic city would seem to be a contradiction in terms. Perhaps it must be done in keeping with the manner of the Neo-Babylonians: transforming it playfully from the inside out, modifying it during the journey; restoring life to the primitive aptitude for the play of relations that permitted Abel to dwell in the world".[11]

The act of strolling as the basic way to get to know, interpret and transform space. The act is ephemeral, so once it is over it disappears. It is also its strength as you can repeat the act numerous times and experience something new each instans. To experience the zone though, it is necessary to move through it. The elements that could reinforce the idea of being in the zone can be divided into different categories. There are

9
M. Foucault, Of Other Spaces: Utopias and Heterotopias, p. 2-5.

10
Simmel, G., Bridge and Door, p. 5.

11
Careri, Walkscape, p. 185-189.

elements that belong to the threshold's group as they lie on the outskirts of the zone and contain it within its boundaries. There are also objects that lie within the zone itself and represent its character. Elements can be divided into natural context- land relief and man- made urban forms. They can either stop you from entering, make you take another route or spark an interest to follow through. All those pieces put together create indefinite number of sequences of experience while passing through the space.

Reinforcement of the Idea of the Zone as a Design Tool

The zone can be used to create strong emotions in the visitors. All the elements that allow free walking through the space and experiencing the city are beneficial in reinforcing the idea of the zone. The idea of the open public space can be strengthen by different elements such as streets, focus points and greenery. New activities can find a way inside the old structures taken over by the nature of the zone. With all the different morphological lenses it becomes clear what the ingredients of the zone are. Implementing them can reintroduce new values to the area and create an emotional relationship between the urban form and inhabitants. The zone can be rediscovered again and again, always different and always captivating. Using an idea of the zone in a designing process may allow you to understand better the site itself and fit your architectural proposal better within it.

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'Stalker', dir. Andrei Tarkovsky, Soviet Union, Ruscico, 1979, [streaming].

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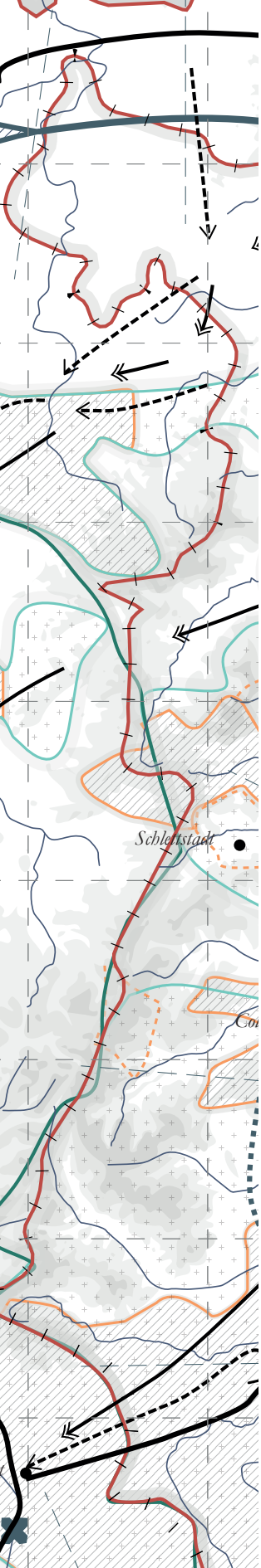
Fig.1.
Scene from Andrei Tarkovsky "Stalker", Soviet Union, Ruscico, 1979.


Schlettstadt

BORDERS

BARRIERS OR EXCHANGE ZONES?

Strasbourg is a city whose character is heavily influenced by its border location in the area that has always been a flash point in the history of Franco-German enmity. The city was constantly reterritorialised, redefined and reshaped. Changes reforming the city often had a very defining character, which left its marks visible in the urban tissue up to the current day. On the other hand, they created a multiplicity of undefined areas, whose actual shape does not reflect any coherent set of modifications. As a result, Strasbourg demonstrates constant tension between indefiniteness and definiteness as well as openness and closeness.

Richard Sennett[1] emphasises the importance of distinguishing between the notion of a border and a boundary. A boundary is understood as a confinement, heavily articulating the enclosed territory, which excludes any unpredicted activities. A border, in contrast, refers to the area of higher interactivity around the edge. Boundaries are solid and reductive, while borders are permeable and productive. In Deleuze and Guattari's terms, boundary is a territorialising agent, pushing an assemblage towards the homogeneous stratum, while border dissolves the boundaries, by creating the zones of the exchange of energies.[2] As a result, borders owe their higher activity and complexity to the presence of heterogeneous agents and changing influences generating fluctuating conditions.

Openness to outside agents and interactivity require a special structure of elements suitable for interaction. In Alexander's words, it is a border zone – a niche for desirable effects[3] – where transformations occur. Opening up the boundaries and allowing for exchange of energies within the environment, according to Sennett, contributes to the accumulation of complexity, thus enables the evolution of the system.

The following drawings investigate the character of borders and boundaries in Strasbourg. Such analyses provide comprehensive explanations of the chosen edges, which serve as a starting point in defining city's level of (in)definiteness as influenced by (de)coding and (de) territorialisation. The recognition of particular features within each area of interest is a prerequisite to formulation of coherent design proposals, consciously either sustaining or modifying the existing conditions.

1
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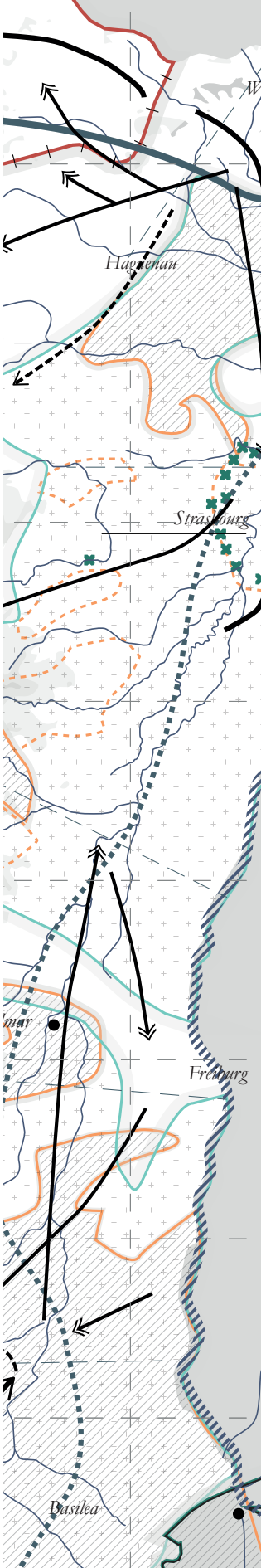
2
De Landa, M. 'Space: Extensive and Intensive, Actual and Virtual' in I.Buchanan, Lambert, G. (eds), Deleuze and Space, Edinburgh, Edinburgh University Press, 2005, p. 80.
3
Alexander, C., A Pattern Language, New York, Oxford University Press, 1977, p. 9.



Argentoratum

923 Holy Roman Empire

1262 Free Imperial City

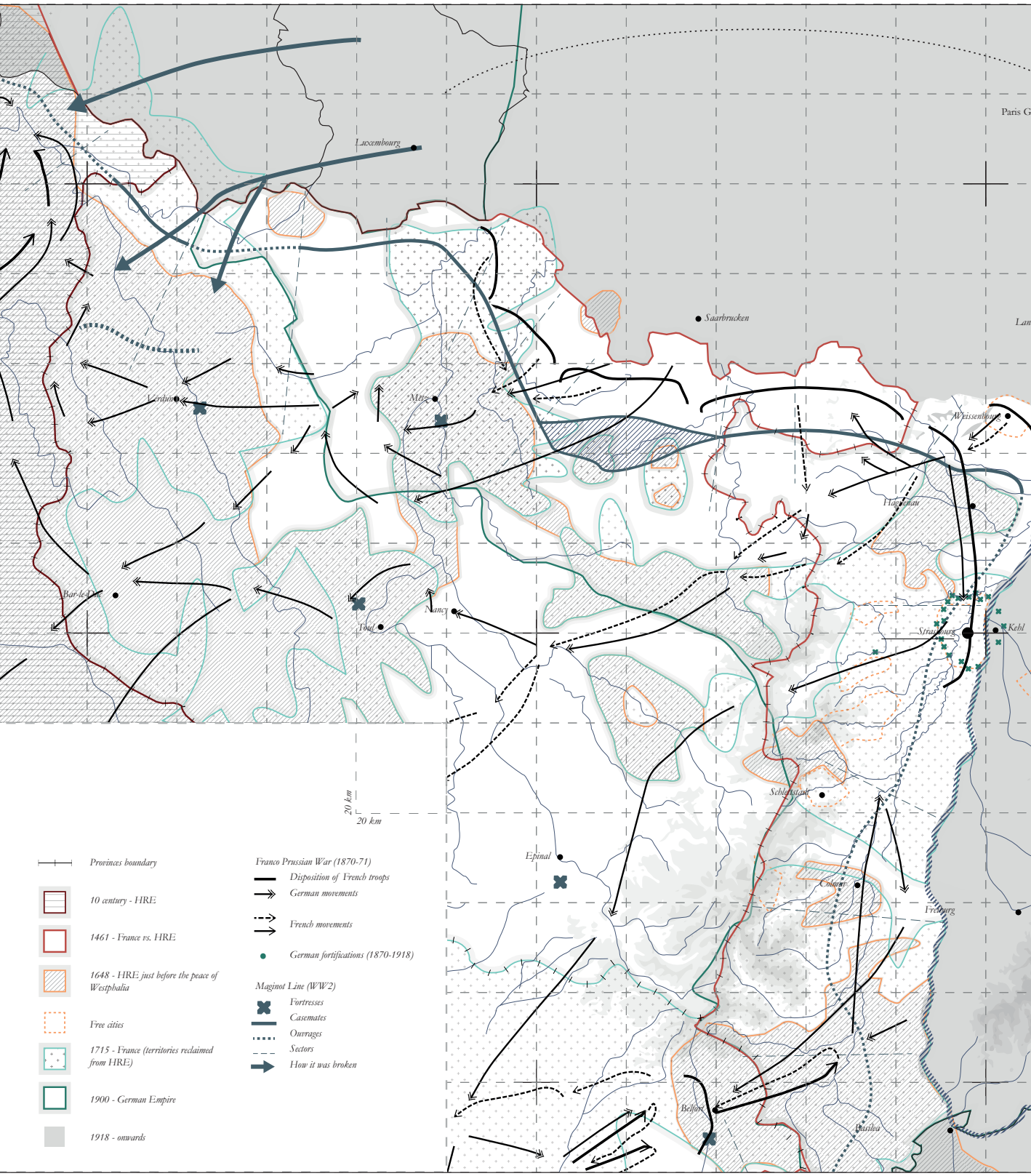
1332 Free republic

1648 French Kingdom (Treaty of Westphalia)

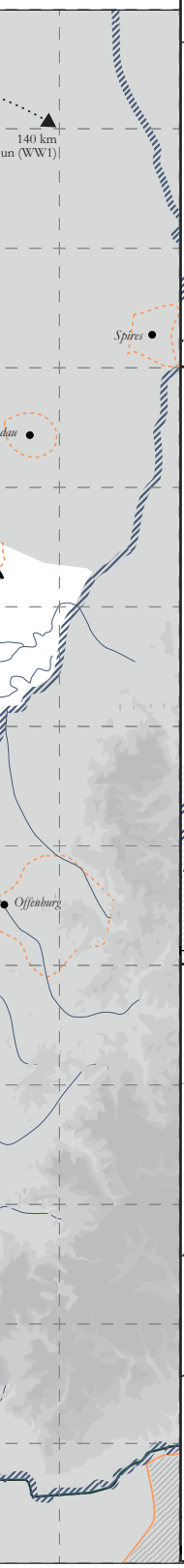
1870 Kingdom of Prussia (Franco-Prussian War)

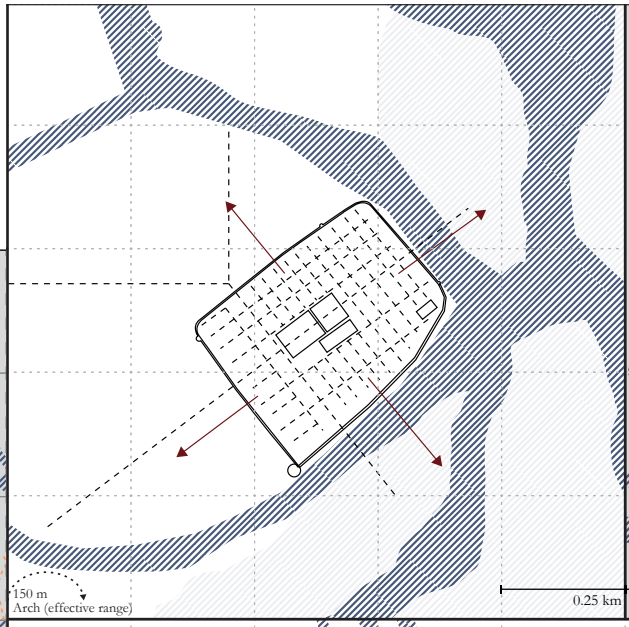
1914 France (WW1 - Treaty of Versailles)

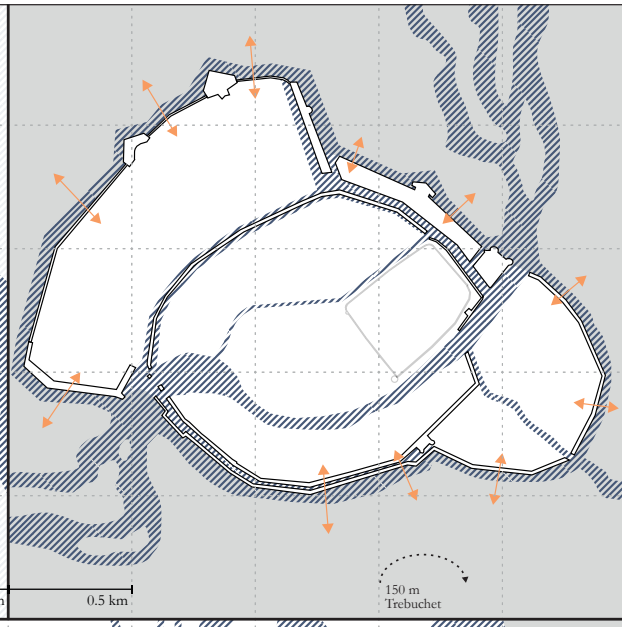
European C

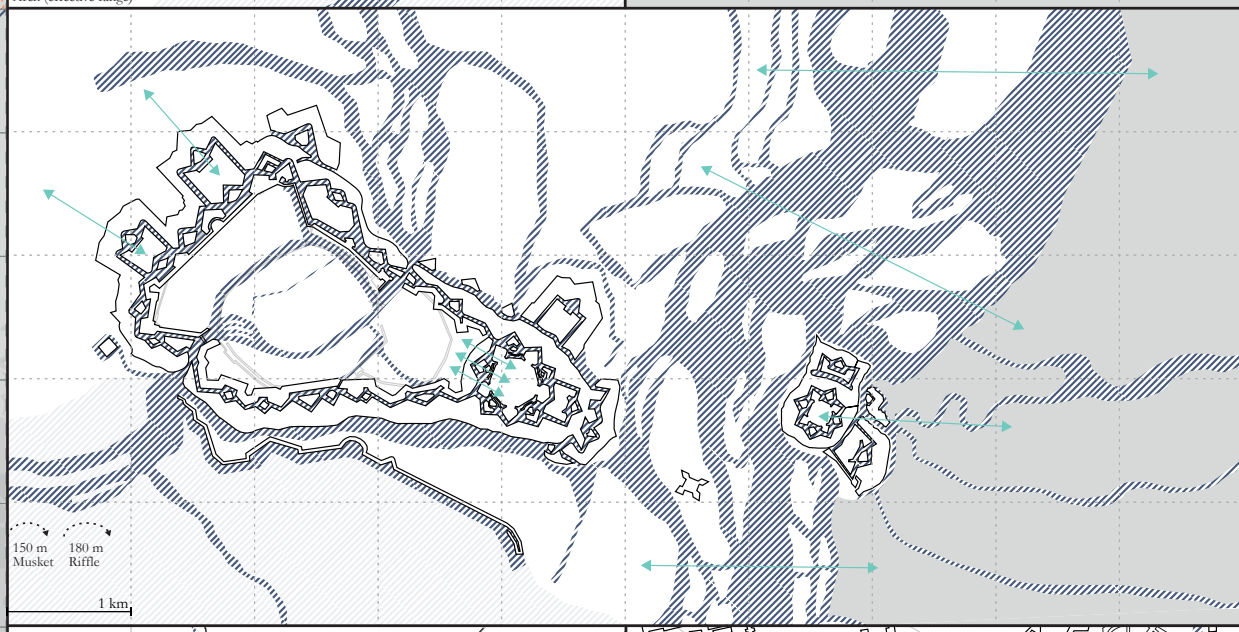


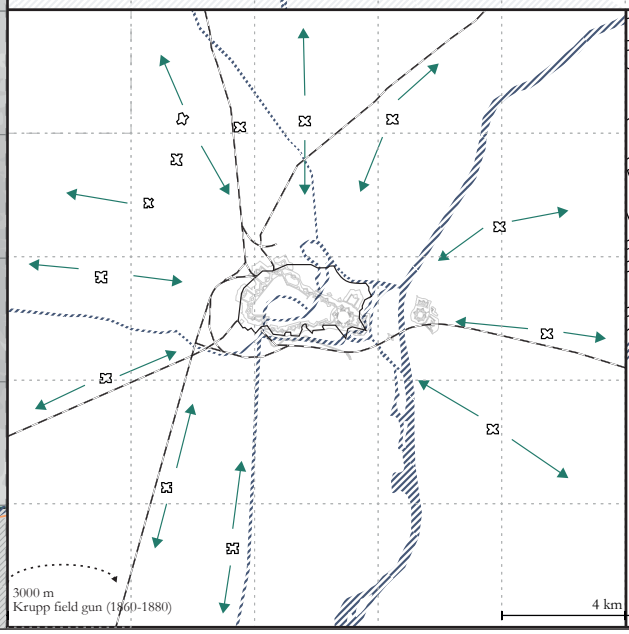
1952
oal and Steel Community

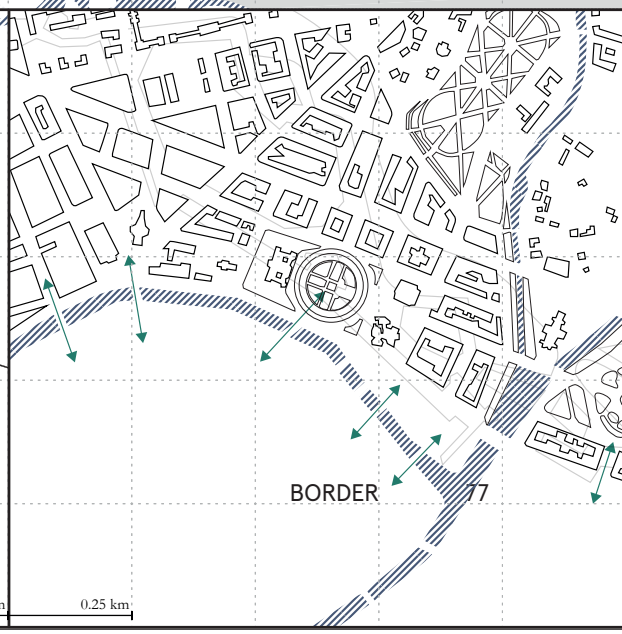


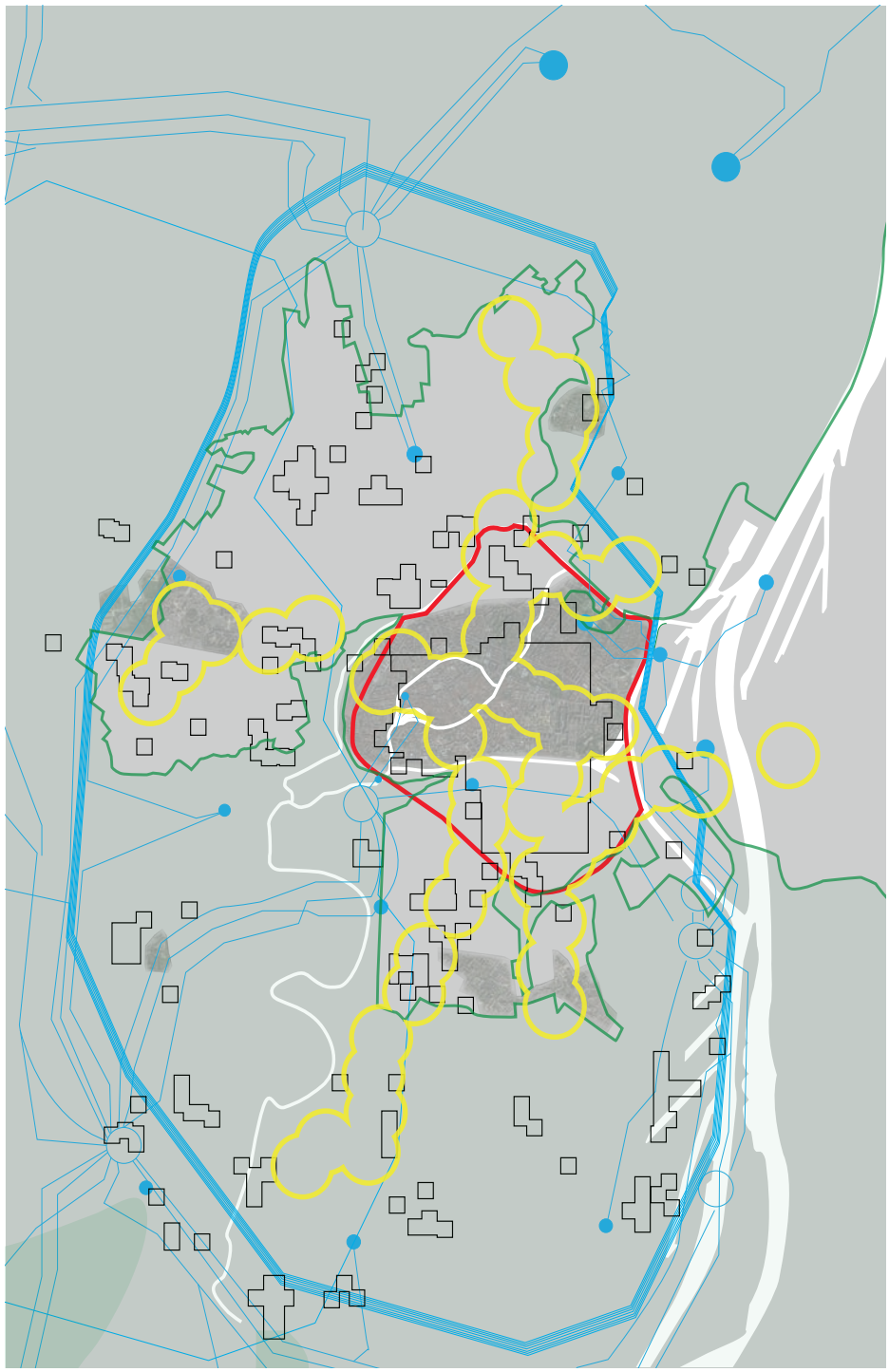








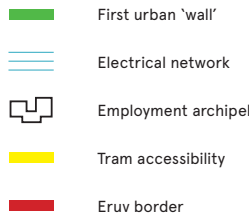


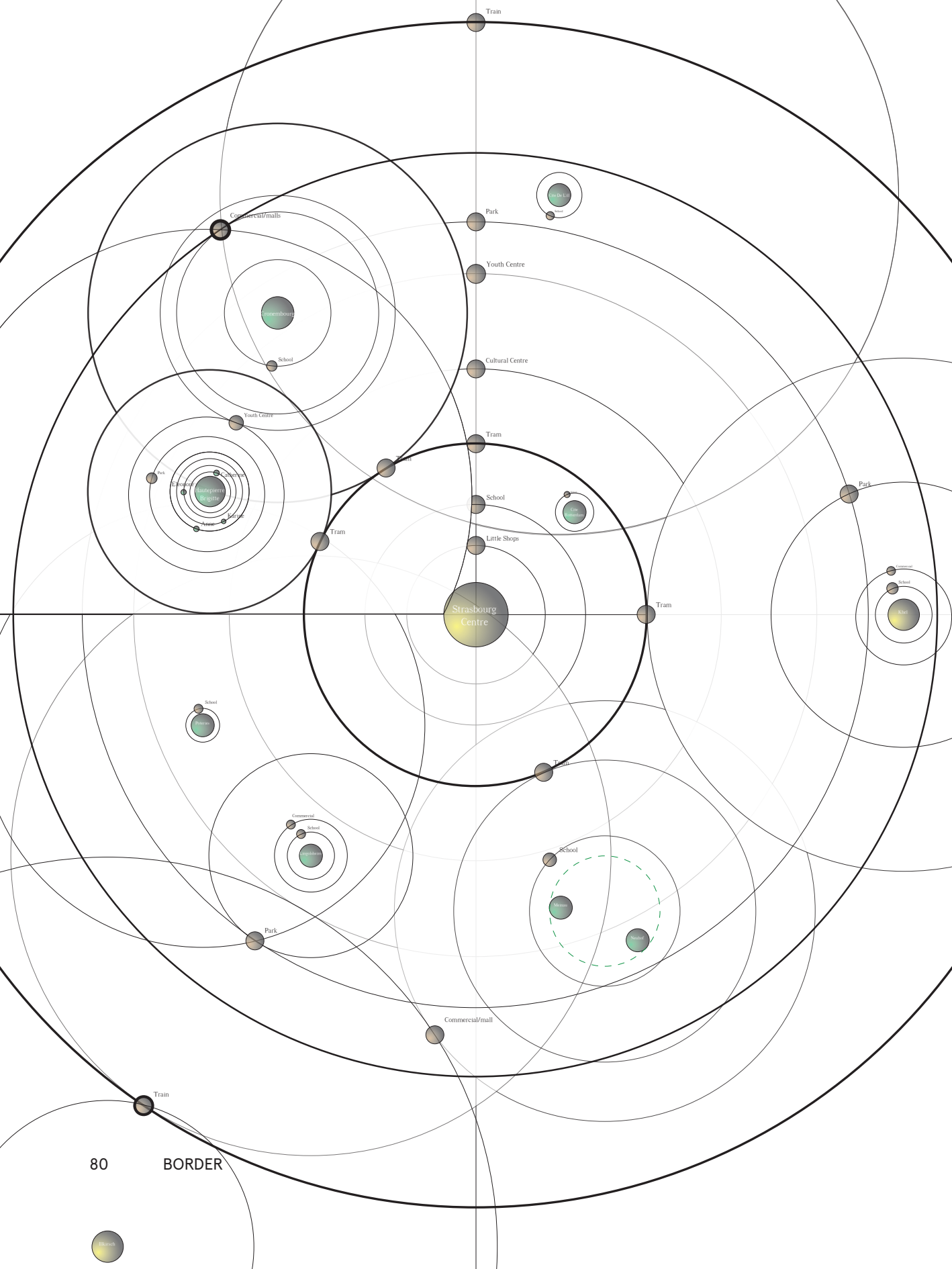


RELATIVITY OF STRASBOURG

Here we can see the borders of Strasbourg vieuwed from different perspectives. Attatched to them, the QP's or 'Grand Ensembles' seem to play a major role for the city, what is not necesseraly visible at first glance. A lot of them are situated at the intersection of those borders, they have a certain resposibility regarding the law, dwellings near employment poles, ecology and landscape and as independent activiies as they are the furthest fom te city center.

The first urban 'Wall' can be seen as the first urban encounter discrupting the ecological and natural system. The Electrical Network is important for different reasons. First, it shows where the major power olines are situated. Secondly, a lot of law based programs are linked to this network. It thus brings a lot with it. The employment border is where we can find the major poles of employment. They inform on the proximity of the dwellings or city center, regarding the work territories. From this point of view, strasbourg is an archipel. The tram accessibility shows the extention of strasbourg from the public transport. It also reveals how a point A the would be more distant from the city center than a point B, could in fact be closer (in terms of time) than B because of its proximity to a tram station. Its border is also an archipel revealing the big gaps between stations and disctricts. The red border is the border of the 'eruv'. It is a ritual enclosure that some Jewish communities, and especially Orthodox Jewish communities, construct in their neighborhoods as a way to permit Jewish residents or visitors to carry certain objects outside their own homes on Sabbath and Yom Kippur.

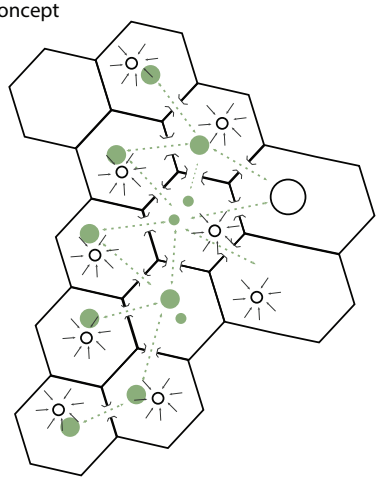



Train
Commercial/malls
Park
Youth Centre
Cronembourg
School
Cultural Centre
Youth Centre
Tram
Tram
Tram
School
Little Shops
Strasbourg Centre
Tram
Park
Tram
Park
Commercial/mall
Train

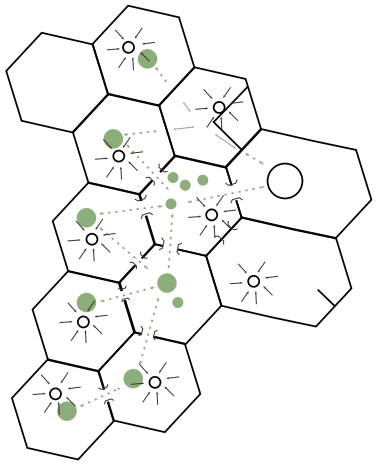
SATELLITES OF STRASBOURG

In this diagram we can see an analogy to a constellation where each planet is a city or district that relatively 'works' like a city. It shows the extend to wich the grands ensembles serve and/or can be autonomous. Each 'satellite' is an activity essentieal to constituate a city. Some planets, thus share the same satellite, indicating a dependency. The grands ensembles also can be seen as satellites of Strasbourg within a fractal understanding of this diagram.

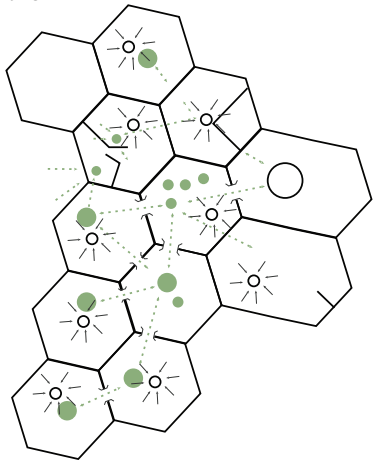
1964: Original concept



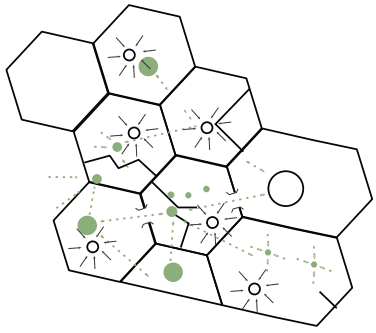
1971



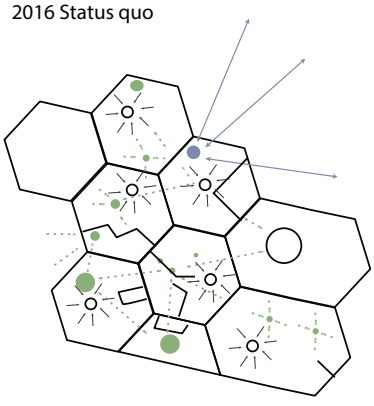
1973



1977



2016 Status quo



The evolution of Hautepierre through its building proces has been remarquably changed. On the starting point we can see this 'molecule' like plan. The car network was separated from the pedestrian one by bridges going over the roads, and a carefully carfree zoning within the cells. Already in 1971, we can see that the car invited itself in the cells, bridges wheren't created and so forth. In 1977, the whole south part has been cutted, and the highway acts like a big separation that has cut of the 'molecule'. In purple, we can see that a youth center has been added, that actually does not primarely is used by Hautepierre's inhabitants.

Pedestrial bridge

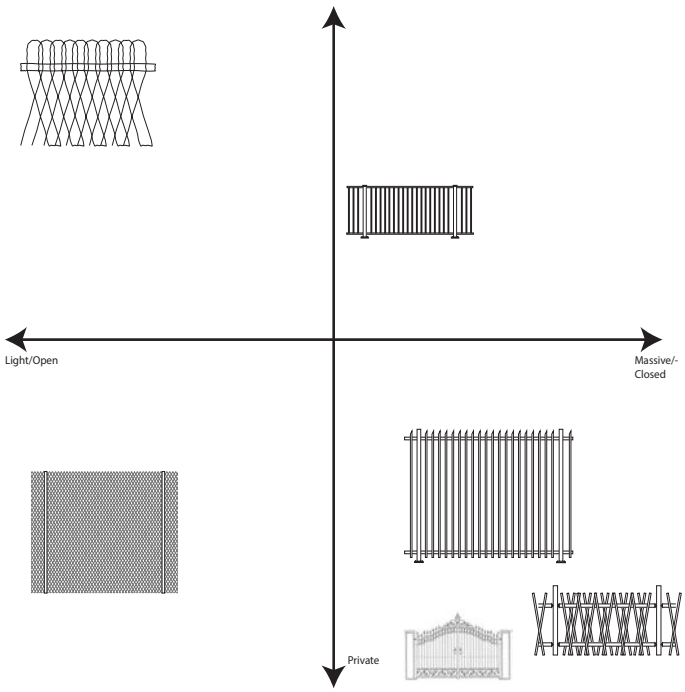
Car network

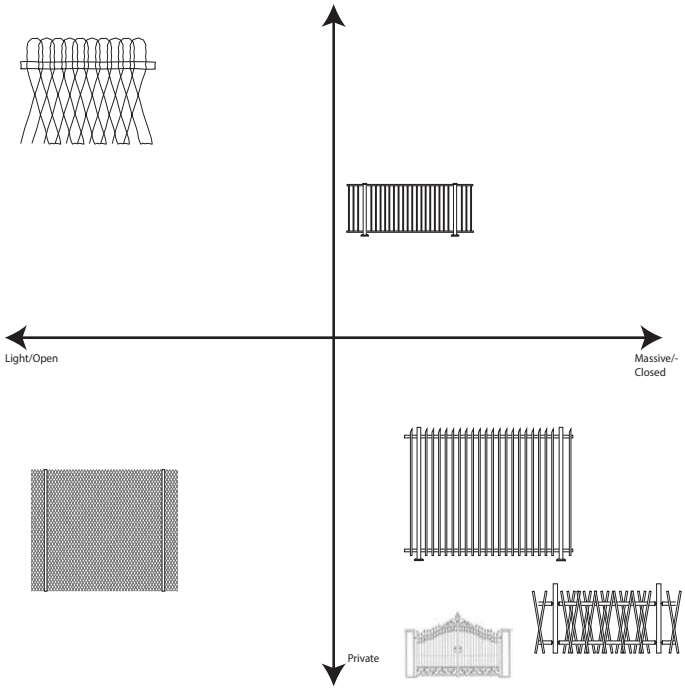
School

Activities

Pedestrian network

Youth Center (not used by Hautepierre's inhabitants)





1
This modernist ideal aimed at zoning each cell clearly. The buildings had a continuity that aimed at framing the landscape and other vieuw points. It also separated the car from the pedestrian zone.
At the noeuds of the car network, we can see that the circulation was though to be fluient because of the use of bridges and tunnels.

2
The zoning is clearly not present in the built plan. It seems that the buildings where dropped on a 'no man's lands'. No separation or zoning, and at the noeuds are roundabouts, that proved to generate congestions.

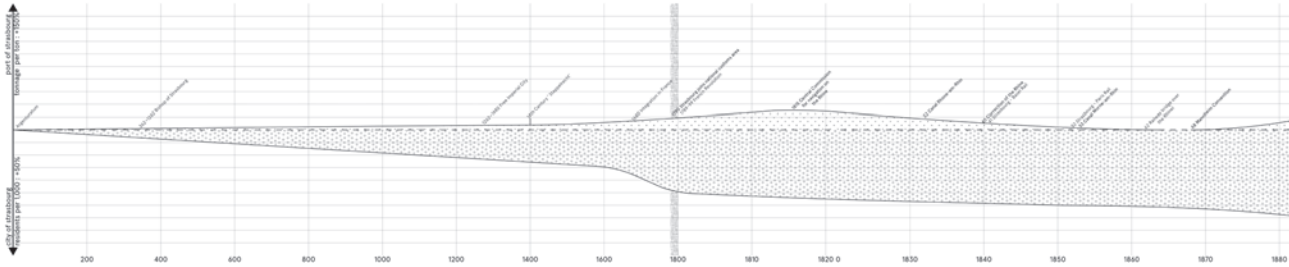
Activities

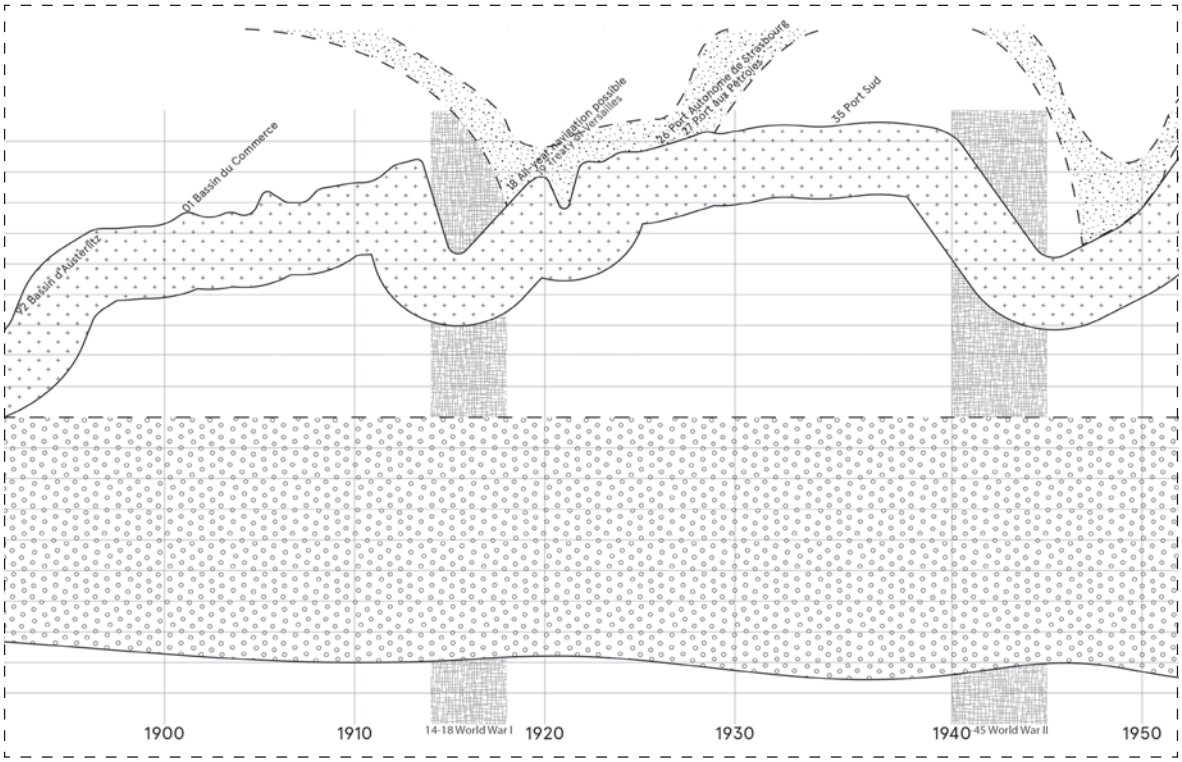
Dwelling

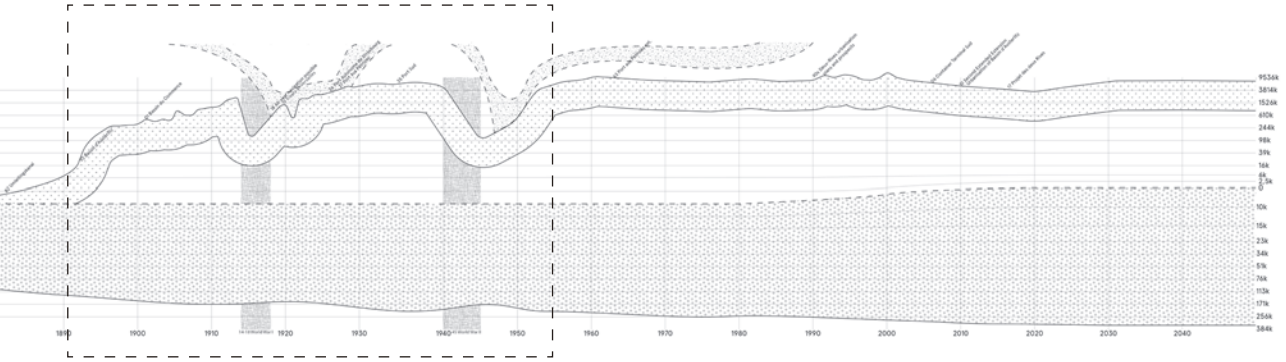
Park

Parking

Pedestrian Zone


port of strasbourg
tonnage per ton • 1000
city of strasbourg
residents per 1000 • 100%
200
400
600
800
1000
1200
1400
1600
1800
1810
1820 0
1830
1840
1850
1860
1870
1880


01 Bassin du Commerce
02 Bassin d'Austerlitz
18 Année navigation possible
19 Treaty of Versailles
26 Port Autonome de Strasbourg
27 Port sur Pétroles
35 Port Sud
1900
1910
14-18 World War I
1920
1930
1940
45 World War II
1950

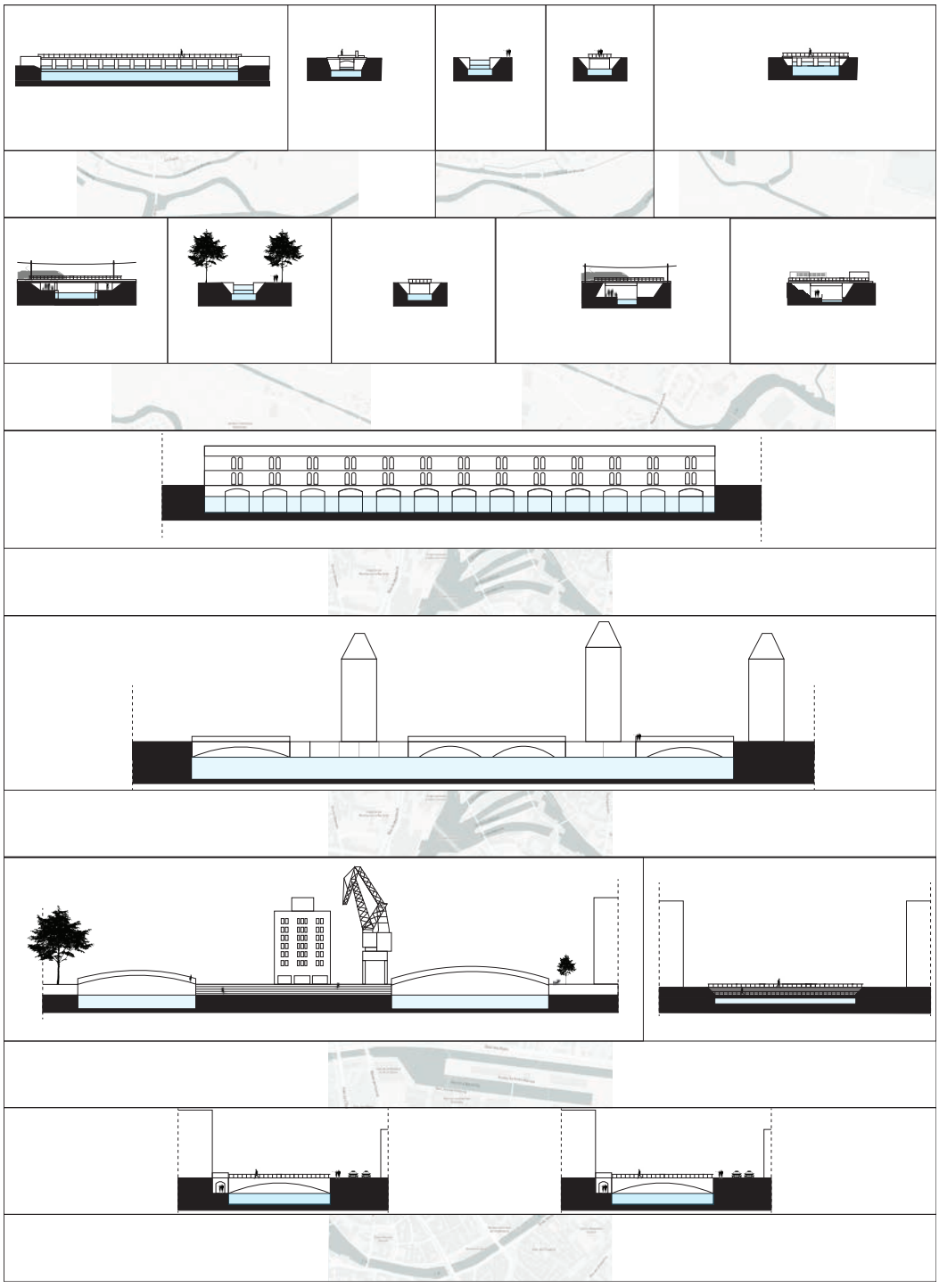


CITY AND PORT MOVEMENT

Like most ports of ancient cities, the port of Strasbourg started, due to the small scale of trade at the time, within its city walls. It can be argued whether or not this was even a port, at first, but when in the 14th Century the city gained its 'Stappelrecht,' the city started to prosper and trade was steadily, but slowly, climbing.

In the early years of the Industrialisation, efforts were made to improve the accessibility of the city by controlling the flow of the Rhine, resulting in unexpected detrimental effects on the city's fluvial trade, for the currents of the Rhine became too fast for safe passage. Simultaneously, canals were dug to the city that provided access to Paris and Marseille. Although these canals provided solace to the trade of the port, they made it dependent on them. The advent of an increasingly extensive railroad network resulted in a further decline in the fluvial trade which halted all activities for a short period of several years. Meanwhile, attempts were made to restore the Rhine so to make it accessible once more, whilst plans were simultaneously drafted for extending the port. After all, the city limits were confining and were needed for the Neustadt, while Industrialisation and the emergence of the steam engine on the Rhine required much expansion. The port grew initially southward, but then eastward to the Rhine. The extension of the port towards the Rhine eventually gave rise to the Autonomous Port of Strasbourg, in 1926.

The growth of the port towards the Rhine positioned it between the borders of Germany and the border city of Strasbourg. Its growth is clearly discernable from the geomorphological situation, in which the extensive canalisation are now merely reminiscent of extensive but foregone micro-economics.



CATALOGUE OF CANAL BORDERS

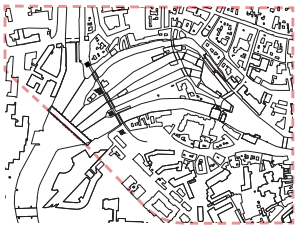
With the extensive growth of the urban fabric and transitioning of canal system as it orients itself towards recreational activities. The catalogue collection provides a spread of sections that follows the canals, moving from the peripheries of the city towards the city center. The catalogue primarily places the focus upon the relationship between the water and land, as the sections selected follow moments along the canal in which lock systems or bridges are introduced. While the sections from the peripheries provide scenarios of the more traditional levels of interaction between the canal and surrounding land. The settings in the city center contain more recent development with platforms and seating areas along the water. It is the gradual movement from the edges of the city towards the more densely situated city center that comparisons can be made on the level of interaction between the urban landscape and the water.

XIII c.

Ponts Couverts' construction: Served to protect the defenders who would have been stationed on the bridges and towers in time of war

XVII c.

Ponts Couverts lose their fortification function



XVII c. – Barrage Vauban's construction

Construction of Barrage Vauban: In case of an attack the dam would close the valves, flooding hinterland

Barrage Vauban

XIX c. (1870)

Le siège de Strasbourg: Closing the barrage valves results in flooding of the northern part of Neudorf

XX c. (1928)

Ponts Couverts' towers recognized as a national monument

XX c. (1971)

Barrage Vauban's recognized as a national monument

Ponts Couverts as a tourist attraction

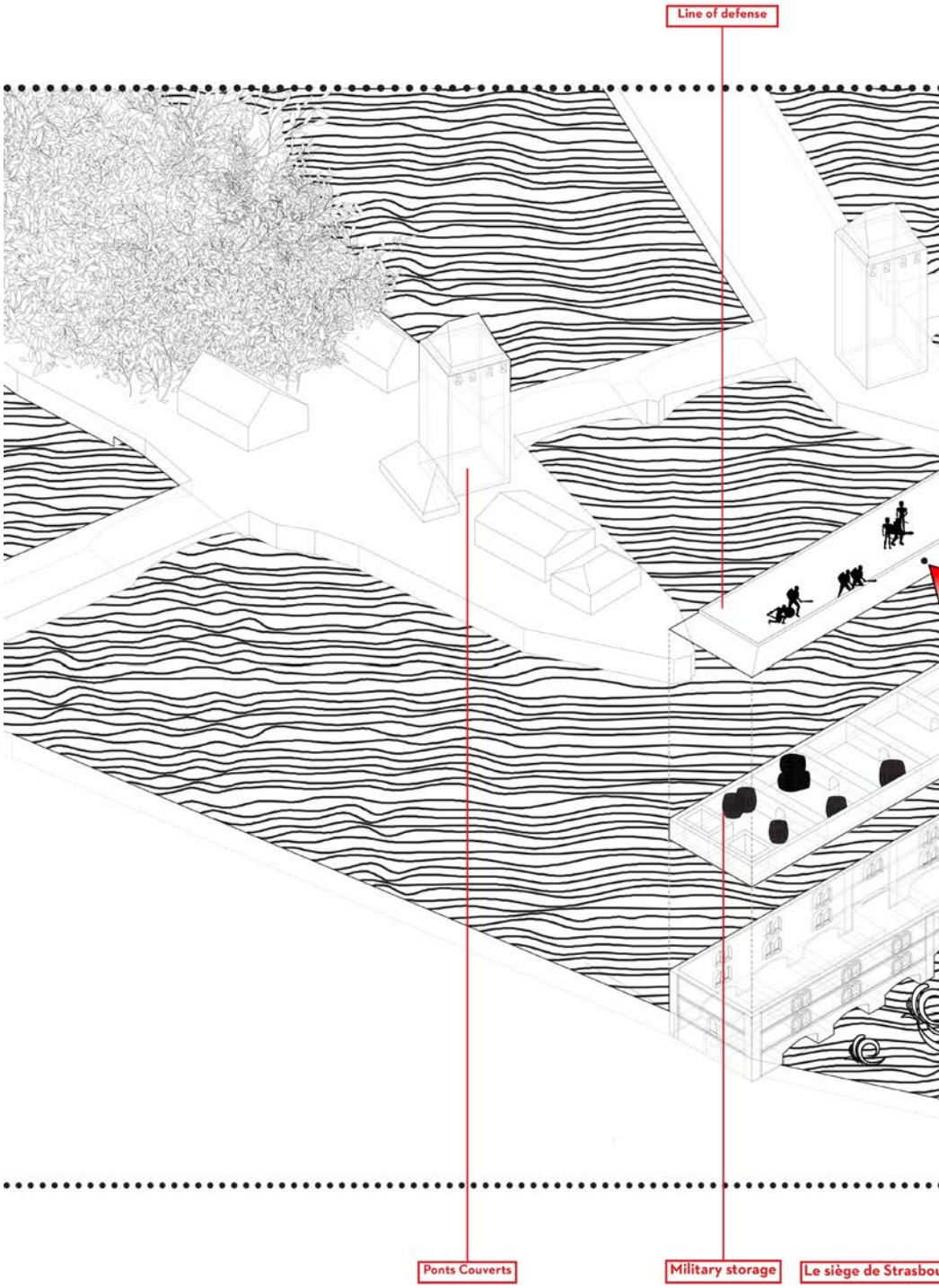
XX c. (2010)

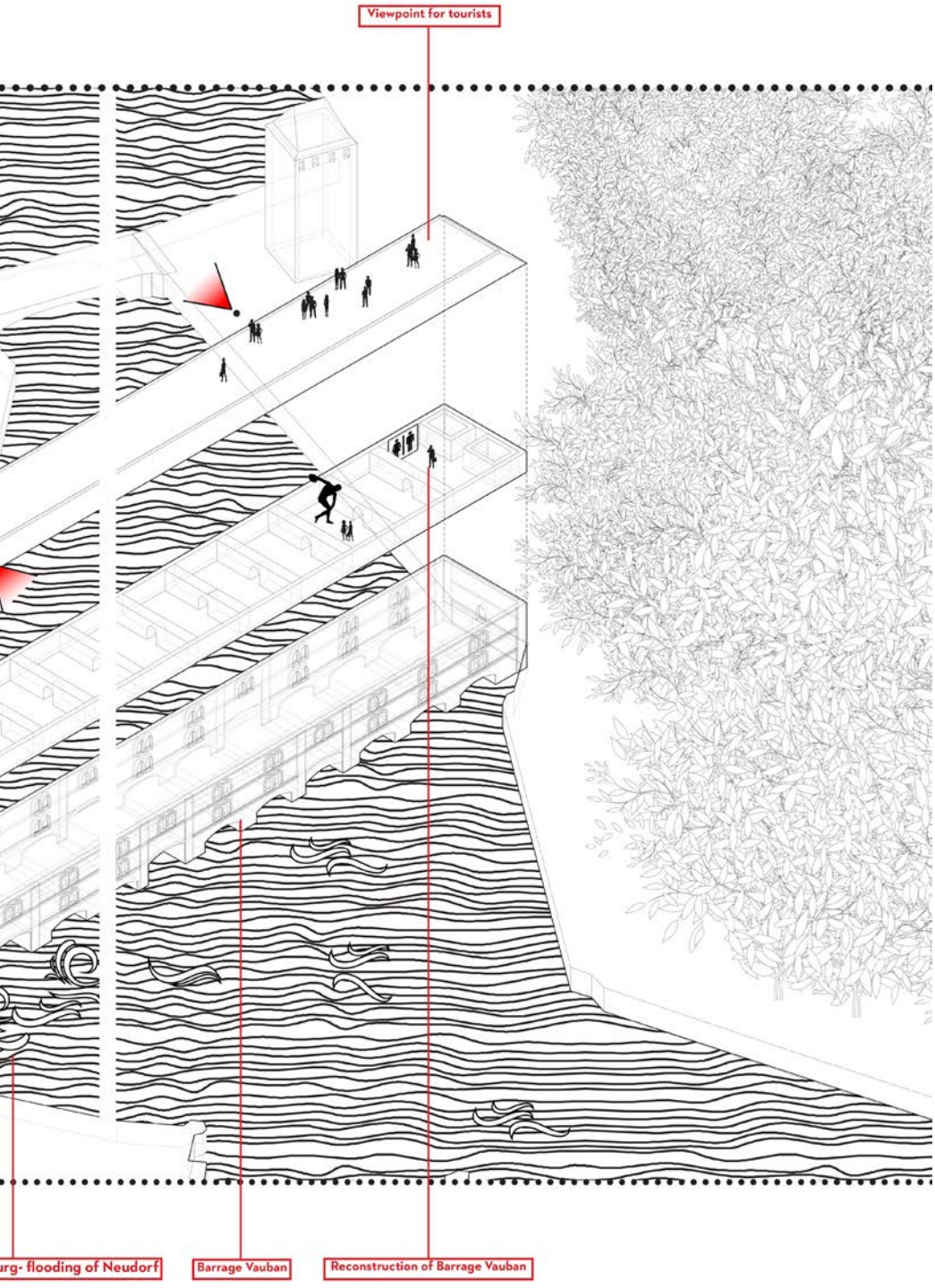
Barrage Vauban refubrishmen adds public toilet, exhibition space, lookout point on the roof

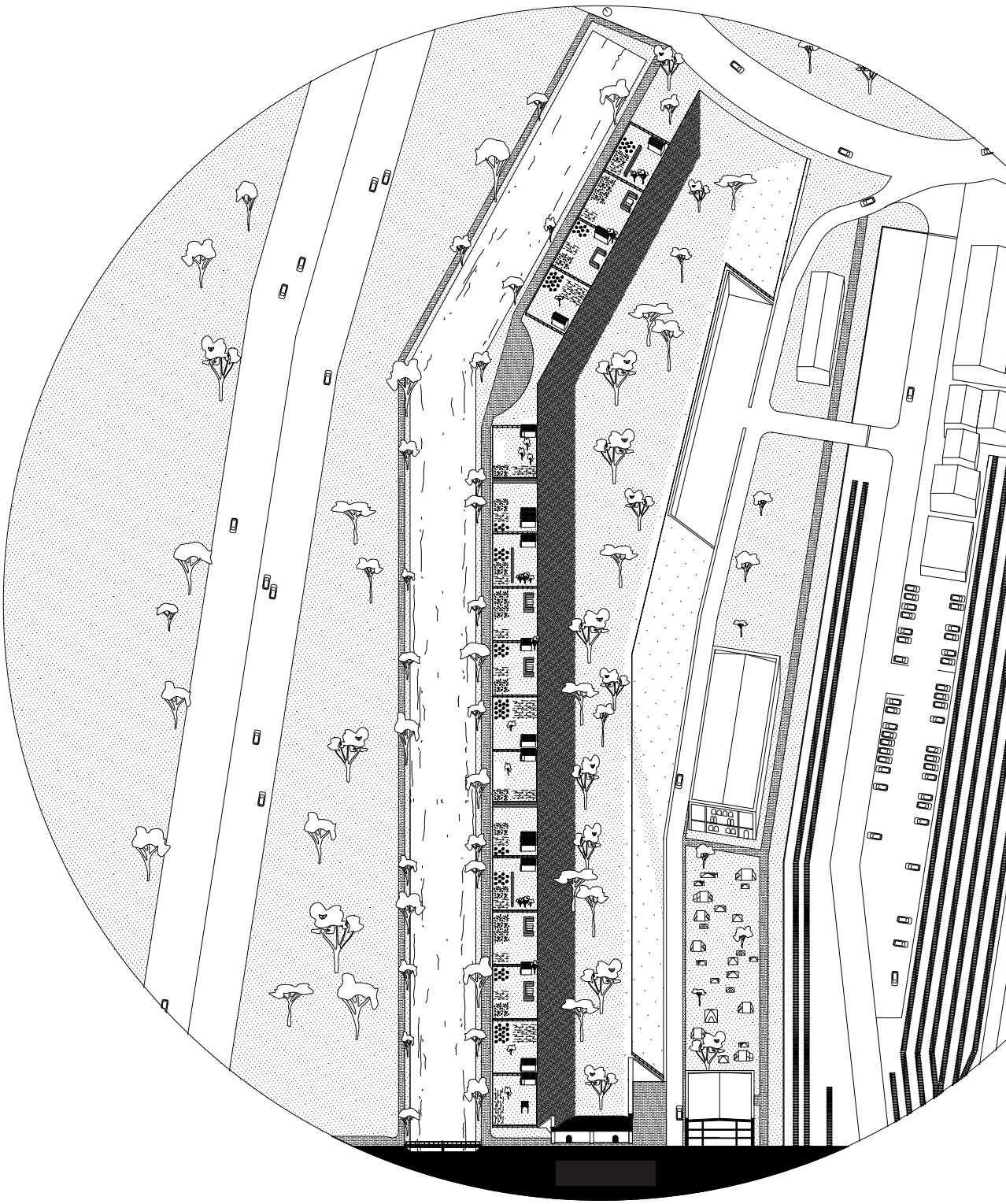
Barrage Vauban's interior

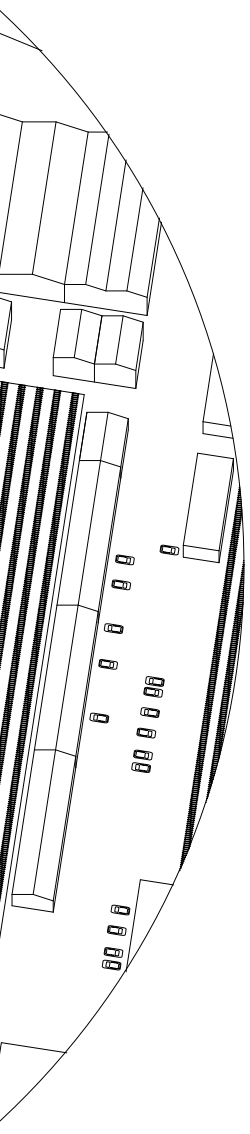
CHANGING RELATIONS

The timeline and axonometric drawing on the following spread show the changing relation between two characteristic buildings placed within Strasbourg's city center. Pont Couverts and Barrage Vauban are two military buildings that influenced one another throughout centuries. Study provides an understanding of how their function changed and how they transformed from being the defense system to the tourist attraction.


Line of defense
Ponts Couverts
Military storage
Le siège de Strasbou

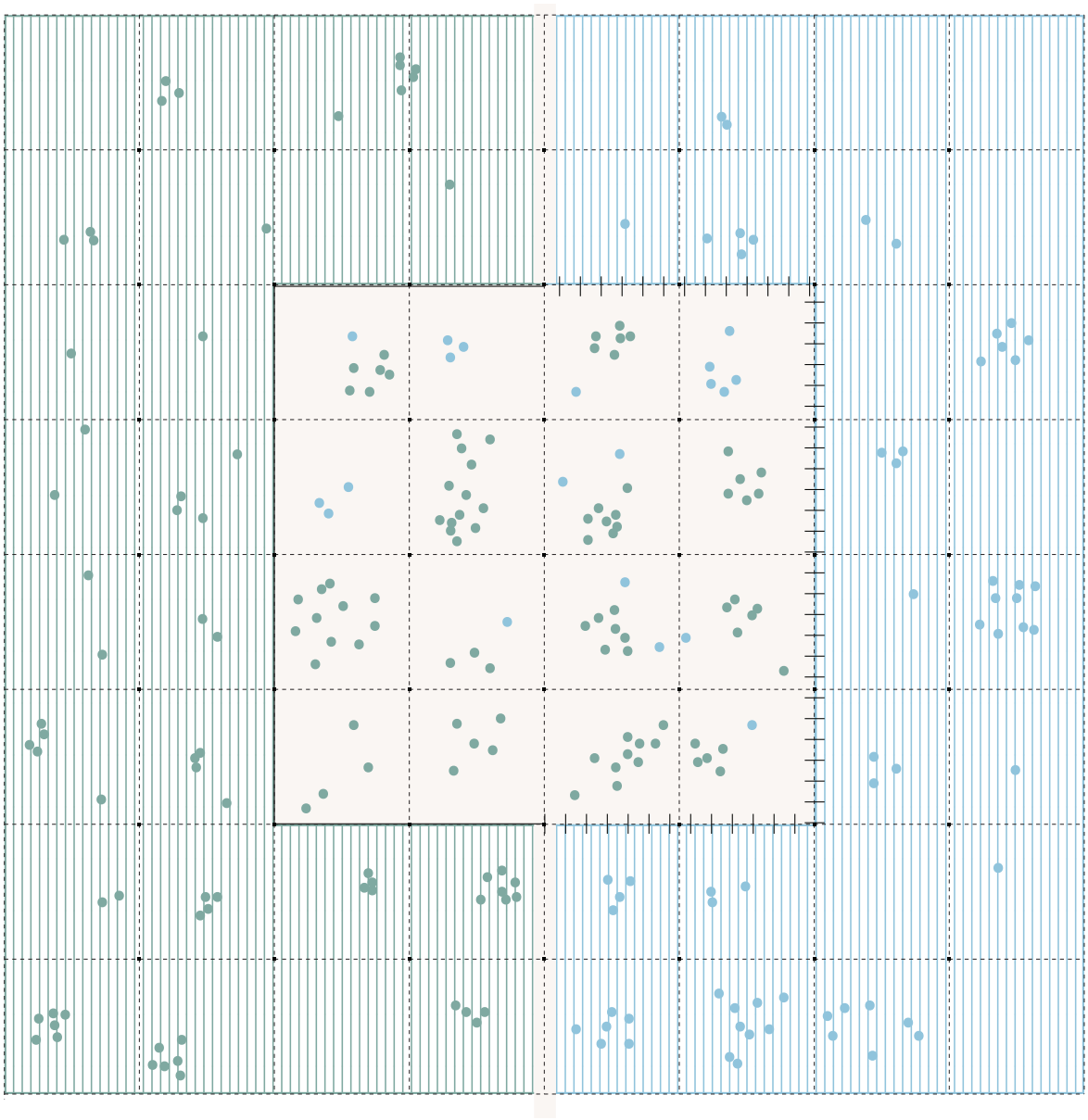

Viewpoint for tourists
urg- flooding of Neudorf
Barrage Vauban
Reconstruction of Barrage Vauban





POINTS OF INTEGRATION AND CLOSURE

This point is located behind the train station at the glacis, viewed anew as a 'thing'. On one side of the glacis exists manicured allotments and signposted leisure walks, whilst on the other, separated by a fenced hill and a tunnel, lie squatters wedged in between two derelict buildings and train infrastructure. This 'thing' reveals Strasbourg's tendency to overly focus on some problems and ignore the bigger issues. Their actions speak of thresholds in the form of fences, slopes, blind spots, trees and so on. This results in many residual, untouched or unknown spaces along with spaces hiding in plain sight, blind to the eyes of Strasbourgers.

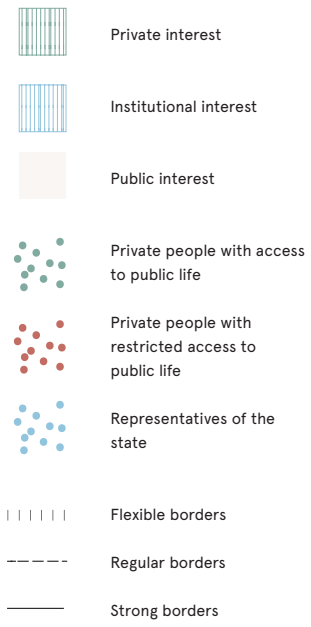


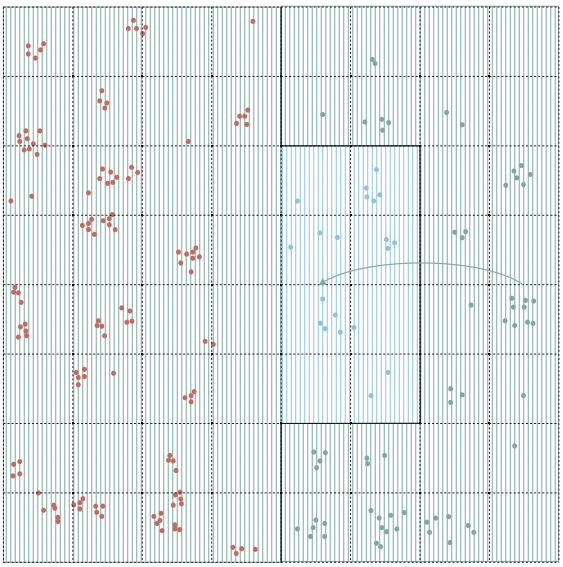
PUBLIC SPACE AS A MEDIATORY ZONE

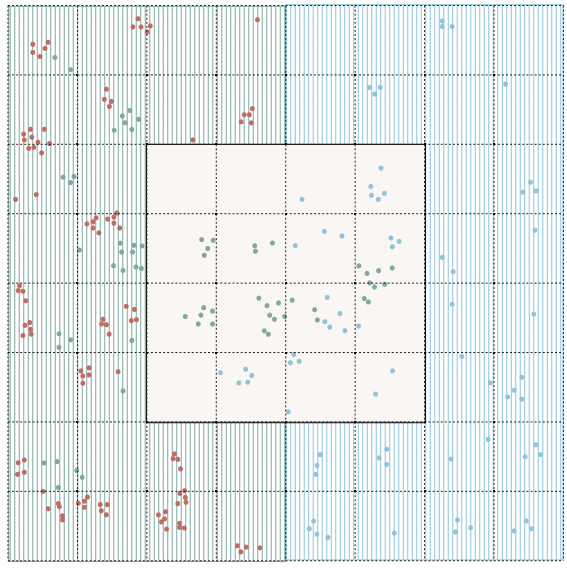
In accordance with Habermas' theory, public space can be understood as an arena of mutual control between a society (understood as private people entering the public space) and any organisation holding power (may it be a state, an organisation, a public person, etc.). Public space is the area of constant control. In a perfect world, private interest is constrained to the private realm, as well as a state interest in only expressed within state realm. Ideally, public space is regulated by the government only to such extent that it does not constrain expression, free speech, freedom of assembly, etc. On the other hand, citizens are expected to comply with imposed rules. As a result, public space is an area of constant struggle over the territory, which allows for recognition of a certain group in public space.

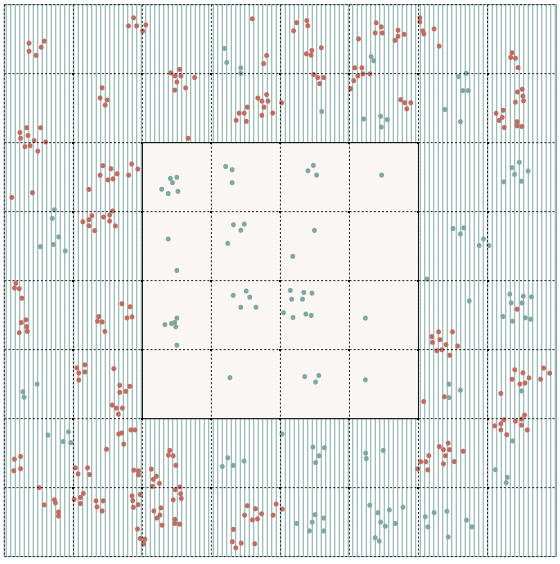
Two variables influence the inclusiveness of space: the level of territorialisation (openness or closeness of a border) and the level of coding (the intelligibility of signs existent in the public sphere). By making the public space too territorialised and coded, the state may limit the scope of people capable of participating. Similarly, aggressive territorialisation by any group excludes other citizens from joining.

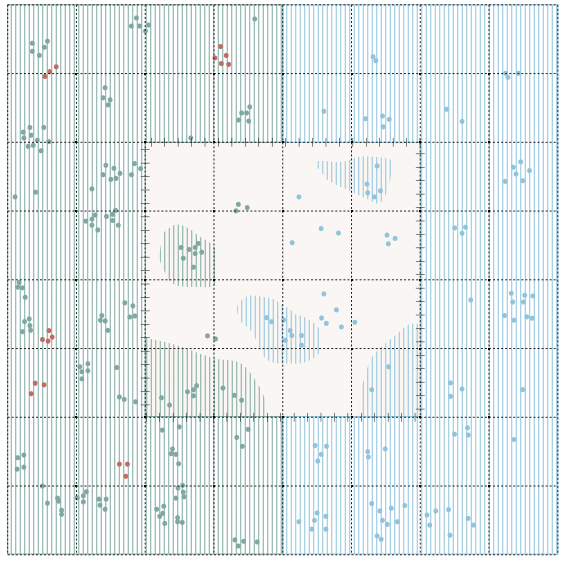
The qualitative analyses of manifestations in Strasbourg are aimed to establish links between the expression advocated by protesters and the choice of certain public spaces (along with its symbolism) to host this endeavour, as well correlated with the time of a protest, the extent of participation and the scale of the subject matter.

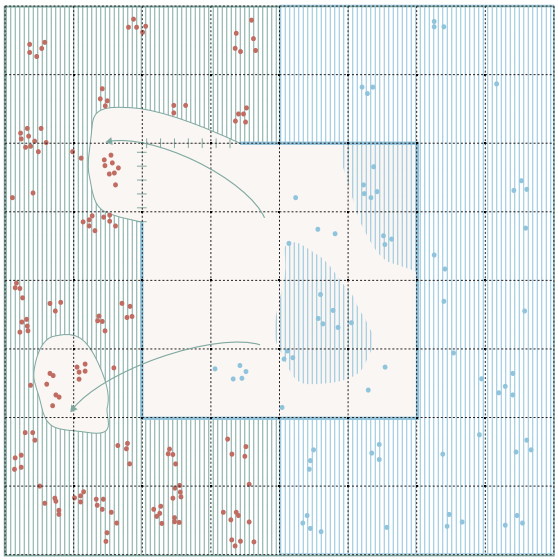


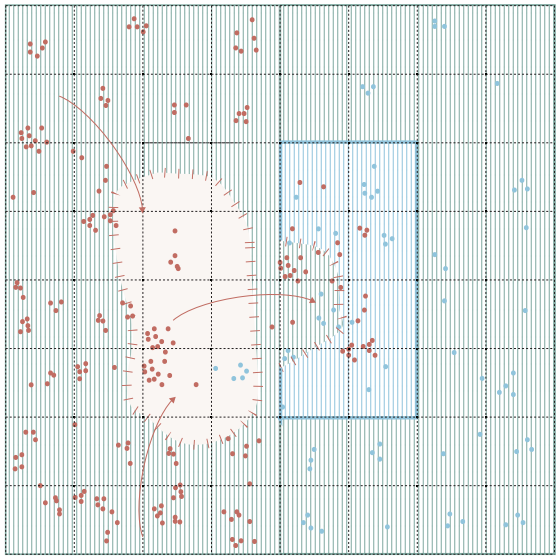












Absolute Monarchy (top left)

Public sphere, understood as a separate realm distinguished from a private realm, is non-existent in the feudal society. The superior creates a public representation, which is elevated to the public status, yet is not inclusive to other members of the society.

Bourgeois Democracy (top middle)

Public sphere constituted by discussions between social institutions and highly educated representatives of the bourgeoisie. The public interest clearly distinguished from the private interest.

Campagne des Banquets (top right)

The governmental restriction on political gatherings and demonstrations was circumvented by the idea of private political meetings, which served as a way to still provide the regime with a popular criticism.

Greek Oligarchy (bottom left)

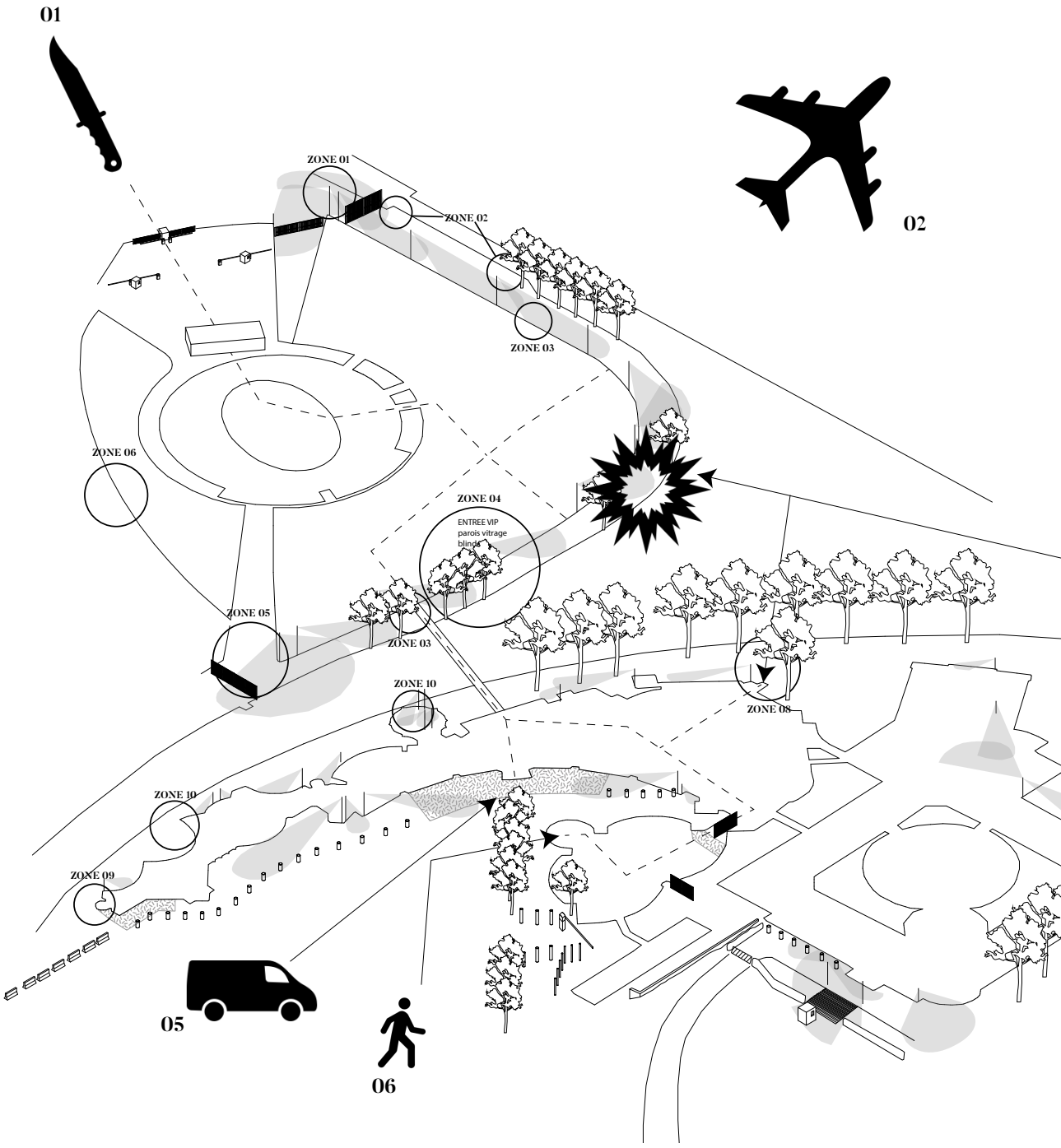
A greek polis was divided into common and private realms. Agora was constituted by common lexis and praxis. Access was only restricted to the the most acclaimed citizens, whose status was constituted based on personal wealth (private realm).

Modern Democracy (bottom middle)

Access to public life is granted to the majority of citizens. Conflicts restricted to the private sphere enter public sphere, as well as the institutional interest influences public interest.

French revolution: 1789 (bottom right)

Governmental restriction on political gatherings and demonstrations was circumvented by the idea of private political meetings, which served as a way to still provide the regime with a popular criticism.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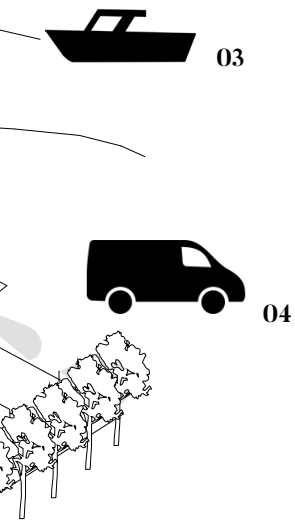


INDEFENSIBLE PARLIAMENT

In aquiring a full understanding of the security perimeter around the Quartier Europeen in Strasbourg, requires and understanding of its parts and an investigation into possible breaching-points. Through this process, an better understanding of the possibly poor safety conditions around the complex is aquired. The building communicates a strong security profile and attempts to look superficially unimpregnable. The fact that there are several, one more elaborate than others, ways in which through architectural investigation of the complex, breaching-points are discovered, provides a better understanding between the discrepancy between security and safety.

1
A ceramic knife, smuggled into the plenary room.

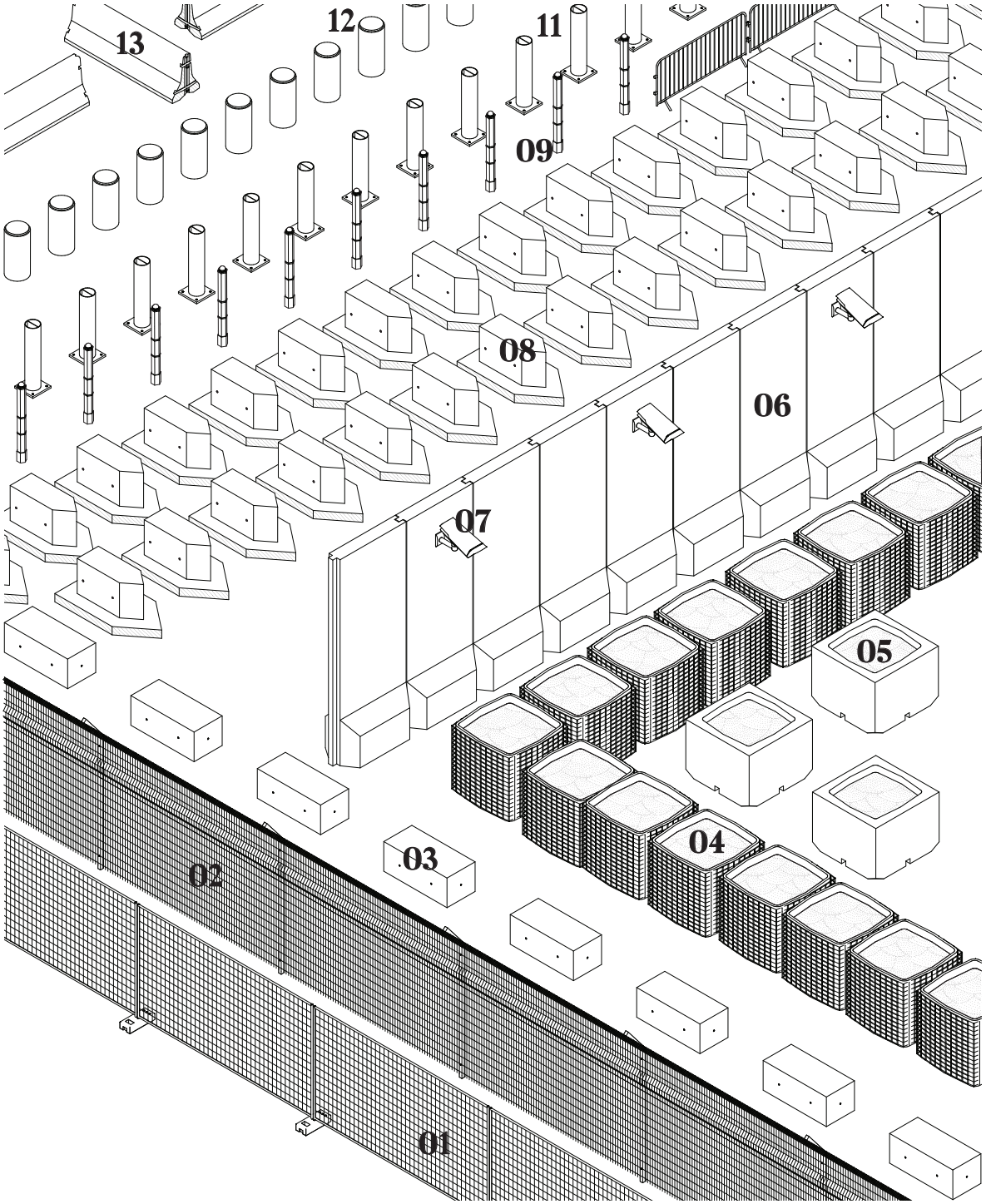
2
Aerial kamikaze on the plenary room.

3
Waterfront infiltration or bomb attack.

4
Infiltration through the catering depot of zone 08.

5
Infiltration through construction and renovation.

6
Infiltration through unused parts of the complex.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INDISTINGUISHABLE GEOGRAPHIES

Through the processes of globalisation and subsequent rise of global conglomerates lobbying and vying governments for contracts, a new global security architecture has arisen. The objects that litter the public space serve a similar perimeter purpose, are built by similar companies, often intertwined, and in return, look similarly. The militarization of European cities through the application of these military security tactics in response to terrorist attacks, and strategies in the public space have blurred the lines between our imagined geographies of distant wars and our homes. The world is becomeing indistinguishable warzone.

1
Heras Fencing, Quartier Européen, Strasbourg, France.

2
Security Barrier queue), Bethlehem, West Bank.

3
Concrete block, Place Kléber, Strasbourg, France.

4
Hesco Barrier, Camp Bastion, Helmand, Afghanistan.

5
Concrete Planter, Strasbourg, France.

6
Concrete T-wall, Route Tampa, Baghdad, Iraq.

7
Security camera (SIRAC), Strasbourg, France.

8
Anti-tank Barrier, Demilitarized Zone, Paju, South Korea.

9
Bollard, Strasbourg, France.

10
Nadar Barrier, Place du Chateau, Strasbourg, France.

11
Bollard, Baghdad, Iraq.

12
Bollard, Strasbourg, France.

13
Jersey Barrier, Strasbourg, France.


WAR IS PEACE
FREEDOM IS SLAVERY

ARCHITECTURAL STRATEGY IN URBAN SECURITY AND TERRORISM

WOUTER PIJNENBURG

Introduction

Going to work in Manhattan is not what it used to be. A revolution has taken place in streets, lobbies and public buildings. Better said, a devolution has taken place. Upon approaching the office tower, one has to walk passed various police officers stationed at the corners of intersections. They hawkishly peer through the endless straights of the grid, looking for suspicious behavior. A perimeter of bollards and jersey barriers surrounds the entrance to the building. In some cases, concrete planters are adorned with colorful bouquets of flowers for the sake of atmosphere. Upon entry, of the building, you might have to open up your backpack, briefcase or satchel and surrender it temporarily for an x-ray. While at the same time, you will have to pass through, and pass, a metal detector test. All of this happens under the wary eyes of high-tech cameras and armed security guards.[1] They are a constant reminder of the last terrorist attack and the imminence of the next. What happened that made New York paranoidly secure? In order to give a less straight-forward answer, and visualize the geopolitics that in part shape these kinds of streetscapes, a look has to be taken at the previous century in which the United States established its hegemony. On the 20th of August, 1998, the American president Bill Clinton informed the world he had authorized the launch of 88 cruise missiles against camps in Afghanistan and a pharmaceutical factory in Sudan. The attack was executed on retaliatory grounds following the bombing of US embassies in Nairobi and Dar as-Salaam nearly two weeks earlier. In response to these missile attacks, two years later, the USS Cole, a guided-missile destroyer, was the target of a suicide bombing in the harbor of Aden in Yemen. This in return invited a retaliation from the United States, giving room to the tit-for-tat-(for-tit) exchange of fire and the spiral that is the war on transnational terror we find ourselves in to this day.[2] Part of this war, before it was even declared by George W. Bush, were the terrorist attacks, in which several hijacked airliners were turned into kerosene-fueled missiles, and the events that unfolded from it on the 11th of September 2001.[3] [4] The war on terror not only gave legitimacy to misguided retaliatory wars in the Middle-East.[5] In New York the attitude towards employing preventive tactics changed. The reason these events are interesting from an architectural perspective is the fact that repercussions of these geopolitical battles, have been of great influence on Western urban spatial policy. Ad hoc security measures were hastily installed to thwart further terrorist attacks.[6] [7] Its echoes ushered in similar changes all through

1
M. Sorkin, Indefensible Space, p. vii-xvii.

2
S. Elden, Terror and Territory, p. 1-6.

3
P. Marcuse, The Threat of Terrorism and Existential Insecurity: Urban Policy Responses, Architectures of Fear, 2007.

4
W. Enders and T. Sandler, After 9/11: Is it all Different Now?, p. 259-277.

5
Marcuse, The Threat of Terrorism.

6
S. Graham, Architectures of Fear: Terrorism and the Future of Urbanism in the West, Architectures of Fear, 2007.

7
H. Petroski, Technology and Architecture in an Age of Terrorism, p. 161-16.

the world, giving rise to the modern security revolution of Western society. This in return has transformed the framework within architects are supposed to design public space, and public buildings. A new range of public buildings with reassuring characteristics through bunker-like qualities are built and pre-existing ones have been scrutinized. Cities seem to be under siege, through the constant threat we are reminded off.[8] Architects however, are faced with a moral dilemma between fortifying the city and ignoring the issue, possibly endangering civilians. Faced with these moral dilemmas, what possible answer can architecture give? What has been the role architects have previously taken in the design of public space and –buildings? Furthermore, what is the role of the architectural project in the ensuing discussion on the modern security revolution? Can the architectural project provide new answers?

Geopolitically Induced Instability

The airport for example, or as Paul Virilio describes it; the last gateway to the State, was transformed into the modern iteration of a fortress.[9] The revolution of affordable flying has blurred the borders between countries and continents and make them more porous.[10] The security revolution however, created a new barrier or necessary bureaucratic regulation, unrivaled by other countries in its thoroughness. The technology that was developed to securitize airports is equal to that used in prisons.[11] These developments had been going on ever since the 70s, when it was decided that space surrounding the gates should be sterilized and devoid of anyone who had no reason to be there but to fly. This development was also on par with the rise and increase in globalization, which as mentioned, diminished the role of previously established physical borders, and jeopardized territory.[12] American territory comes from the States' ability to enforce jurisdiction and security on its land and its encompassing borders. The aforementioned cruise-missile attack can just as much be considered as part of this enforcement, as well as being considered terror. Terror, understood through an historic lens, first emerged as a tactic when Robespierre suggested that the difference between operations of liberty and those of tyranny were differentiated by their purpose, not their means.[13] As the reprisal actions were in the light of a broader understanding of terror. The combination of virtue and terror, Robespierre explains, is essential. Terror is powerless without virtue, whilst virtue without terror is disastrous. Terror is the prompt, severe inflexible execution of justice. This also means that it is not entirely possible to make a moral statement based on an act of terror without understanding its accompanying virtues. Since the area of influence of an entity over other entities is territory, national borders and urban seclusions becomes a manifestation of power relations in geography. In order to secure the freedom of everyone in a territory, terror has to be implemented as a security tool in order to dissuade anyone from causing harm. This gives rise to the idea of imagined geographies, in which territory, and the concepts of our space and 'their space' blurs.[14] Whenever an attack happens on one side, the other side will see itself forced to retaliate in order to secure sovereignty over its territory, often extending their jurisdiction across the border. Through globalization and foreign wars, puppetry of states and the sovereignty the United States subsequently negated in other states where key to its hegemony and the emergence of the tit-for-tat spiral.[15] The war on terror was condoned, through these blurry front-lines, which in part originate from the globalization. But that same globalization, and the economic and symbolic powerhouses that that same hegemony spawned in cities such as New York, created more porous borders and targets for those it had angered. This circle however is not complete without an incentive or motive to drive it forward. The driving force behind our borders are more porous, and terror-enforced territory has become a common thing, is the capitalist market and the military industrial complex.[16] There is a capitalist incentive for both companies that produce weapons and those that develop new defense measures. In some cases, both these departments are housed within the same company. In any case, they are the involved in the same unions for security, defense, weapons, and aerospace technology. The

8
S. Graham, Cities Under Siege: The New Military Urbanism, pp. 1-35.

9
P. Virilio, The Overexposed City in S. Redhead (ed.), The Paul Virilio Reader, pp. 83-99

10
Sorkin, pp. 1-28.

11
Petroski, pp. 161-167.

12
Enders and Sandler, p. 259-277.

13
M. Kamal, The Meaning of Terrorism: A Philosophical Inquiry, pp. 1-11.

14
S. Graham, Cities and the 'War on Terror', pp. 255-267.

15
Elden, pp. 63-70.

16
Marcuse, The Threat of Terrorism.

influence their subsequent lobby groups have on the policy development of the government and the strategy of the US command means that they will prevent the circle from being broken too easily. In the end, those policies fuel the geopolitical instability, ensuring weapon sales and funding for security measures.

Intertwined Locality

Globalization created an ease of movement. Instant visual journalism and the internet played their part in this. The engineering of the homeland space, as imagined in our minds, on the grounds of supposed imperatives of national security, have merged distant and local spaces into one big, virtual battlespace. What happens in Iraq, Syria and Afghanistan has consequences in the architectural detail of the streets of New York. This means that a bomb dropped on a factory in Syria, as part of geopolitical actions, is in relationship with the concrete jersey barriers and bollards that adorn the pedestrianized areas of Times Square. The smallest object and its architectural detail is designed around the effects American hegemony has had on the world. Furthermore, these designed security measures, and their larger systems exist in a second spiral that is fueled by asymmetrical warfare and the ways in which terrorists are forced to be evermore create in setting up new attacks. Furthermore, security issues surrounding public space have been politicized by local and national governments and have arguably, put us into a spiral of literal self-reinforcement. Security and Homeland Security constantly has to be updated in order to adapt to new challenges posed by new forms or variations of attacks Western cities have not yet adapted to. What attacks have set in motion, is that people from multiple fields have been forced by their governments to become counter-terrorism experts. They design and inform policy which utilizes existential insecurity as a strategy. An example of this are the officers patrolling the street. They are not placed there to protect from an imminent threat. They are supposed to make the people aware of the possible risk.[17] [18] One questions himself whether the same way goes for the streets and public buildings that have new and added layers of security ranging from concrete blocks and setbacks, to the incorporation of intricate biometric security systems. Before the vehicular attack, jersey barriers were barely present in cities. Before the first knife attacks, metal detectors were not deemed necessarily. As terrorists adapt, and find new ways of defamiliarizing everyday objects such as cars, trucks, box-cutters and airplanes, new layers of security are added on top of previously designed ones. This in return has transformed the city into a palimpsest of security measures, retro-active protecting citizens from memories of attacks.[19] Symbols of economic and hegemonic prowess in American cities, put those cities and its citizens at risk to a degree. The citadelization of cities and public space therefore will never be complete as long as people are given motivation to attacks these symbols.[20] [21]

Dystopia and Utopianism

The themes of security, safety, surveillance and urban fortification have enjoyed a steady increase in popularity amongst researchers in the last few decades. Ever since the rise of the conflict between hegemony and globalization in the 70s arose, researchers have been involved in the topic.[22] There seems to be little consensus of the role of the architect in this larger matter. One could be inclined to fully go with the flowerpot trend and design new hip ways in which security measures can be camouflaged. On the other hand, one could theoretically also design against security, perhaps designing a terrorist hideout in a city like New York. However, building regulations, written by governments, are formed through the opinions of experts, employed by industrial behemoths such as the military industrial complex. This means, it is impossible to design a building that does not new security measures into account. But besides this, if we were to entertain the thought of taking position against the system anyhow, it would constitute a moral dilemmas such as the problem of safety in itself. Understanding the dead-end nature of the going down either of these roads, sheds light on the problem of architect's moral dilemma in dealing the issue at hand. Within actuality,

17
I. Primoratz, A Philosopher Looks At Contemporary Terrorism, pp. 33-51.

18
Marcuse, The Threat of Terrorism.

19
Graham, Architectures of Fear.

20
J. Coaffee et al., Resilient Design for Community Safety and Terror-Resistant Cities, pp. 103-110.

21
Marcuse, The T hreat of Terrorism.

22
Primoratz, pp. 33-51.

we have to choose between either cooperation in the larger system, or disavowing the system and victimizing oneself and others in the ensuing consequences.[23] Albert Camus in a series of essays offers an answer to the posed moral dilemma. Through restraint, one can be of better help if one wishes to be part of a counter revolt[24]. One should refuse to take either side in the moral dilemma. Outside of actuality, within the realms of utopia and dystopia, architects can find the space to define and shape the problem. This does not mean that an answer is provided, on the contrary, it is not the role of the architect to provide all the answers. One can far better employ him- or herself to provide the setting in which a public debate is formed on the topic. Either by adopting the problem and turning it into something desirable, or undesirable. Architects however have a plethora of tools at their disposal which, besides designing buildings in actuality, can visualize scenarios and provide a possibility to open up public debate and discussion. Rem Koolhaas' Exodus project for example, was intended as both a fictional and factual scenario for the contemporary metropolis. Koolhaas, having previous experience as a journalist and screenwriter employed his skills to design a new urban culture. This subsequently creates architectural innovation and political subversion. When the architectural project no longer has to be set in actuality, it provides all the freedom the architect could need to design the possibility of utopia and dystopia. The development of aforementioned tools such as scenario writing, visualization and imagination is of great importance to the role of the architect in denouncing and, or extrapolation of the actual-, previous- and future status-quo. The way in which fictitious and factitious meet is of great importance. A great example literary work in which this balance is well kept can be found in Mike Davis' books.[25] [26] One only has to take a critical look at movies such a Bladerunner to understand the extrapolations of current trends in pollution and policing that are made to create a world that is not only fiction, but a possible future. Within the choice for which trends to extrapolate always resides a moral choice, but by achieving a certain level of complexity, through totality of the whole that exists of a great number of parts, the project can be elevated beyond a mere simulacrum.[27] Through maps and visualizations the architect can create instantaneous knowledge, inscripted with power relations.[28]

Conclusion

The role of the architectural project should be to provide a scenario which provides ample fuel for debate and discussion amongst the general public. By staging a project outside of actuality, the architect can free himself from the constraints that create a set-up to dilemmas and dead-ends. Through the self-reinforcing rhythm in which the geopolitical realm and urban space spiral and escalate, we can begin to understand the special relationship certain elements in a streetscape or building design have with geopolitical events. The geopolitical realm, on the largest imaginable scale is in almost direct contact through causality with the architectural detail of the streetscape in cities like New York. This in return creates a window of opportunity for architecture to operate within. The role of the architect should be to try and be as morally unbiased as possible, as explained in Albert Camus' work.[29] By taking factitious information and extrapolating it through scenario-writing, the architect can provide a strong basis for the aforementioned debate. Architecture in itself is also a great tool to portray the underlying relations geopolitics and hegemony at play in this theme. It's interesting to follow in the footsteps of previous architects that used these techniques and explore the topic to its fullest potential. Architects have the potential to do more than solely design in actuality, especially in an academic setting. When a project does not necessarily have to be set in actuality, it produces a window for the architect to shape a utopia or dystopia.

23
D. L. Altheide, Terrorism and the Politics of Fear, pp. 87-132.

24
A. Camus, The Rebel, pp. 153-163.

25
A. Camus, Neither Victims nor Executioners, pp. 255-276.

25
M. Davis, City of Quartz: Excavating the Future in Los Angeles, 1990.

26
M. Davis, Ecology of Fear: Los Angeles and the Imagination of Disaster, 1998.

27
J. Lecomte, Beyond Indefinite Extension: about Bruno Latour and Urban Space, pp. 462-478.

28
T. McDonough, Delirious Paris: Mapping as a Paranoiac-Critical Activity, pp. 6-21.

29
A. Camus, Neither Victims nor Executioners, pp. 255-276

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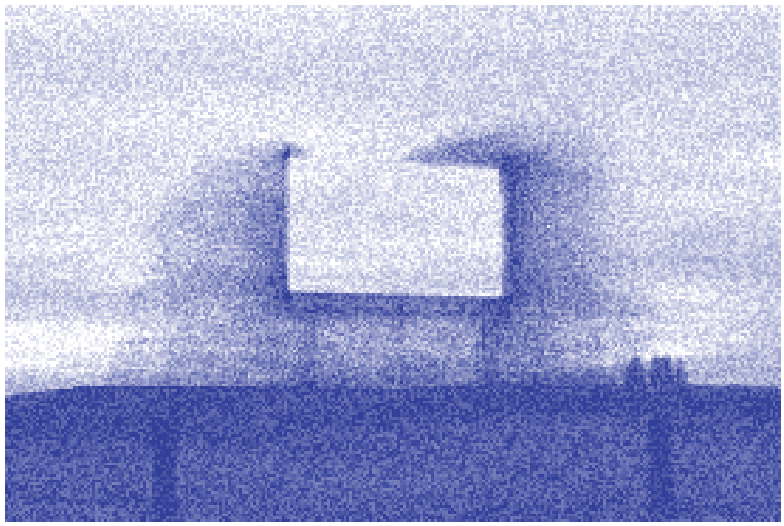
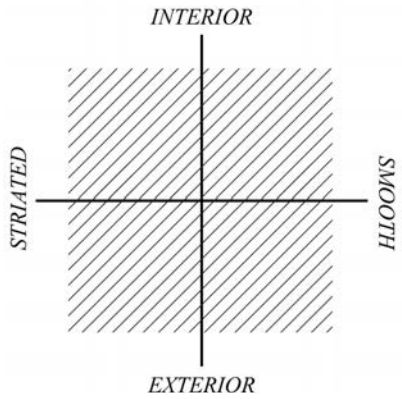


A WOMB WITH A VIEW: AN OUTLINE OF INTERIORITY

HELENA ANDERSSON

I.
No longer contained by rivers and mountains, by flags and hymns, it extends along tracks and pipes, travels through billowing steam, settles its disputes with handshakes and traces its boundaries in ink. Visionary virtuosi flush society's bloodstream with scientific agents, dissolving local clogs and persistent stains. The Experts outperform the Magi in manufacturing cosmic connections. Sinews grip pencils and levers; veins throb like chisels and pistons - a perfectly equilibrated man-machine fuelled by devotion to progress and despise for the idle. Europia's front porches and shop floors adjoin powerful corridors, flocking together under a parliamentary plumage plucked of any odd feather. This is the Homeland to end all wars.[1]

Throughout this essay, the conceptual couples of 'interiority-exteriority' and 'smoothness-striation' will be combined and contrasted according to the quadrants of the below matrix, with the intention of briefly evaluating their spatial implications as means, measure and metaphor. Given that the notions are neither mutually exclusive nor 'belong' together, the operation aims to loosely outline an expanded field of critical architectural agency within the contemporary European city. As a parallel narrative, a series of literary vignettes written in order to reenact moments of the history of Strasbourg, serve as interpretive illustrations of the theoretical framework in question. Contributing to disciplinary discourse, the paper comments on a tendency for post-structuralist theory being used to depoliticise and dematerialise architecture, either through literal, aestheticised translation, or through discouragement of anything but minimal, temporary interventions.



1
Where: Paris
When: 1814
Who: Claude-Henri de la Saint-Simon
What: "De la réorganisation de la société européenne, ou De la nécessité et des moyens de rassembler les peuples de l'Europe en un seul corps politique, en conservant à chacun son indépendance nationale"

Introduction

Interiority, and more specifically the interior, lies at the heart of architectural awareness. Conceptualised as the opposite of the 'ultimate' exteriority of nature, it is the literal and metaphorical womb in which human life, and eventually an anthropocentric conception of civilisation, can occur.[2] Architecture originates from the need to dwell in a state of sequential enclosure; to shape protective membranes and carve out manageable niches in the midst of chaos. Walter Benjamin and Hanna Arendt imagined the interior as "the étui of the private individual"[3] and "the world's last, purely humane corner"[4] respectively; vital as a physical place of reflection and retreat from the intense publicness of the modern city. Meanwhile, various spatial theorists and philosophers consider so called 'interiorisation' to be a devastating condition of our capitalist, globalised and technologically advanced reality; virtually as well as actually. Benjamin's arcades being the earliest and most famous example, Sloterdijk's reference to the Crystal Palace as 'hothouse'[5] a potentially more poignant one, and Koolhaas' notion of 'junkspace'[6] the most polemical, they all constitute attempts to define a gradually inflating architectural type, technology and mentality conceived to eliminate risk by shutting out a the contingency of a perceived exterior. Seen through this lens, architecture-as-interior operates not simply as enclosed, private or concealed space, but as securitised, homogeneous, meticulously controlled milieu; hyper-responsive and tendentious while reproducing a dubious sense of transparency and 'organic' development. Waving the flags of 'optimisation' and 'integration', it promotes a state of seamlessness, at once all-encompassing and invisible; an architecture which appears to dematerialise into a generalised atmosphere, "a silent sky".[7]

Notwithstanding, that which remains interiorised can never become part of 'civil' society – rather, it is through the "double movement" of expulsion and enclosure, through what Sloterdijk calls 'inclusive exclusivity'[8], that space is produced and perceived at all. What we consider to be fundamentally 'architectural' gestures – the placement of a wall, a roof or a floor – are always acts of differentiation; acknowledging the Other, and affirming the both/and rather than the either/or. As argued by DeLanda, any notion of internal relations presupposes entities with fixed properties optimally expressed through interaction in particular configurations, while ignoring their relative independence, latent dispositions and capacity for multiple realisation.[9] A reading of systems as sets of exterior relationships, where detachable, irreducible and heterogeneous components wander between assemblages, renders futile any attempt of totalising interiority, while paving the way for manipulation, appropriation and 'noncapitalisable'[10] paradox.

As space negates – escapes – binary conceptions, claim Deleuze and Guattari, it becomes smooth. Limitless and infinitely varied, it emerges as free-moving bodies without fixed qualities, trajectories or points of spatio-temporal reference engage with each other by chance and desire. Bluntly put, this intensive, dense, viscous environment provides a freedom[11] of movement and expression which is not afforded by the extensive, granular, striated space that we usually perceive as our habitat. Striation occurs at the moment of delimitation, predetermination and restriction of flow, when potentialities are 'forced' into particular actualities, and is thus inevitable within the material reality of any human culture or settlement. Despite its connotations, the smooth space is not utopian – "never believe that a smooth space will suffice to save us"[12] – nor is striation intrinsically undesirable. However, the concepts are metaphorically capable of indicating architectural intent, and function as a spectrum for understanding spatial processes that strive towards heterogeneity or homogeneity, stabilisation and destabilisation, respectively;[13] processes which always, since space is produced and not 'found', are deeply practical, political and poetic.

II.
So be it! One cut, to marry the city's iron and water mouths.
Let us disembowel the gut cramped since centuries; release its sickly odour; transplant its paupers into peripheral convenience. It shall require equal parts brute force, desirable

2
J. Wambacq and van Tuinen, S., Interiority in Sloterdijk and Deleuze, p. 3.

3
W. Benjamin, The Arcades Project, p. 9.

4
H. Arendt, The Human Condition, p. 52.

5
P. Sloterdijk, In the World Interior of Capital, p. 12.

6
R. Koolhaas, 'Junkspace', 2002.

7
R. Exo Adams, Invisible Machines: Toward a Theory of Interiorization, para. 3.

8
Wambaq and van Tuinen, p. 3.

9
M. DeLanda, A New Philosophy of Society: Assemblage Theory and Social Complexity p. 4.

10
B. Cache, Earth Moves, p. 38.

11
A. Parr (ed.), The Deleuze Dictionary, p. 296.

12
G. Deleuze and Guattari, F., A Thousand Plateaus, p. 500.

13
DeLanda, p. 12.

displays and subtle rocades. It shall require Haussmannian precision, but none of that blatant Frenchness! Today's boulevard is a sober street, a modestly meandering artery à l'autrichienne. Tomorrow's cosmopolites reside in air and light, consume through tantalising vitrines, and owe their soles to electric transportation.
Empire, gentlemen, is staged on the perimeter.[14]

The Smooth Interior

On the macro scale, any European urban setting is governed by at least three spatio-temporal conditions, or might one say degrees, of interiority. Firstly, it is part of a global space defined by the relationships between "flows that animate any human habitat"[15] – predominantly cycles of production and consumption. Secondly, it is deeply entangled with the European Project; the founding principle of which is free circulation of ideas, goods and people in order to mitigate potentially harmful friction while overriding local conditions and internalising a notion of shared identity. Thirdly, it more than ever relies on logistics and infrastructure not only as means of utilitarian conveyance but as tool for social integration and economic resilience; as political argument and branding strategy. This "world interior"[16] is a complex web of transaction and circulation: a continuous feedback loop where phenomena such as 'urban nomadism', business platforms, just-in-time supply chains, and service-oriented consumption promote minimal material accumulation in pursuit of supreme smoothness. As things are requalified from assets to liabilities, and movement from mere flux to means of value creation, spatial technologies adjust accordingly: eliminating large warehouses while increasing truck capacity and self-storage facilities; creatively developing the hotel typology while investing little into long-term housing; replacing designated office cubicles with flexible, portable work 'environments', to mention a few.

In this strive for seamlessness, sameness becomes a necessity, promoted as service, disguised as desirable uniqueness. Standardisation of signs, units, dimensions, setups and protocols flatten any transitional bumps, physical as well as mental, which might appear on the fringes of the centripetal vortex – making the act of 'exiting' not only difficult to perform but to define, if at all definable. In fact, the more the city resembles infrastructure, the more it is internalised as part of the body itself; the interior becomes a second skin. We partially owe today's 'smart' and even wearable technologies to Modernism's definition of the man-machine assemblage as governing unit of the urbe; an ideal, universal template for non-representational city planning.[17] Replacing the politically and religiously organised, "symbolical agreement" of the civitas[18], the city-as-body or city-as-house are holistic entities made of tissue and arteries, living rooms and corridors – no longer acknowledging a presence of Other, entirely self-referential, and requiring full coordination and consistency in order not to collapse.

If not obvious already, one must now recognise that while undeniably interior, the space described is far from smooth. Contemporary urbanity, regardless of its facial fluidity, operates as a mechanism of capture; a Deleuzeian notion denoting how interiority is produced by sovereignty, aiming to constitute a "general space of comparison".[19] Rather than an ocean of boundless motion, the Seamless system appears as a "vast potential utopia clogged by its users"[20]; its deterritorialising forces capable of producing one difference only – that of relative value. Could it be that the perceived smoothness is nothing but a rationalised construct; a pattern extracted from vast data sets, tailored to fit a causal narrative we want to, or must, believe?

III.
– Dear colleagues, I believe today our hearts have shifted slightly further to the left! Remember the war, when rails became symbols of resistance?
– And a river Styx of sorts…
– All the more reason not to negotiate with the enemy! We worked hard for the statutory right to transport, but I fear for its implementation. Contrary to many of our colleagues, I do not appreciate executives,

14
Where: City Hall, place Broglie, 9 rue Brûlée, Strasbourg
When: 1907
Who: Rudolf Schwander, mayor, et. al.
What: "Grosser Strassendurchbruch" – La Grande Percée' – an urban renewal plan cutting through the historical city centre.

15
P.V. Aureli (ed.), Brussels – A Manifesto, p. 33.

16
Sloterdijk, 2013.

17
R. Exo Adams, Becoming Infrastructural, para. 5.

18
Aureli, p. 34.

19
Parr, p. 41.

20
Koolhaas, Junkspace, p. 180.

managers and advisers - whatever titles they sport - expressing their commitment to social justice through lavish lunches and generous 'gifts'...
– Only fools trust these so called partnerships. I say, beware of the murky waters! The banks might already be lost... But not this.
– All this talk of market efficiency – we seem to consider the Hexagon, and the Union, as one large balance sheet! I might be an economist, but the bottom line is always peace of mind.
– Hear, hear. The system is vital, frail and must never fail.[21]

The Striated Interior

When refusing the tropes of the 'organic' or 'smart' city, reconsidering its spatial logic as a carefully crafted system of points and vectors, destinations and blank spots, fills and voids, one also refuses the possibility of any persistent smoothness. "Where movement becomes synchronised, it curdles"[22] claims Koolhaas, effectively evoking the moment of striation; where matter becomes form. True to the old dogma of the tendency of the rate of profit to fall, capitalism's ever-expanding grasp devours ever more – data, networks, consumers, logistics, trade, communication, platforms, built matter – and spits out ever less – diversity. Whether it be a reaction to such speculative deterritorialisation, or simply a strive for sense in a seemingly senseless world, one might be attracted to Benjamin's claim that withdrawing something from circulation entails giving it a stable value – allowing for material traces of life to become art.[23] Architecture is never a means of embodying 'essences' or genus loci, never an empty vessel waiting to be filled at a point of presumed completion, but it is is indeed an art of distinction – of defining and enacting spatial limits and differences of relative permanence. While something resembling our conventional conception of architecture could well appear as or within a purely smooth space, it would struggle to outlast the singular event, and thus, to become a materially "active agent".[24]

The creative capacity of the incubator is not a contemporary obsession, but was addressed by 19th century political theorist Claude-Henri de la Saint-Simon, claiming that England owed its industrial and political prowess to geographic insularity which enabled it to experiment with independent, pioneering modes of production and social organisation.[25] This is an admittedly slightly oversized but still viable example of a clear spatial delimitation becoming a facilitating environment; providing margin, memory and predictability that help synchronising collective interests and individual needs. Although considered auxiliary, passive and receptive, lacking other purpose than that of keeping and holding, container spaces need no manipulation to perform, produce, at maximum capacity. The striated interior creates a systemic 'lag' that allows us to evaluate fluctuations, haeccities and tendencies in otherwise hyper-responsive networks. In the intricate web of needs and desires that is the city, these artifacts for containment and supply, whether following precise volumetric standards or approximating demand, all reveal a background dialogue between current norms and limitations. However, this is not a particularly effective use of the singular capacity of architecture – that of producing and projecting future contexts, rather than simply micro-managing real-time behaviour.

As networks of exponentially increasing synchronisation become both cause and effect, necessity and goal, object and representation, they are rendered self-evident and politically 'neutral'. In this environment, architecture tends to operate mimetically: adopting a correlationist approach in line with the entrenched gospel of 'form follows function'. Such claims to optimality, a 1:1 ratio, a perfected use value, undermine architecture's capacity to operate as a "critical device".[26] In order to turn Koolhaas' curdling crowds into swarms of political subjects, architecture needs to exteriorise itself; affirming both its specificity and its potential of becoming other.

IV.
Now Catherine, smugness does not become you. But 56 for, 34 against... Was

21
Where: Hôtel Matignon, 57 rue de Varenne, Paris
When: 18 February 1983
Who: Pierre Mauroy, prime minister; Charles Fiterman, transport minister; Jacques Delors, finance minister; Laurent Fabius, finance minister's budget responsible.
What: The SNCF attaining EPIC (Établissement Public Industriel et Commercial) status, thus becoming completely nationalised for the first time since its creation.

22
Koolhaas, p. 180.

23
Benjamin, p. 9.

24
Aureli, p. 74.

25
C.H. de la Saint-Simon, De la réorganisation de la société européenne..., p. xiii.

26
Aureli, p. 74.

that a flash of relief across poor Rudloff's face? Fifteen years of inherited opinions, unscrupulous lobbying, endless quarrelling; a particularly dirty campaign, this. But what to expect from leaders favouring big business and car-hugging suburbanites; considering the tramway a passé, plebeian infringement on their civil liberty to park within arm's length of Galeries Lafayette? Clearly, this tram transcends standard talk of convenient conveyance and equal opportunity. Ideology takes you only so far; address identity and go further. While they are still scratching their bewildered heads at the sight of a socialist at the helm - not to mention a woman - I will polish the streets of this polluted pothole. I will show them chic and cosmopolitan. I will give them profit and PR. They do not call me Czarina for nothing.[27]

The Smooth Exterior

When attempting, for the purpose of extrapolation, to discuss interiority in isolation, every argument somehow feels unfinished. Obviously, this unease stems from the already stated fact that any act of delimitation, withdrawal or capture also is an act of differentiation. While metanarratives about Europe, Markets and Progress appear to be 'all-inclusive', every redefinition of a centre produces new peripheries, feeds desires to be 'in', and increases difficulties to remain 'out', regardless of whether these counteract a seemingly fundamental human need to 'belong'. On levels closer to individual cognition, any mode of networked transport represents a collapse and folding of the unstable categories of interior and exterior: a traveller or object in transit exists in an enveloped state of 'inside', moving through the panoramic 'outside' condition of the street- or landscape, viewed from within the physical and administrative boundaries of the motorway, the train tracks, the bus schedule... Similar space-folding occurs in any constructed environment, but is intensified in modern types such as the glazed atria of shopping malls, online chatrooms, industrialised greenhouses, free trade zones and airport mini-cities.

We can no longer withdraw into the interior – punctured by pervasive technologies and fears of missing out, our personal étuis are paper thin, leaving us uncomfortably exposed and still suffering from cabin fever. As argued by Virilio, the paradoxial predicament of modernity's speedy smoothness is that of the inescapable meltdown, catastophe – paraphrasing Aristotle, "the invention of the 'substance' is equally invention of the 'accident'."[28] In more or less benevolent forms, the contingencies of the exterior provide the contemporary subject with rare force majeure moments of repose, respite and discharge – the bus was late, it was impossible to find a parking space, someone stripped the rails of its conductive copper... Transit space in particular, that which strives to be nothing but a pleasant blur, somehow becomes the 'realest': revealing its flaws as the immaculate virtual is violently pulled into the actual, with scaleable effects and a curious intimacy. Its points of exchange and transition are not simply beeping plastic cards, toll stations or real-time adjusted travel planners, but are inhabited by overwhelmingly physical swarms of bodies shuffling, stumbling and swearing in space. It is sore behinds and tense thighs; it is damp overcoats and graffitied billboards; it is platform vomit and gum-dotted seats. Although perceived as a lack, an in-between, an anticipation, it could be considered far more tangible, far more expressive, than the carefully curated simulations of familiarity and community which make up the majority of urban 'public' space today.

Reintroducing DeLanda's definition of exteriority, one needs to adopt a habit of regarding locally exhibited properties not as essence or identity, but as specific material expressions of theoretically endless capacities. In so doing, the subjective nature of phenomenological and metaphorical readings become not constitutive of, but complementary to, a tentatively 'objective' understanding of reality as literal "processes of assembly."[29] These processes, operating across a spectrum from homogenisation to heterogenisation – the one side aiming to stabilise assembled Wholes, the other to tear them apart – are themselves assemblages, making it impossible to outline any type of 'pure' intent or causality;

27
Where: Administrative offices of the Municipal Council of Greater Strasbourg, 1 Parc de l'Étoile
When: June 30th 1989
Who: Catherine Trautmann, newly elected mayor, and 94 other deputies.
What: Vote in favour of installation of tramway system rather than VAL (underground automatic light rail).

28
P. Virilio, The Original Accident, p. 5.

29
DeLanda, p. 3.

only gradients and feedback loops. As the two parallel aspects of exteriority – the material-expressive and the processual – translate into and onto architectural practice, they effectively reaffirm its disciplinary relevance and singularity as a form-finding exercise which both constructs and critiques. Furthermore, they facilitate a reading of smoothness as indeed not an absolute state or 'saviour', but a dynamic configuration of things that, much like flying dust before it settles, exhibits the most degrees of freedom.

In order to maintain the remarkable capacity for smoothness immanent to the sheer amount of amalgamate assemblages flocking together in the contemporary city, it must not be treated as an entity analogous to the body, but as an assembled territory of perpetual otherness. When challenging an atomistic world view of minimal units and rigid hierarchies, scale shifts are key – much like the action of zooming into a point in order to requalify it as an intersection of vectors, and the action of zooming out in order to uncover the vector as a sequence of points. One concrete example of smooth exterior spaces are residuals: 'left-overs' and border conditions produced when overarching, interiorising narratives translate poorly or inefficiently onto the immediate territory. Those strips of land delineating the highway, that void under the viaduct, that vacant parking lot – they are all ambiguous; escaping formal or material classification; difficult to read as objects, sites or fields; perceived as both presence and lack, singular and same. They appear as "real space edited for smooth transition in virtual space"[30], seemingly bereft of any properties beyond mere extension, and yet they both produce and hold the territory; embodying the noncapitalisable. An architectural fascination with such spaces is intrinsically dialectical, and entails constantly balancing the degrees to which these fields of potentiality are expressively materialised as novel urban types, or left as abrasive anomalies, engaged in silent struggle.

VI.
A blurry brushstroke along the horizon; a sleek serpent hugging virgin rails with a whirring roar. It is the very fastest of its kind, allowed one final sprint before conforming to regularised caution. Fifty-three gazes flutter between dull displays and a pioneering panorama. Today Paris is far less than 108 minutes away. But curves appear in a matter of seconds.
The earth tilts before it strikes.
The serpent shrieks before it shatters.
Then silence.[31]

The Striated Exterior

At the opposite end of the spectrum from elusive residuals and contingent crowds, one finds territories which are parcelled, named, zoned, measured, valued, distributed and administrated. Dotted with historical artefacts, riddled with boundaries and appropriated by rent-extracting enterprises, these relatively similar environments are constituent of the majority of contemporary European cities. Within the striated urban exterior, architecture either conforms to, or struggles to break free from inherited assemblages that constitute both backdrop and stage of a sociopolitical drama with rigid roles and precise choreographies. However, although seemingly homogeneous and conceptualised by dominating metanarratives, even the most scripted environment cannot escape its immediate material reality – every spatial intervention adapts to very specific, local demands, whether it be troublesome topographies, family feuds, a rare bird species, volatile weather conditions, or other. Striation does not necessitate consensus or eradication of all difference – stable relations, whether desirable or not, do not occur automatically, but procedurally, additively, iteratively. Just like sedimentation, to use a Deleuzeian analogy, it is a process of layering; subject to exterior impact, never really reaching a 'state' but constantly becoming.

Monuments and institutional buildings tend to be the most significant urban exteriorities – immediately legible as Other by substantiating their foreign temporality and abstract sovereignty. Despite the relative ephemerality of 'functions', the inherent slowness and massive presence of architectural form allows for the disjunctive synthesis of multiple voices, bodies and

30
Koolhaas, p. 189

31
Where: Eckwersheim, north of Strasbourg
When: November 14th, 2015, 15:04:42
Who: SNCF staff, family and friends. 11 deceased, 32 injured.
What: Derailment of TGV train 2369

timescales, initiating a process of folding which is not materially emergent, but metaphorically expressive. Metaphor is a means of exteriorising concepts – of casting into the world – not as objectification, suggesting the existence of either something or nothing, but as one of many potential actualisations of the virtual. In the realm of architecture, form and materiality are often read as signs and metaphors. However, while an analogous reading might uncover artistic intent, reveal historical processes and hint to latent capacities, it says little of actual operability. In order to encourage a more performative reading, perhaps one must reverse the interpretation of the architectural assemblage from thing-as-metaphor to metaphor-as-thing. Shuttling metaphor from material assemblage to abstraction and back again postpones the process of sedimentation, while the 'meaningful' rhetoric of intent and purpose is overlaid, distorted and redefined by accumulating traces of life.

As an act of spatial distinction, and an attempt to produce a relatively stable assemblage, any architectural intervention entails striation. However, every new constellation also releases latent capacities for otherness – the relative interiorisation exteriorises that which was previously only a potentiality; it simultaneously realises a certain preformed intent and actualises potentials which until then lacked definition. The European city, in full representative regalia, is not 'done for' as a contemporary political arena. However, spatial discourse turns dull when the ultimate exterior of urban 'heritage', or worse 'identity', become overriding images that transpose the exterior into a hermetically sealed, meticulously polished interior.

VII.
Non, Merci!
Since 2003
We refuse to be part of your scheme
In the name of the European dream
This cut will cause our lands to bleed
And wipe away the rarest breeds
'Congestion' rhymes too well with 'greed'
Pseudo-solutions for pseudo-needs
From up there it must be hard to see
But more is not less, unfortunately
Invest in people, not in fleets!
Watch and learn as we clog up your streets
Thousands of feet causing tires to screech
Under the pavement, the beach! [32]

Enter Exteriority

Whether one entertains the thought of interiorisation as a gradual realisation of a 'global village' or a reminder of capitalism's Chthulhu[33]-esque character; as a technologically driven process of spatial optimisation or as an inflated "meta-architecture"[34] turning the world into a shopping mall, it appears as if architecture has the greatest potential political agency when operating as an exteriority. This is not simply due to the fact that architecture is most easily conceptualised as something which 'holds' or 'critiques' the human environment, but to the limited variety of people, things and thoughts that the interior can contain – even when containing the entire world. Given that the interior performs a cultural role of safe haven and 'second skin', a shift in control or definition of its domain has vast implications – faced with a modern condition of space-time compression and dissolving categories of public and private, intimacy and integrity, we have begun to wrap ourselves in blankets made of the very stuff from which we initially wanted shelter. A critique of current spatial configurations cannot be fully articulated if relations are considered as solely interior or exterior; spaces purely smooth or striated.

Whether an inflated void or dense presence, archtitecture has "equal capacity to affect and to be affected".[35] Despite any desire for 'realist' alternatives to 'idealist' conceptions of the human environment[36], we cannot escape subjectivity – any efforts to operate 'beside oneself", are subjugated to the human condition of being, in every sense, of the world. What we need, however, is not a theory of how to produce 'exteriority' or 'smoothness', but one of how to think and practice 'externally' and 'smoothly' – striving towards spatial configurations which allow for the greatest amount of scenarios, and produces a kind of abrasive reality which has the ability to surprise. One useful conceptual-

32
Where: Place Kléber
When: October 15th, 2016
Who: GCO Non Merci – initiative against the Grand Contournement Ouest – and 50 other affiliated protest groups: a total of 3000 people.
What: Anti-Bypass Protest.

33
Chthulu is a monstrous, godlike character appearing for the first time in H.P. Lovecraft's eponymous novel from 1928. In function of high-priest of the Old Ones that will annihilate humanity, Cthulhu was cursed from the surface of the earth, and hibernates on the bottom of the ocean until found and awoken by its disciples.

34
R. Exo Adams, Interior: Twelve Points in the Phenomenology of Empire, para. 2.

35
DeLanda, p. 124, citing Deleuze.

36
Delanda, p. 3.

isation of architecture evoking complex simultaneity through simple, precise and sequential gestures is afforded by Bernard Cache's theory of 'framing'. As an "art of the frame"[37], architecture is occupied with selecting and articulating of spatial intervals that produce potentially smooth milieus, without being smooth 'as such'. The frame, regardless of its orientation, never suggests a three-dimensional, totalising interior, but rather provides focus as a flattened, relative arbiter between inside and outside. The image produced within the frame is one of potential metaphor, subject to global trade, but the frame itself always operates locally. Removing, shifting or dissolving a frame is referred to as 'deframing' – the act of decoding and disassociating certain intervals, perhaps when they express too great a degree of striation. This process, one might argue, is an example of the metaphor-as-thing: the frame likens the surrounding environment to an image, appreciated not for its 'contents' or 'subject matter', but for the fact that that particular image has been framed. Life ensues due to the apparent potential for life to happen within that interval – a self-affirming loop, albeit never self-referential or symbolical.

Far from resembling a Claude glass – simplifying complex material assemblages to something 'picturesque' to be looked at in hindsight – these architectural images produce not spectators, but participants. Instead of retreating into a silent, invisible sky, or dotting the urban environment with attention-seeking exclamation marks, an architecture of radical exteriority could indeed provide our womb with a view.

37
Cache, p. 1.

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sous les pavés, la plage

EMBODIED PROTEST: AN ANTIDOTE TO MEDIATED PRESENCE

ADA JASKOWIEC

Introduction

The tradition of dissent is exceptionally rich in France. Starting with the French Revolution in 1789, then Spring of Nations in 1848, or even student protests of 1968, countermovement was a strong way of marking the advent of the new. Riots and revolutions may be less common nowadays, yet the tradition of being in the street, expressing beliefs, being heard is a big part of the French political culture. Sometimes protest in France, instead of being the last resort, becomes a primary step to take, a manifestation of disagreement, before even entering a discussion.[1]

The development of the idea of public space as conceived specifically to enable group contestation against the authority is certainly not a linear process, however, we can distinguish a few events highly advancing the process. In "The Gutenberg's Galaxy" McLuhan explains the far-reaching consequences of the invention of printing press by Gutenberg in 1440, which triggered the process of evolution from the manuscript culture towards the electronic age. It initiated the process of the development of technology leading to equalising access to information, enabling independence and emancipation of an individual. The rising amount of people being able to read and write, triggered the formation of individual awareness based on the ability of critical assessment of information. The first and most influential event which was possible because of the invention of print was the Reformation. Luther's movement was able to access the wider group of recipients due to the use of the brand new communication technology allowing faster than ever ways of replicating written material.

Following Alec Ryrie's analysis[2], the legacy of protestantism contributed to the development of society towards democracy. It was the first movement that showed the possibility of insurgence and the right to challenge the rules. It also demanded the government's limited involvement into people's lives, which much later became a cornerstone in the development of a modern political system. It could be said that the fact that Luther nailed the printed statements to the door was the first act of protest and the preview of what was to come later as democracy - creation the public space as a place of contestation.

Strasbourg found itself in the centre of this revolutionary whirlwind. Being the place of Gutenberg's biggest invention, it proceeded to be one of the first cities to convert to protestantism. Moreover, thanks to that situation, it was the recipient of all the new scientific devel-

1 Dehesdin, Slate.

2 Ryrie, CNN.

opments at the time, including Copernican revolution. Nowadays, the existence of European Union institutions - the Council of Europe and European Court of Human Rights - sustains its symbolic role of the European's keeper of democracy.

Crowd as a New Protagonist

It is not given to every man to take a bath of multitude; enjoying a crowd is an art; and only he can relish a debauch of vitality at the expense of the human species, on whom, in his cradle, a fairy has bestowed the love of masks and masquerading, the hate of home, and the passion for roaming.[3]

The early 19th century brings about the unprecedentedly fast development of urban culture. Growing density of human settlements and urbanisation creates a new collective protagonist - the crowd. The new concept enters the awareness of city dwellers - being in the crowd, experiencing the constant presence of other people around. Baudelaire's poem "Crowds" calls enjoying a crowd an art, "a bath of multitude", "a debauch of vitaly at the expense of the human species". Losing oneself in a crowd is the 19th century equivalent of Wordsworthian "sublime" - the uncanny power of nature. Urban landscape shaped by a collective force of people becomes a new human habitat.

Traditional depiction of a crowd uses panoramic top-view projection. Abraham Bosse's depiction of Thomas Hobbes's "Leviathan" (fig. 1) compares a crowd to the legendary sea creature[4]. The juxtaposition of Leviathan - the symbol of all evil and a humanity - in Hobbes's understanding maintaining peace only due to social contract - depicts a crowd almost as a force of nature. Similarly, the same tradition of crowd depiction was used in picturing Nazi assemblies in the 1930s, aimed at emphasising the force of the crowd as one, homogeneous entity. However, growing individualisation shifted the representation towards more immersive depictions, using first person perspective. For example, in the post-revolutionary Russia, the crowd gained human traits. Posters would show zoomed in human parts (fig. 2), e.g. faces, hands, torsos,

Fig. 1.

3
C. Baudelaire, Crowds.

4
Ziada, To See (Like) a Crowd.

introducing human body in more detail. Thus a crowd becomes more heterogeneous, obtains emotional value, apart from being this shapeless mass of similar entities. Its substance, a human body, is brought to the fore.

Such transformation results in the creation of spaces in the city which are occupied by crowds - a public sphere. The moment when the crowd ceases to be just an indifferent mass of people and gains causative power is when relations between individuals are formed and it starts to exercise a collective aim. One of these moments appears during protest as the moment of collective contestation.

Development of the Public Sphere

The novelty of publicness as it was conceived in the 19th century lies in the opportunities of participation and direct influence on the space, which was not within reach of previous city dwellers. In order to impose the specific gaze of the public space, Jurgen Habermas's definition will be treated as a starting point for the enquiry. It defines public sphere as a mediatory zone between the state and the society[5]. Political control is subordinated to the democratic demand. Public activities can be understood as constant struggle of influence over public realm between the authorities, understood as rule imposing agents and the society – private people undertaking endeavours in public space.

Fig. 2.

Such conception of public space is a very novel attitude. During monarchic times, crowd cheering the king did not have the same power it has now. A crowd cheering a king was not a powerful public gathering, but rather a collection of extras with no real influence on king's proceedings[6]. Similarly, famously democratic Athenian Agora was in fact an oligarchic public sphere - unaccessible to women or slaves. Habermas suggests to see the 18th century French liberal bourgeois sphere as the ideal realisation of publicness, where inequalities are temporarily put aside in order for everyone to be engaged in a rational, non-exclusive and disinterested debate about the public good[7]. However, subsequent inclusion of the society members who might have been more disadvantaged than the others and would require public sphere to seek for the realisation of their own private needs, put an end to the liberal public sphere.[8] What is more, the emergence of media led to diffusion of press and propaganda.

Instead of talking about the Habermasian destruction of the public sphere or Sennettian "fall of public man" and applying outworn and outdated definitions to a modern society, Margaret Crawford[9] claims it would be more productive to broaden the definition of public and make a shift from its understanding as a unitary, internally-coherent entity towards the explanation as a polyphony of voices, which does not exclude conflicting interests. The term she advocates, introduced by Nancy Fraser - counterpublics - describes spaces formed as a response to restricted access to publicness imposed by a dominant social layer. Depending on the historical situation, the excluded group would be different, e.g. heathens, women, children, slaves, the poor, immigrants, etc. In fact, Fraser argues, there was not a single point in history when there was one united public.[10] Public has always been constructed out of multiplicity of smaller agents, constantly rearranged and reinterpreted.

5
J. Habermas, An Encyclopedia Article, p.50

6
'At that time there existed a public representation of power. The status of the feudal lord, at whatever level of the feudal pyramid, was oblivious to the categories public and private, but the holder of the position represented in publicly: he showed himself, presented himself as the embodiment of an even present "higher" power. The concept of this representation has been maintained up to the most recent constitutional history. Regardless of the degree to which it has loosed itself from the old base, the authority of political power today still demands a representation at the highest level by a head of state.' Habermas, p. 50.

7
Habermas, p. 53.

8
J. Habermas, The Structural Transformation, p. xii.

9
M. Crawford, Contesting the Public Realm, p. 5

10
Crawford, p. 4.

Counterpublics are "often sites of struggle and contestation, help to overturn it [the normative space]"[11]. Insurgence, protests, countermovements, riots, public struggles over important issues are the inherent element of the public, if we adopt the new, more heterogeneous definition, which accepts the existence of contradictory opinions as the essence of the new public space.

James Jasper, discussing the sociology of protest, defines the term arena which refers to spaces where strategic actions occur. While they are governed by rules imposed top-down in order to define the limits of possible actions, protest is mostly aimed at changing them and expanding the restrictions.[12] It seems that what Jasper discusses, is the exact definition of the transformation of the public space into counterpublic.

Flattening of Experiences

One of the results of the development of media, written language, photography, video, etc. is the primacy of visual culture that we are facing right now. As McLuhan argues in "The Guterberg's Galaxy" the focus on the visual causes the neglect other senses: auditory, tactile, olfactory. As a result, the experiences become two-dimensional. For Lefebvre[13], progressing mediatisation is double reductionist. First, it implies movement of real space into abstract 3D, Euclidean space - losing its multidimensionality, heterogeneity and immediacy of experience. Abstract space produces, imposes and reinforces social homogeneity. Next, it undergoes another reduction to the illusory space of two dimensional representations. It causes the state in which space is no longer to be experienced - it is something abstract to be looked at. Space becomes more an image of space, a text to be read, a message with no traces of either state power or human bodies and their actions.

Starting with parietal art, through perspective painting, photography, video, VR, there is an evident tendency towards higher level of representational realism. And paradoxically, such tendency does not liberate from perceptual constraints, but rather confuses and blurs the ability of clear assessment and distinguishing between the reality and the spectacle. In Debord's words, spectacle introduced predominance of the visual, "capital accumulated to the point that it becomes an image"[14], spectacle is one of the moments or aspects of visualisation.

In "The Society of the Spectacle", Debord goes on to offer a more philosophical angle to understanding of a spectacle. For him, the issue goes beyond the problem of an interface, and refers to "a social relation among people, mediated by images"[15]. The fact of constant mediation leads to the creation of a fourth wall which constantly blurs the real vision. This leads Debord to the Platonic conclusion that what we are experiencing is not directly the reality, but the fake reality. People are subjected to take part in a spectacle that is created as a capitalistic instrument for pacifying the masses. By fabricating pseudo needs and fake cravings the society is subjected to manipulation and incapacitated.

Body in Protest

According to Lefebvre, one of the ways of freeing ourselves from the spectacle, is the defamiliarisation of perception, which has to be realised through erasing any mediation from our cognition. Experiencing space through body and body through space - acknowledging the body's constant relation with the surrounding becomes "the key to a revolt against modernity's straightjacket."[16] Lefebvre states that "the whole of (social) space proceeds from the body"[17]. It ceases to be an abstract idea, but a very corporeal, material entity. It is a body that perceives the space first (through senses), and through our bodies we become social. While a body provides connection, any mediation leads to disconnection.[18]

By interacting with each other, the members of the crowd generate power which allows them to temporarily take over public space. When talking about uprising, mobilisation and disagreeing, the major strength of every movement comes from the collective effort. In the case of protest, the main protagonist is plural - a crowd, a group of people consisting of individuals, who decide on collective action. Power is a virtual concept, which requires constant au-

11
Crawford, p. 5.

12
J.M. Jasper, Protest, p. 24.

13
H. Lefebvre, The Production of Space,p. 285.

14
G. Debord, The Society of Spectacle, Thesis 34.

15
Debord, Thesis 4.

16
J. Weinert, Making Sense.

17
Lefebvre, p. 405.

18
M. Friedman and van Ingen, C., Bodies in Space, p. 94.

thorisation to sustain it. According to Hannah Arendt power needs spaces of appearance, understood as public spaces arising out of actions (praxis) and speeches (lexis) of individuals[19], sustained due to the plurality of agents. Action sustains the power. By the action of the individuals, the potential of power is actualised. At the same time, on the state side, political institutions serve as manifestation and materialisation of power. This understanding requires constant actualisation and highlights the fragility of public space understood as a construct supported by the participation of people.

According to Jasper, all actions are physical[20], which means that we can talk not only about the surrounding, but also about what a human body is capable of doing. Employing a particular "body gaze" allows to look at through how it can be manipulated by human body and how it can influence human body through all its senses.

All these deliberations validate the discussion about the use of body in protest. During the French Revolution in 1789, body was still used as a shield. At that point, the society was still fighting for the right for the actual, corporeal attendance in public life. Barricades would be built not only as a territorial mark, but also to protect the vulnerable body, which was put in life-threatening danger. Almost two hundred years later, 1968 protests brought about a subversive use of body. In the shadow of a post-war trauma, it could also be seen as a society healing process, attempting to blur the memory of disintegrated, bleeding bodies. Following Debord's call for arms asserting that through body one can escape the spectacle and be free from the imposed schemata, the body was understood as a means of liberating the society (fig. 3). Sensory cognition supposedly would break the fourth wall and provide access to "reality". Hence, 1968 brought almost the carnivalesque use of the body. Almost literally applying the notion of liberation from imposed limitations and restrictions of a society, young people would engage publicly in very physical actions, eating, drinking, kissing, making love - which are intrinsically human, but became marginalised by the society. That was the way of being extremely physical, but without being hurt.

In "Rabelais and His World", Bakhtin discusses the carnival as a special period which brings body to the fore by making it the main way of experiencing the events. However, there is also a special collective dimension to this experience, as a carnivalistic self is transgressed in a communal performance and incorporated into a collective body of people. Such communal performance, which Hannah Arendt would call a collective action, leads to creation of the Fraser's counterpublic. Carnival creates an alternative space, which disregards the official rules and deconstructs a dominant culture, imposing its own time and space. In such an alternative spatio-temporal realm the inequalities between people are abolished. In contrast to the carnival, the protest dwells on the reality, commenting upon the existing state and aiming to bring about changes in the reality. Protest is not conceived as a temporary event which serves just as an escape from the reality, but it seeks to leave the mark on the reality.

Therefore, also the body during a protest does not reach the same level of carelessness as during a carnival. Protest is designed as an event, which in itself expresses as an objection to reality, which results in the intrinsic existence of conflict. As a result, it puts a body in a constant peril of damage. It is a very specific and unique state. The hazard of being hurt, or being ostracised by taking the wrong side in the discussion makes people unwilling to join counterpublics. People's objection to participate constrains the action.

Disconnection

The sun arose while we proceeded, and, when we had once again reached that most thronged mart of the populous town, the street of the D-- Hotel, it presented an appearance of human bustle and activity scarcely inferior to what I had seen on the evening before. And here, long, amid the momently increasing confusion, did I persist in my pursuit of the stranger. But, as usual, he walked to and fro, and during the day did not pass from out the turmoil of that street.[21]

19
H. Arendt, The Human Condition, p. 198.

20
"That sounds silly, but we need to look at the wais in which action is embodied: how it feels to someone, how it looks to others, the limits of what a body can do, and how two individual do the same things in slightly different ways." Jasper, Protest, p.41.

21
E.A. Poe, The Man of the Crowd.

In Edgar Allan Poe's proto-detective short story "The Man of the Crowd", the main protagonist follows one man whom he chooses from the crowd , like a detective would follow his suspect, through the streets of London. To his surprise, the followed man never leaves the crowd, he spends hours roaming through the city, but always through the crowd. The text captures a unique possibility which arises from living in a densely populated city - being able to hide in a crowd, making use of its collective power, without really interacting with anyone. A Baudelairean stroll through the crowd - being surrounded, yet alone, may be a modern danger to the notion of collectivity.

In Antonioni's "Blow Up" David Hemmings's character attends a Yardbird's concert. Before he looks at the stage, he navigates through what seems to be a crowd of mannequins (fig. 4). The guitarist, in order break through this spectacle of indifference, decides to destroy a guitar (very fashionable back then) and throws the disassembled neck at the crowd. And only when the fourth wall is broken, this is the moment when the crowd becomes animated and jumps panically to catch the item.

These two situations describe a modern condition of a crowd, which is characterised by a certain degree of numbness and indifference. Despite being together, people may be a part of the congregation without actually actively participating in common praxis. Moreover, the potential of action and collectivity in constructing counterpublics can be numbed with certain political decisions blocking the freedom of interactions. Urban solutions are applied in order influence the social stability, as they may be a very powerful "disconnecting" tool.

A temporary measure might be present during protests in the actions of the police, whose function is to disconnect different groups from each other in order to impede participation. The most famous, long-lasting and brutal spatial intervention of a kind would probably be Haussmann's urban remodelling of Paris[22], which was conceived in such a way that it could block possibility of barricading and facilitated the possibility of military surveillance. On the other side, it also introduced a new urban way

Fig. 3.

of life, based on consumption, reflecting the power structure of capitalism. The poor inhabiting the centre were dispersed across the city, mostly in the outskirts. This created a temporary disconnection between the less privileged, but finally outsourced the problem to somewhere else. Another example might be how American politics of suburbanisation introduced ownership as an element of social stability, which at the same time diffuses the density of habitation, thus weakening the possibility of interactions between people.

Conclusion

In the opening scene of the movie "Pride", telling the story of a group of LGBT activists raising money for families affected by British miners' strikes, the main protagonist approaches the protesting crowd from the inside of the building. Carefully, he steps into the street, hoping to stay neutral and invisible. However, an item thrown at him by the opposing side of the protest, drags him out of his comfort zone and puts him in danger. Thus he is forced to make a decision whether to join or escape (he joins).

22
D. Harvey, The Right to the City, p. 9.

Fig. 4.

This may be an extreme example, however, it quite aptly describes how the fourth wall of indifference between the individual and the crowd can be overcome.

By turning an event from the one that does not require participation towards the one which requires some reaction, it may turn out possible to abolish the problem of indifference and impotence of the crowd. Despite the widespread use of interfaces, i.e. TV, internet, mobile devices, there seems to be a lot of potential in talking just about the crowd. The analogous and physical crowd, consisting of people's bodies.

This leads to the conclusion, which states the necessity of developing spatial measures, enhancing the feeling of the crowd. In order to do that, it is necessary to depart from the body, taking into account all the senses and bodily capabilities. The spatial measures reinforcing the public space in the city and sustaining the vitality of crowds can be divided into two scales of spatial interventions. Firstly, big scale spatial measures may be used to reinforce the movement in a bigger, urban scale. George Baird points at such figures which may develop the opportunities of awareness[23], aimed at shifting the distracted perception (Walter Benjamin) towards idea of action (Arendt). Heterogeneous visibility enables the appearance of even contradictory objects in the space and is a prerequisite of publicness. Spatial propinquity puts people close to each other instead of dividing. Continuity grants the possibility of non-stop, unlimited strolling, providing as diverse network as possible. On the other hand, we may talk about small scale interventions, which instead of fueling the crowd as a congregation, influence particular agents of the crowd, influencing their feeling of being a part of the crowd, such as framing the vision or manipulating the sensory input. Such measures, both on urban and architectural scale, will become a subject of my further design investigations.

23
G. Baird, The Architectural Conditions of Publicness, p. 7.

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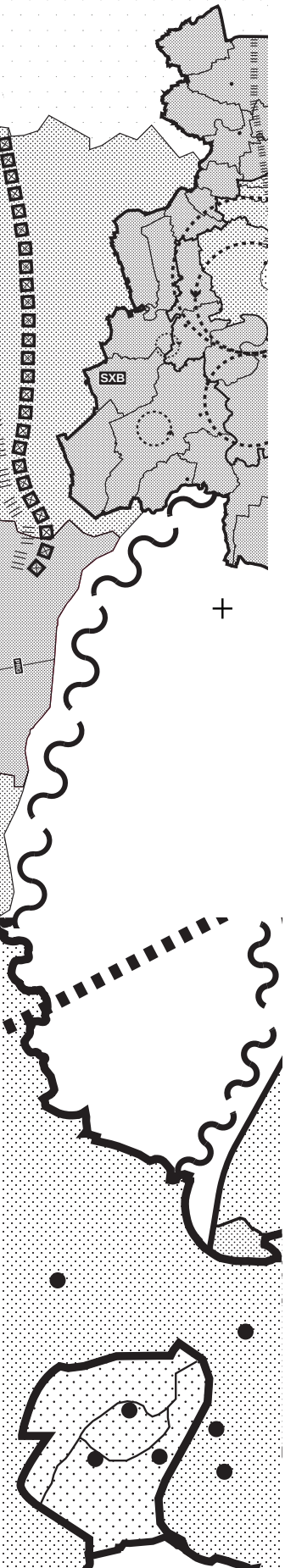
Cover Figure.
Slogan of the 1968's student revolution. It was conceived after students had found out that the cobblestones they used for barricades were placed on sand bed and while removed created sandy patches in the city.

Figure 1.
Abraham Bosse's depiction of Thomas Hobbes's "Leviathan", 1651. https://nomoi.hypotheses.org/files/2015/12/19-500x272.jpeg, (accessed 25 January 2018).

Figure 2.
Gustav Klutsis, propaganda poster, We'll Fulfil the Plan of Heavy Tasks, 1930, https://journal.eahn.org/articles/10.5334/ah.co/, (accessed 20 December 2017).

Figure 3.
Mini skirts worn during Paris protests in 1968 as a sign of sexual revolution and liberation of the body, http://savetheflower-1967.tumblr.com/image/65330322606, (accessed 20 January 2018).

Figure 4.
A still from Michelangelo Antonioni's "Blowup", 1966.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FLUX

A CITY OF COMINGS AND GOINGS

Flux is everywhere. Its broad abstract definition can refer to a wide variety of things. Anything that contains flows, movement, motion and fluidity over time can be categorized as flux. These nomadic states produce moments of continuous change and instability, empowering the thing in flux to evolve or deteriorate. Fluxes relationship to time is important as the rate of change and movement may derive varied results.

The city is undeniably in a state of flux. There can be as many invisible components in flux as there are physical. We can witness the changing city fabric, new roads, buildings, facades, deteriorating areas, the movement of cars, people and all modes of transport. But hidden from the naked eye can exist other layers of flux. Changing governance and policies, economic movement, energy flows, oscillating radio waves and sporadic GPS signals to name a few.

For architects and designers, awareness in these systems is important since flux is the driver of change. We must understand what exists if we wish to re-order or alter these systems of flux. As the philosopher Elizabeth Grosz once said:

> *Our 'artisticness', as Nietzsche puts it, our creativity in Bergsonian terms, consists in nothing else than the continuous experimentation with the world of things, to produce new things from the fluidity or flux, which elude everyday need, or use-value.*[1]

1
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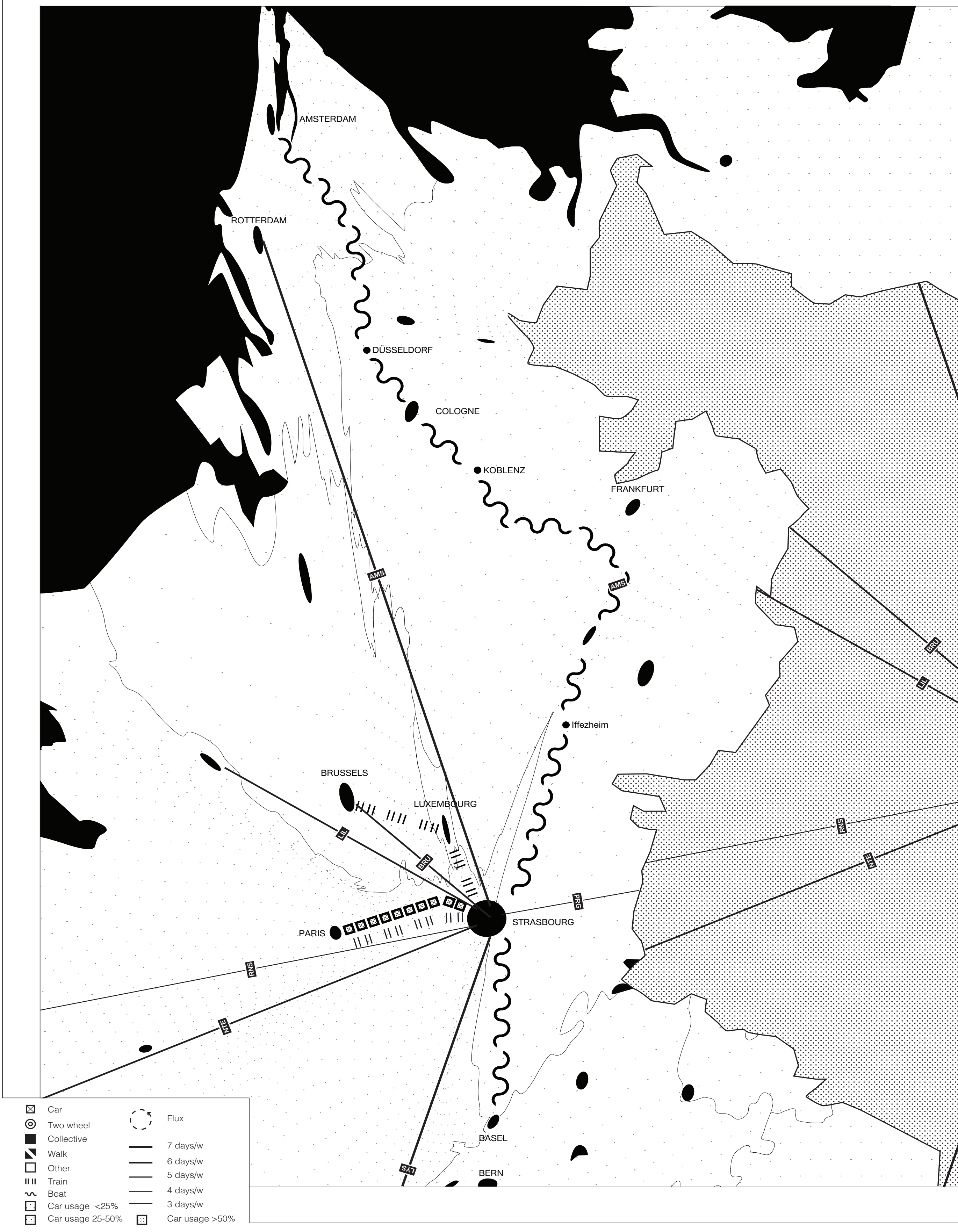
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BASEL
BERN
LYS
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Collective
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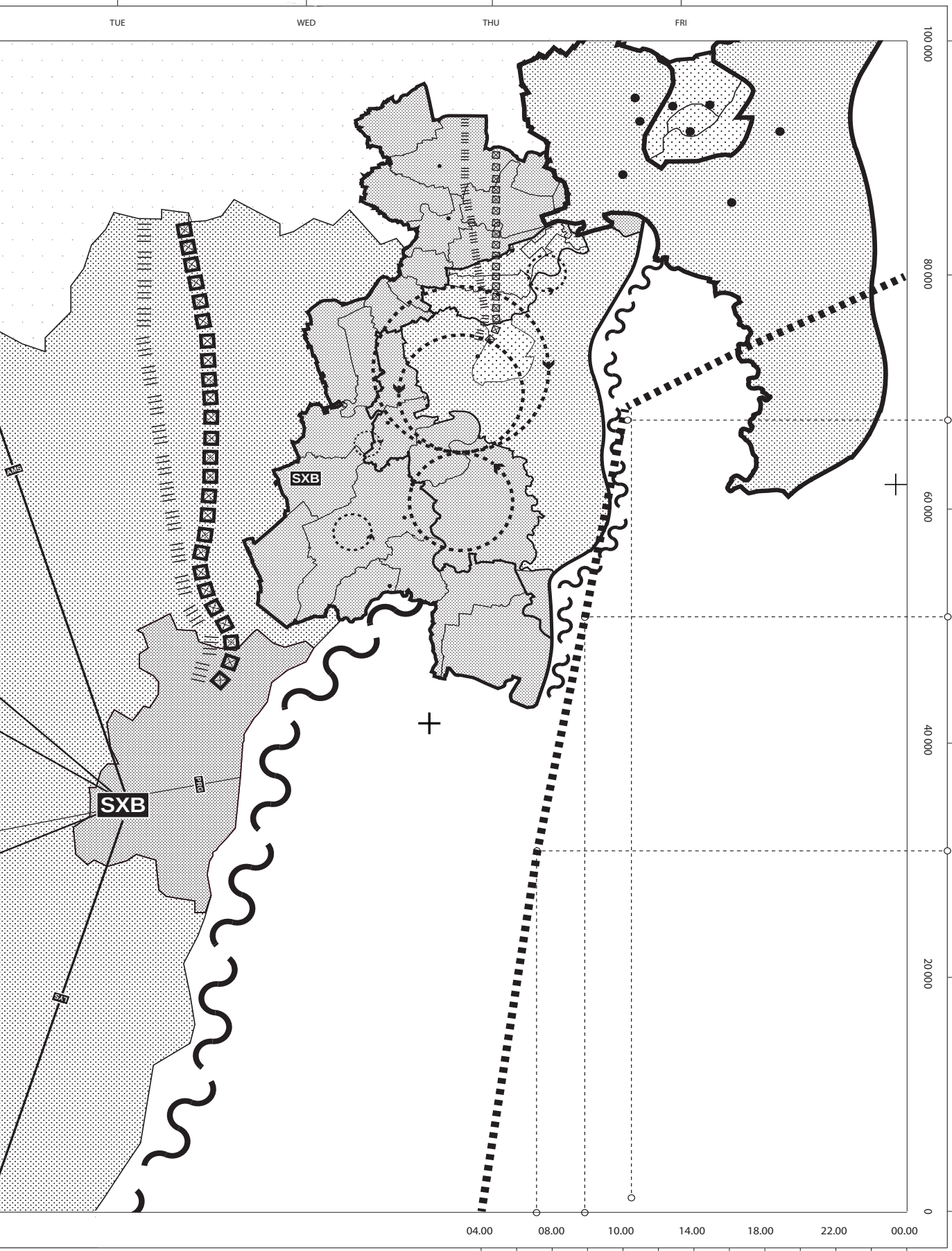
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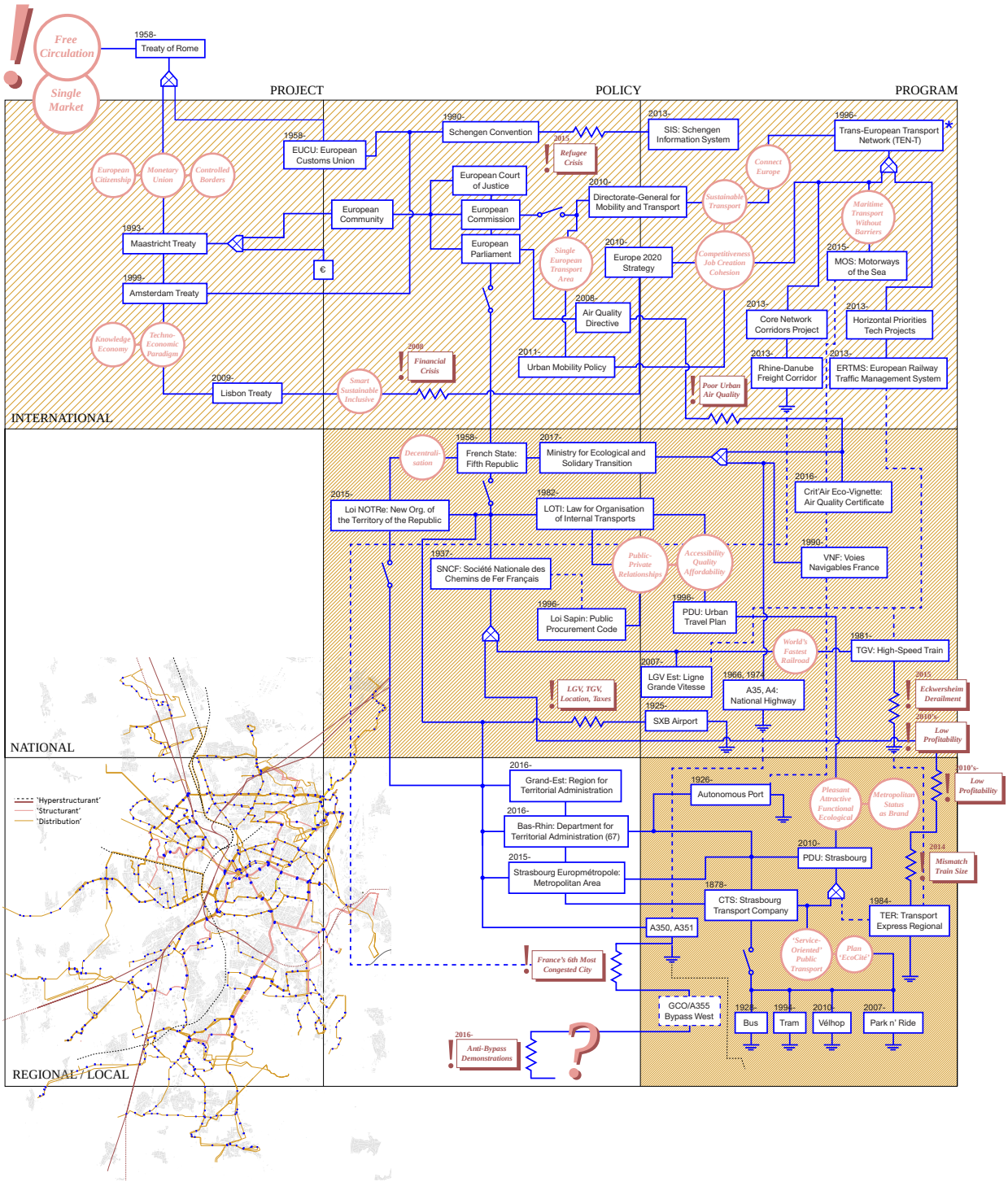
PROJECT
POLICY
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INTERNATIONAL
NATIONAL
REGIONAL / LOCAL
Free Circulation
Single Market
1958- Treaty of Rome
1958- EUCU: European Customs Union
1990- Schengen Convention
2015 Refugee Crisis
2013- SIS: Schengen Information System
1996- Trans-European Transport Network (TEN-T)
European Citizenship
Monetary Union
Controlled Borders
European Community
European Court of Justice
European Commission
European Parliament
2010- Directorate-General for Mobility and Transport
Connect Europe
Sustainable Transport
Maritime Transport Without Barriers
1993- Maastricht Treaty
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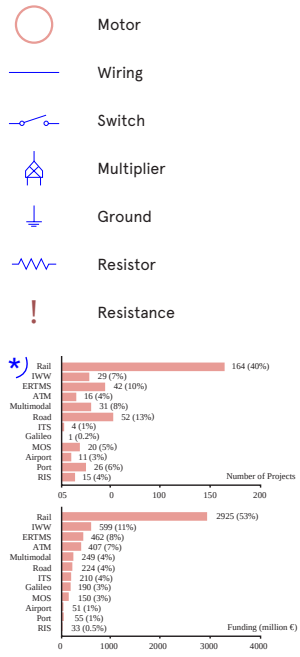
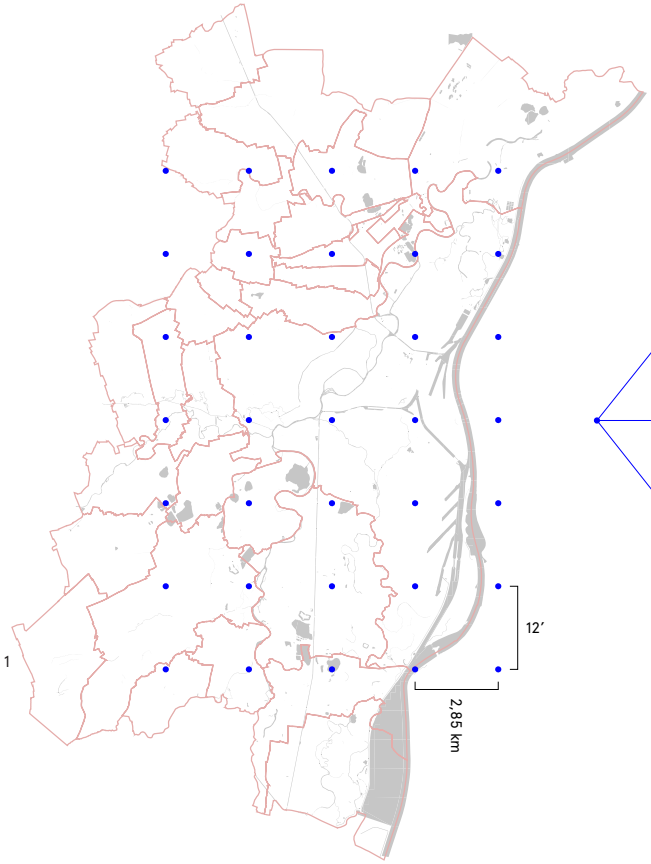
Single European Transport Area
2010- Europe 2020 Strategy
Competitiveness Job Creation Cohesion
2015- MOS: Motorways of the Sea
1999- Amsterdam Treaty
2008- Air Quality Directive
2013- Core Network Corridors Project
2013- Horizontal Priorities Tech Projects
Knowledge Economy
Techno-Economic Paradigm
2009 Financial Crisis
2011- Urban Mobility Policy
2013- Rhine-Danube Freight Corridor
2013- ERTMS: European Railway Traffic Management System
2009- Lisbon Treaty
Smart Sustainable Inclusive
Poor Urban Air Quality
Decentrali-sation
1958- French State: Fifth Republic
2017- Ministry for Ecological and Solidary Transition
2016- Crit'Air Eco-Vignette: Air Quality Certificate
2015- Loi NOTRe: New Org. of the Territory of the Republic
1982- LOTI: Law for Organisation of Internal Transports
1937- SNCF: Société Nationale des Chemins de Fer Français
Public-Private Relationships
Accessibility Quality Affordability
1990- VNF: Voies Navigables France
1996- Loi Sapin: Public Procurement Code
1996- PDU: Urban Travel Plan
World's Fastest Railroad
1981- TGV: High-Speed Train
2007- LGV Est: Ligne Grande Vitesse
1966, 1974- A35, A4: National Highway
2015 Eckwersheim Derailment
2010's- Low Profitability
LGV, TGV, Location, Taxes
1925- SXB Airport
2010's- Low Profitability
2016- Grand-Est: Region for Territorial Administration
1926- Autonomous Port
Pleasant Attractive Functional Ecological
Metropolitan Status as Brand
2016- Bas-Rhin: Department for Territorial Administration (67)
2010- PDU: Strasbourg
2014 Mismatch Train Size
2015- Strasbourg Europmétropole: Metropolitan Area
1878- CTS: Strasbourg Transport Company
1984- TER: Transport Express Regional
A350, A351
'Service-Oriented' Public Transport
Plan 'EcoCité'
France's 6th Most Congested City
GCO/A355 Bypass West
1928- Bus
1994- Tram
2010- Vélhop
2007- Park n' Ride
2016- Anti-Bypass Demonstrations
'Hyperstructurant'
'Structurant'
'Distribution'

SEAMLESSNESS AS PROJECT

Whether considered as a means of social cohesion or as a tool for market expansion (or both), global mobility enjoys the role as one of few untouchable 'truths' in contemporary planning and politics. However, although generally conceived of as an inherently modern, self-evident condition, it is not a 'fait accompli' but a an ongoing process – a Project.

Arguing that the European Union is ultimately nothing more, nothing less than infrastructure – circulation of goods and people – reifying external boundaries while deterritorialising internal ones, this map traces the 'wiring' of Strasbourg transport systems from latent ideals to manifest interventions. The hightlighted instances of resistance serve to show the fragility of the material dimension of the hypermobile, 'seamless' paradigm, yet illustrate the political persistence of its ideals. Finding a 'breaking point', a potential short circuit, appears impossible; when faced with friction, the system rewires - in terms of management and money flows - tunes into current needs and trends - such as disincentivising car use - or polishes its rhetorics - from 'circulation' to 'connection', from 'market' to 'competitiveness', from 'technology' to 'sustainability'... Yet, these points of friction serve as 'plot holes' which can be used to build other narratives.





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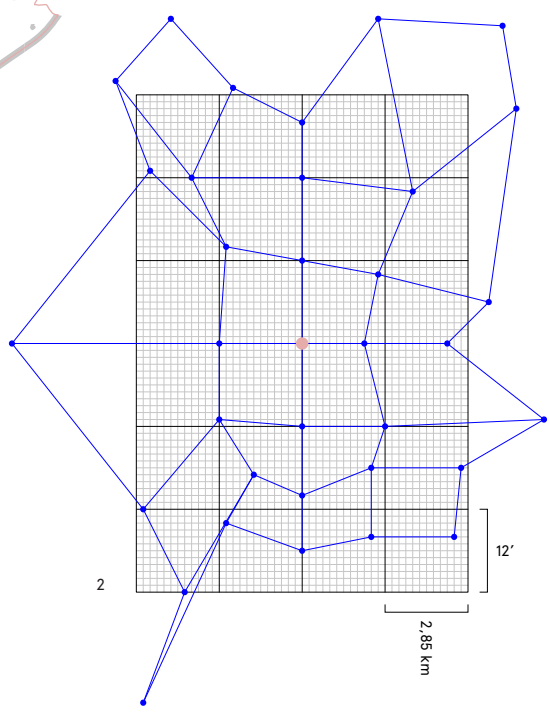

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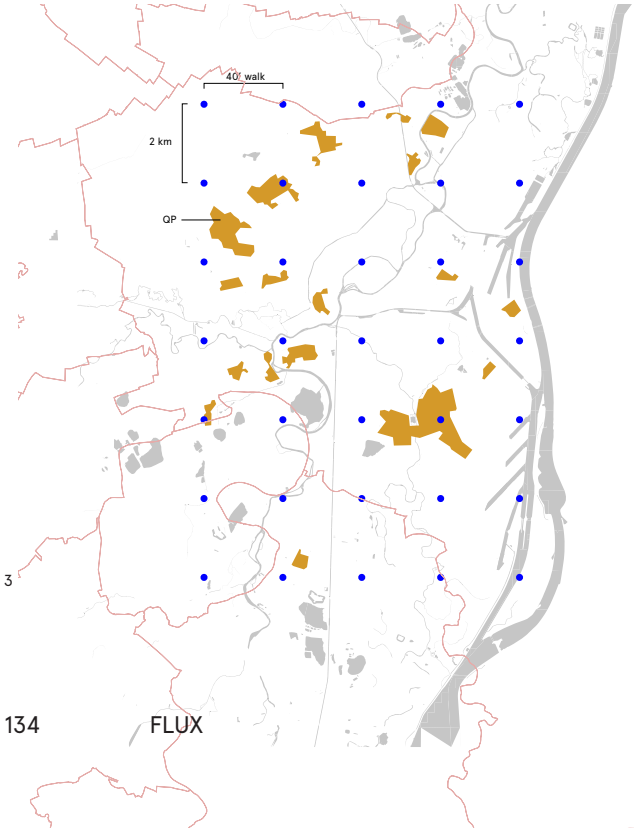

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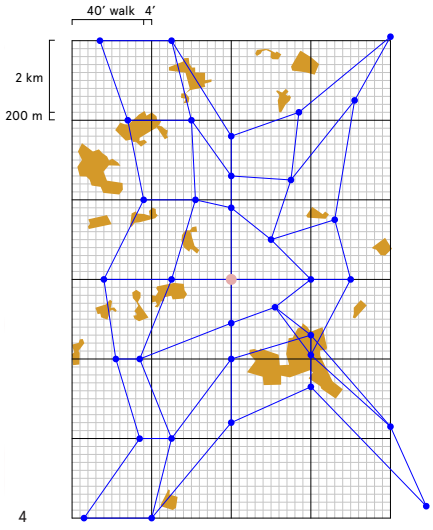

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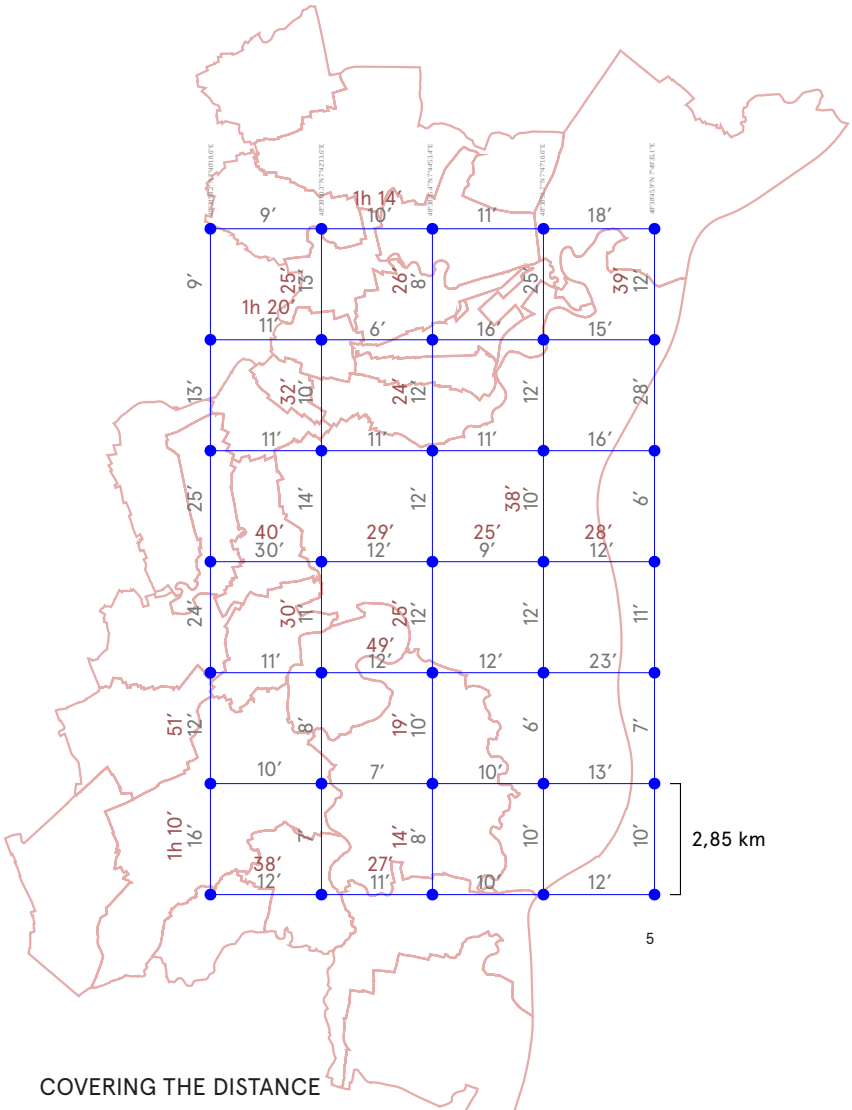


COVERING THE DISTANCE

A well-developed transit network has the capacity to break centre-periphery dichotomies, reshuffle the distribution of socially and economically 'attractive' areas, and render accessible a greater variety of places for a greater variety of people – potentially enabling everyone to 'choose' their lifestyle. However, despite – or perhaps because of – ambitious investments into public infrastructure, the inhabitants of the Alsace region commute an average of 3 hours a day, mostly by car. There are clear discrepancies in the amount of time required to cover a particular distance by means of private and public transport respectively, and some areas remain remote from the central areas still holding the most opportunities for work, education and leisure.

1
Grid applied in order to comprise the main metropolitan area. Spacing 2,85 kilometres; the equivalent of 12 minutes drive in the given terrain.

2
Grid distorted based on the actual and relative time needed to travel by car between anchor points, along X and Y axes. Middle point indicates starting point for relative measure. Different starting point provides a slightly different distortion, although relative time remains equal.

3
Grid applied in order to comprise areas in most urgent need of public transport. Spacing 2 kilometres; the equivalent of 40 minutes walk in the given terrain.

4
Grid distorted based on the actual and relative time needed to travel between anchor points with public transport, along X and Y axes. Middle dot indicates starting point for relative measure.

5
Indication of average time in minutes required to travel between anchor points, by public transport and private vehicle respectively.

Anchor point

Quartier Prioritaire

Municipal boundary

10′ Private motor vehicle

10′ Public transport

Horse-drawn omnibuses and carriages

1848

Introduction of an electric tram.

1871–1914 German Rule

1894

Development of tram lines is obstructed by the WWI, but is continued after the war.
1930: the 234 km of the tramway route , divided between 83 km of urban lines and 151 km of suburban lines, provide more than fifty-five million trips per year, of which 2.5 million for the suburban network.

1914

First trolleybus line introduced.
However, the outbreak of the WW1 and subsequent lack of petrol limit the possibilities of public transport enforce the closure of trolley and bus lines, leaving only tram lines operating.

1939-45 German Occupation

1939

War destruction leaves tram lines severely destroyed.

The city is hesitant to modernize existing lines, yet they are brought back to life. However, they are already inferior to bus lines.

1945

1949 Introduction o
Institutions to St

1960

1878

Introduction of Horse and Steam Tramway

1896–1920

Extension to Kehl inaugurated.

Floating bridge got replaced by a fixed bridge, the ancestor of The Bridge of Europe.

1928

First bus line introduced.

Rapid development of automobile transportations puts into question the validity of tram transportation.

1942

Extension to Kehl Station reintroduced

Last tram carries passeng
in Strasbourg.
The last run is a public
procession - the funeral
the tram. People gather
say goodbye to the longe
serving mean of public
transport in Strasbourg.

Oil crisis.

the first oil crisis challenges previously unquestioned supremacy of oil-run transportation means. Oil prices increase by 400%.

of European
trasbourg

1973-74

1980s

VAL vs. Tram.
The 80s mark the decade of ongoing discussion arout the choice of modern mean of transport for the city of Strasbourg. The majority of authorities seems to support the construction of VAL - automatic metro system.

With Catherine Trautmann's election as mayor of Strasbourg, the VAL project was abandoned in favour of the tramway.

1989

Creation of a Multi-Modal Transportation System (integrating trains, trams, busses, cars, bikes, P+Rs, etc.)

1994

Tram is reintroduced to Strasbourg.
10 km long line A (north-south) and line D

Line B and C enter service.

2000

2002

Tramway gets linked with regional rail.

Line B and C get extended, while line E enters service.

Finally, the European institutions obtain public transport connection.

2007

2016

TGV reaches Strasbourg.

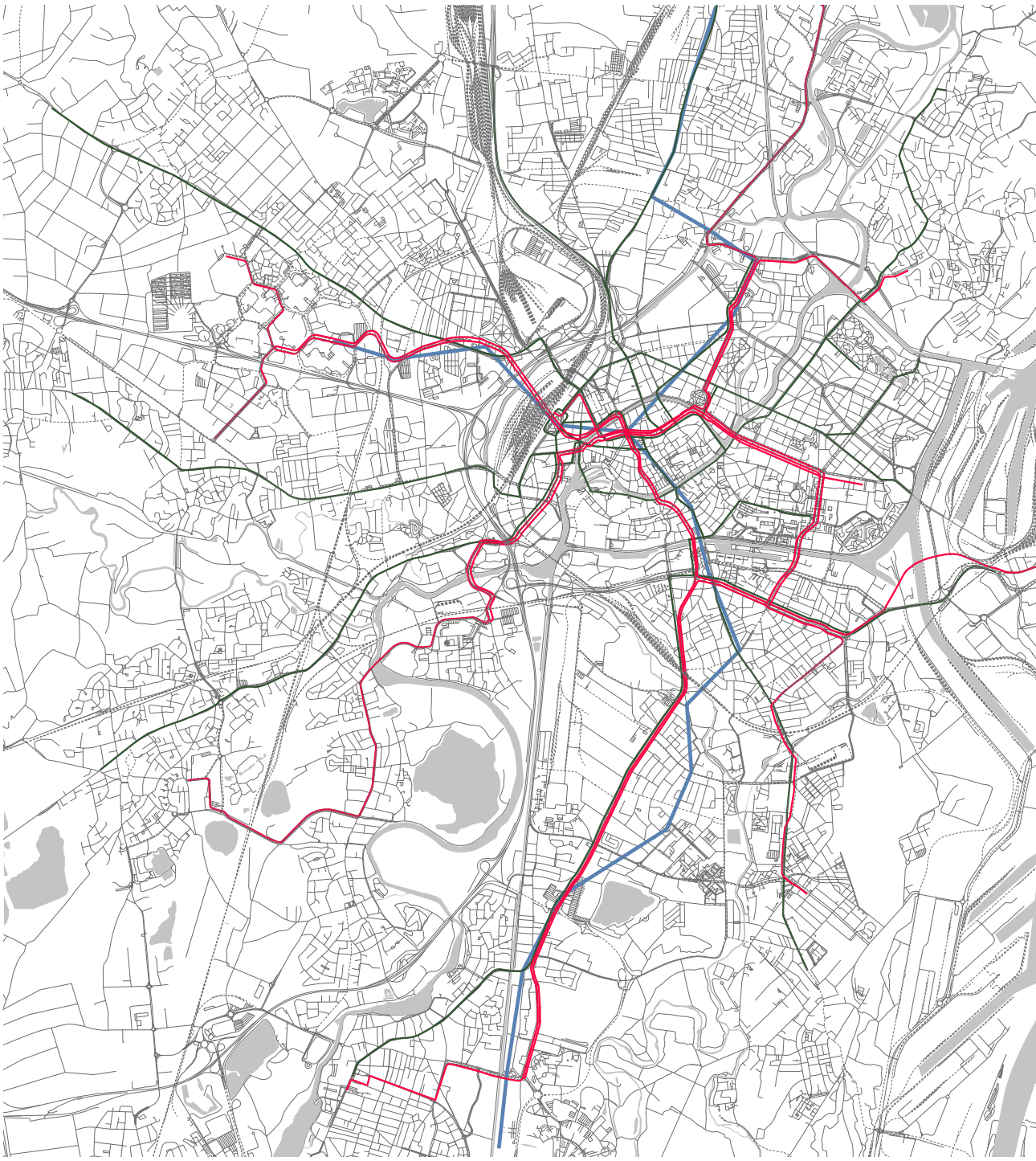
As a result, Strasbourg is reachable from Paris in below 2 hours.

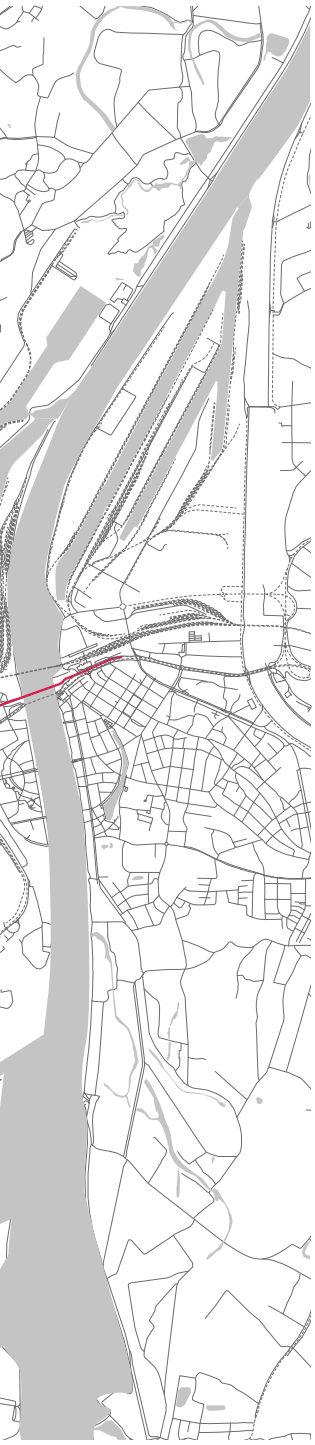
Modern tram line reaches Kehl.

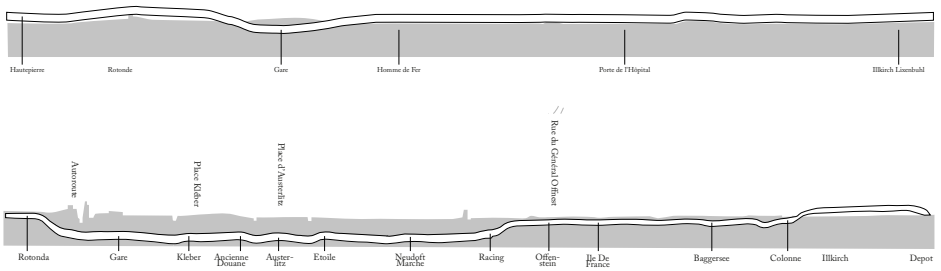
2017

TRAM IN STRASBOURG

Tram communication, introduced to Strasbourg in mid 19th century, within decades became inefficient and too slow. Its withdrawal was also triggered by war damage. However, post-war replacement of tram communication with buses turned out to be a short-sighted decision, which contributed to growing congestion and air pollution. It made the local government drastically change its tactics and reintroduce tram in early 1990s in its modern and eco-friendly version.







UNBUILT NETWORKS

The revival of tram communication in Strasbourg, which is nowadays promoted as the city's biggest advancement in the field of public transport, was preceded by years of fierce discussions regarding the choice of the optimal mean of transport for the future and sustainable Strasbourg. During 1980s, France witnessed the emergence of VAL - a rubber-tyred metro system - developed at the Université Lille Nord de France, first introduced in Lille, then Paris and Toulouse. The plans of VAL in Strasbourg had already reached the late stage of development, when the change in political leadership shifted the course and decided on the reintroduction of tramways.

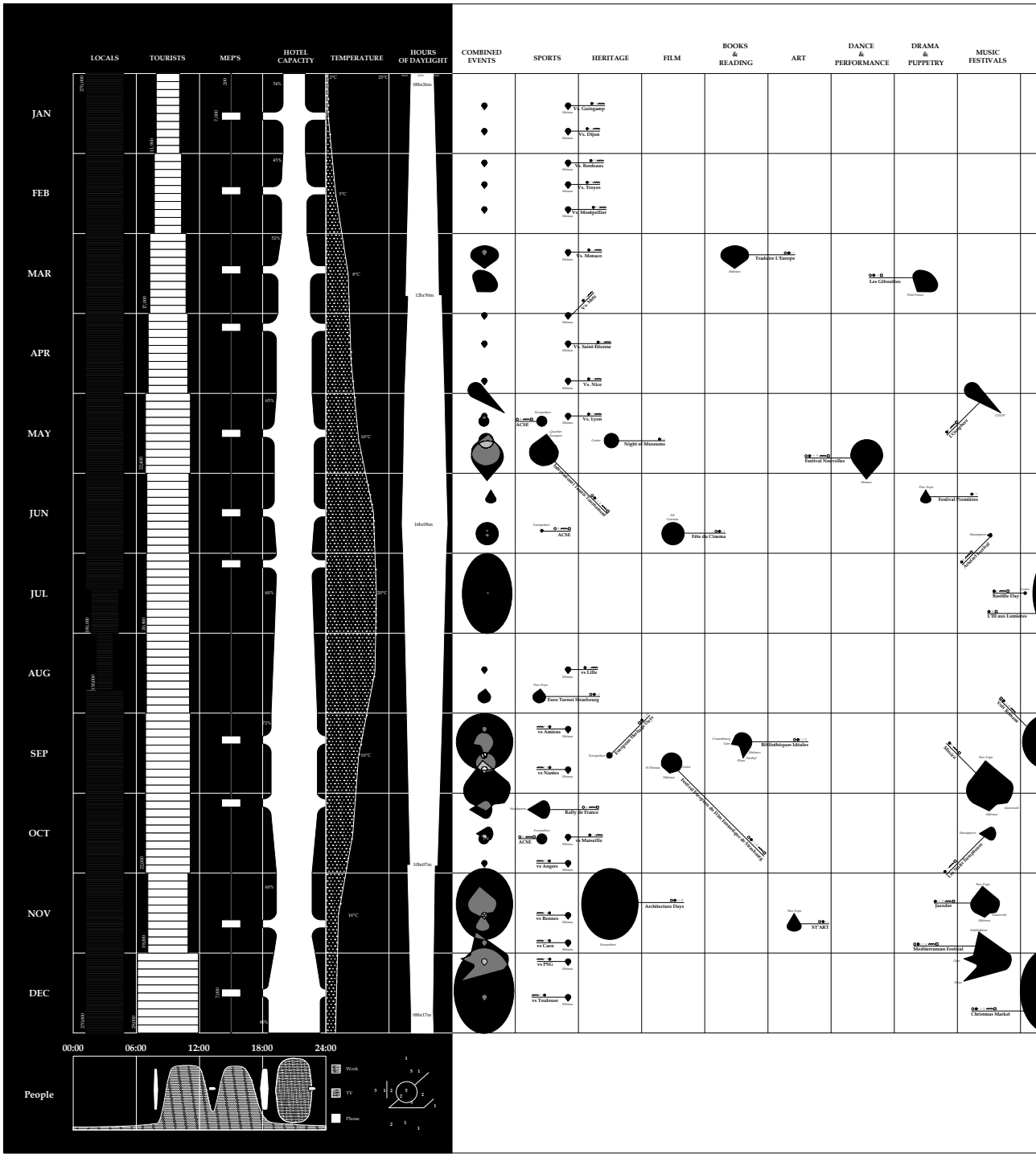
Right top:
Section through existing tram network.

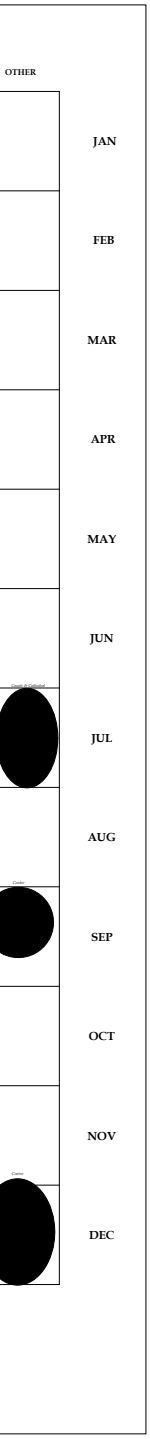
Right bottom:
Section through designed VAL.

existing tram network

1930s tram network

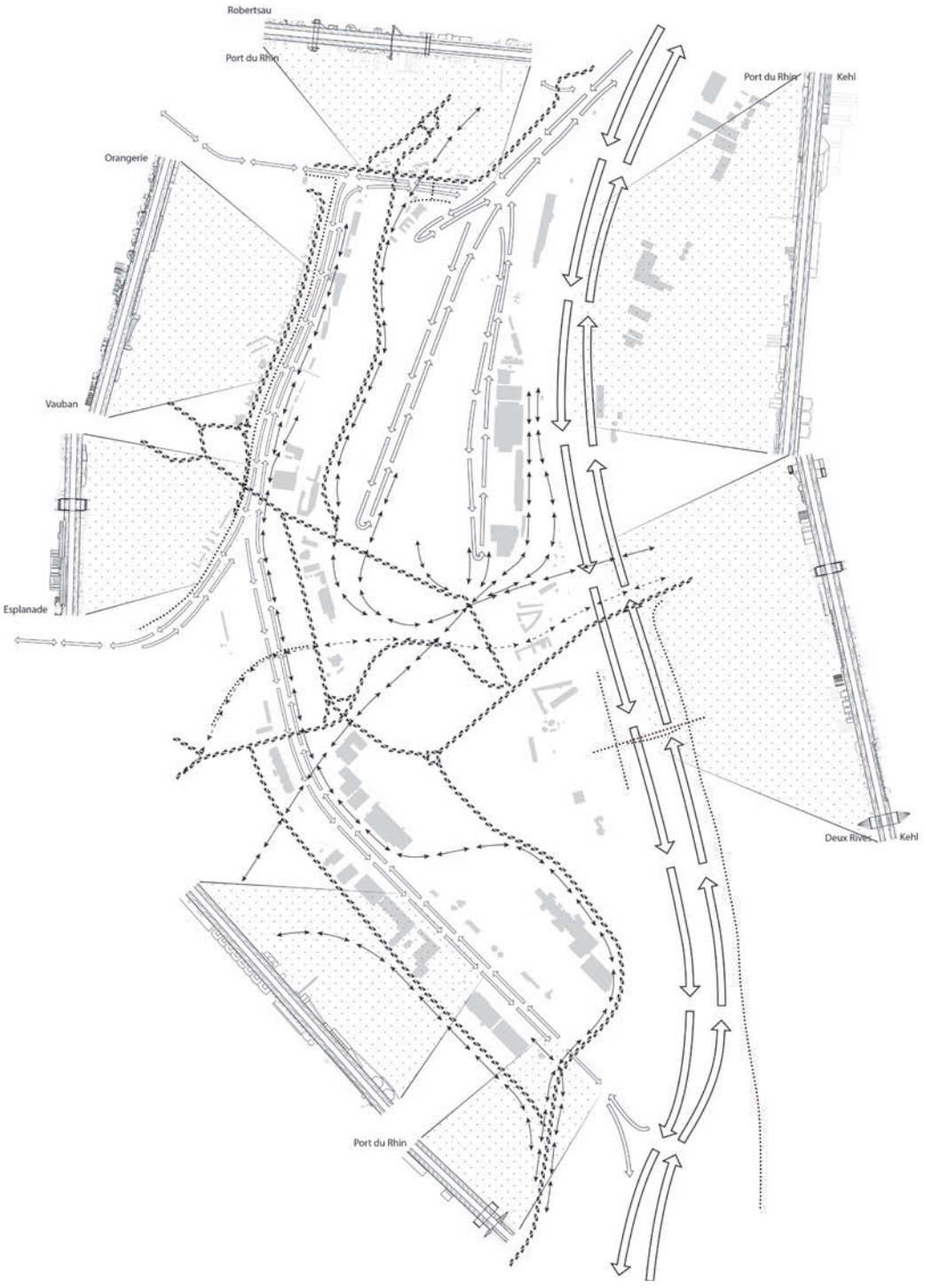
1980s VAL (proposal)


LOCALS
TOURISTS
MEP'S
HOTEL CAPACITY
TEMPERATURE
HOURS OF DAYLIGHT
COMBINED EVENTS
SPORTS
HERITAGE
FILM
BOOKS & READING
ART
DANCE & PERFORMANCE
DRAMA & PUPPETRY
MUSIC FESTIVALS
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Vs. Guingamp
Vs. Dijon
Vs. Bordeaux
Vs. Troyes
Vs. Montpellier
Vs. Monaco
Vs. Saint-Etienne
Vs. Nice
Vs. Lyon
Night at Museums
Festival Nouvelles
Les Giboulées
Festival Premières
Bastille Day
Fête des Lumières
Vs Lille
Euro Turnel Strasbourg
vs Amiens
vs Nantes
Bibliothèques Idéales
Rally de France
vs Marseille
vs Angers
vs Rennes
vs Caen
vs PSG
vs Toulouse
Architecture Days
ST'ART
Jazzdor
Mediterranean Festival
Christmas Market
00:00
06:00
12:00
18:00
24:00
People
Work
TV
Phone



PLANE OF CONTRASTING DESIRES AND RHYTHMS

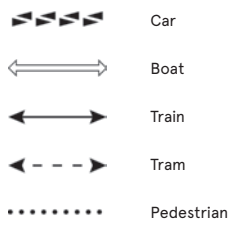
Strasbourg is a living, breathing organism conducted by underlying timetables and schedules. Opposite is a symphony of major cultural events throughout the year, coupled alongside the local population, the amount of tourists, the arrival of the MEP's, the hotel capacity, the hours of daylight, the temperature and the average french working hours. By placing these systems side by side, relationships, correlations and habits become evident. Most events move around the city daily, occupying spatially varied locations. Even highly contrasting events can be seen occupying the same space, regardless of how different their function is. What is important is that all ages are represented, the organisatino strives on the constant diversity.

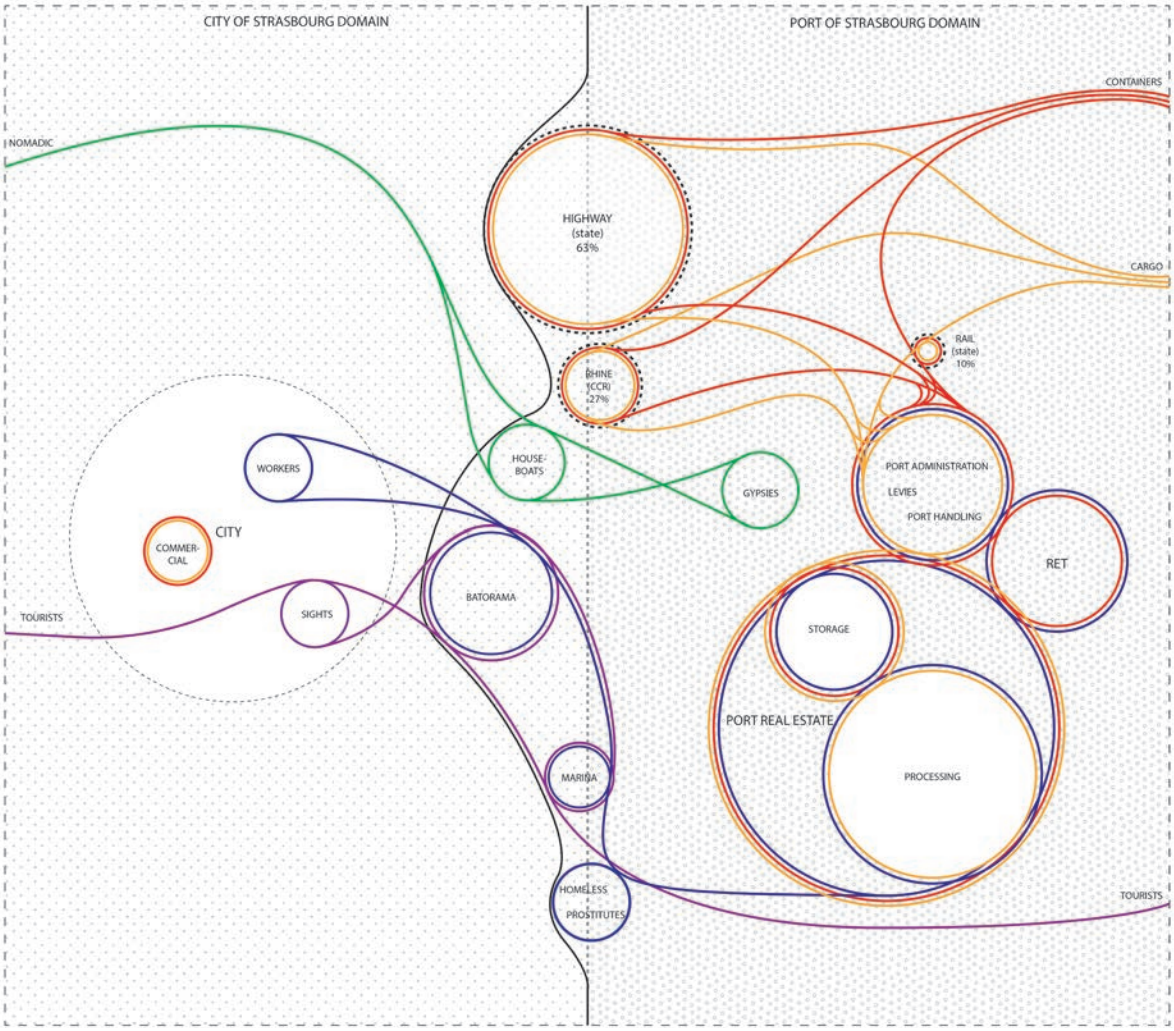

Robertsau
Port du Rhin
Orangerie
Vauban
Esplanade
Port du Rhin
Kehl
Deux Rives
Kehl
Port du Rhin

INFRASTRUCTURE ON AND WITHIN THE PORT BORDERS

The “island” of the port, in-between a multitude of destinations, performs in a variety of ways. Cars and trucks - fast-paced yet intermittent - dominate the scenery, while barges, well over 100 meters long, come and go at seemingly slow and few, but steady rates. They hardly use the inner bassins, Vauban and des Remparts, which are now almost only used by cruise ships and leisure crafts. Trains are even less frequent - carrying large amounts of cargo at once, at a speed that can, at times, be outpaced by people on foot. Together, these types of infrastructure occupy an immense amount of condensed space within the port territory, spreading out towards the city and its hinterlands.

These particularities of its infrastructure are similarly present on the borders which confine the port as a space in-between. Derelict lands lie opposite to docking spaces for tourists, who are dropped off and taken by bus to the city centre, oblivious of the actualities of the neighbourhoods next to which they are moored. Temporal house boats flank the city - obstructing the views of the water and the port. Canal locks control and slow the flow of boats, while other traffic rushes overhead - unbeknownst of what lies underneath.




CITY OF STRASBOURG DOMAIN
PORT OF STRASBOURG DOMAIN
CONTAINERS
NOMADIC
HIGHWAY (state) 63%
CARGO
RAIL (state) 10%
RHINE (CCR) 27%
WORKERS
HOUSE-BOATS
GYPSIES
PORT ADMINISTRATION
LEVIES
PORT HANDLING
CITY
COMMER-CIAL
RET
BATORAMA
SIGHTS
TOURISTS
STORAGE
PORT REAL ESTATE
PROCESSING
MARINA
HOMELESS
PROSTITUTES
TOURISTS

CITY AND PORT ACTORS

For the Port of Strasbourg to function, it is not merely dependent on the logistics of the port. In fact, one/fourth of the port relies directly on the handling of goods, most of which consists out of their own ventures into the handling of containers, while other revenues are generated from the handling of their real estate and, Batorama - Strasbourg's boat tours. Yet, there is a much larger number of actors and factors that come into being in the port.

The logistics of the port extend way beyond the city of Strasbourg, the region of Alsace, the country of France, and even beyond Europe. Of course, the port relies heavily on the sea ports (mainly Rotterdam), but there are numerous other connections available by rail and an immeasurable amount by road. However, independent of their origin or destination, at the port almost all cargo is treated, administratively, similarly.

Beyond these,however, are many small actors that rely on the port in one way or another. Interesting examples are the house boats, that are moored on the city's banks yet are connected to 'its grid' through the port. Homeless and prostitutes that rely on the vacancy of its lots or the needs of the working man. The holiday family, traversing the canals and using the ports facilities...

TRANSIENCE

Expression

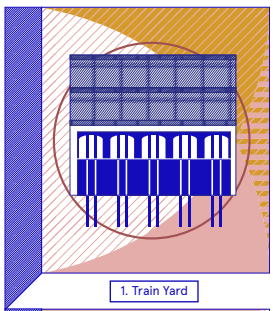
Supply

Holding

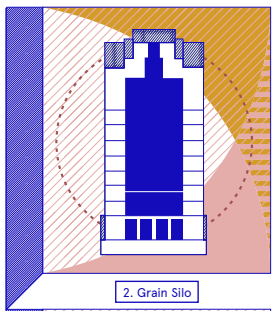
Precaution

SPECIFIC ('APPARATUS')

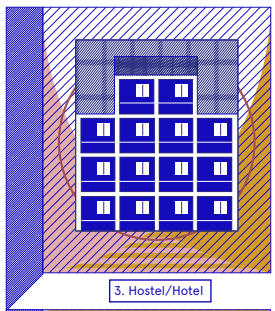
GENERIC ('UTENSIL')



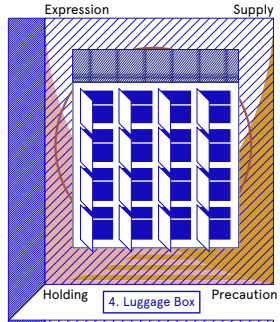
1. Train Yard



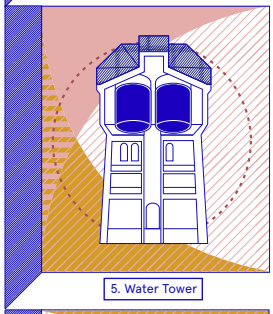
2. Grain Silo



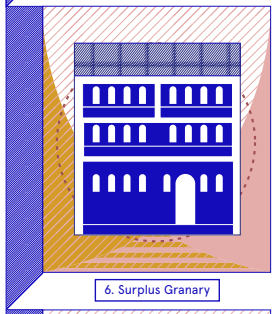
3. Hostel/Hotel



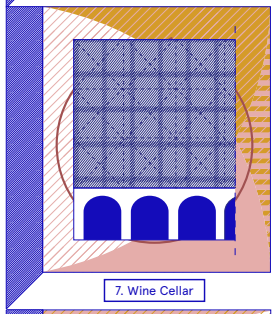
4. Luggage Box



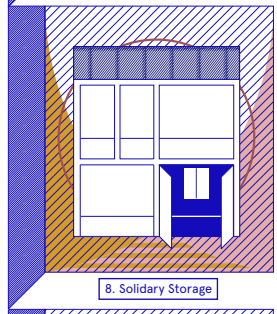
5. Water Tower



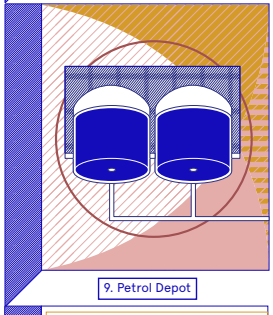
6. Surplus Granary



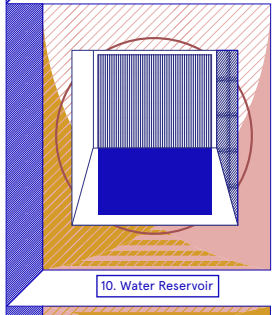
7. Wine Cellar



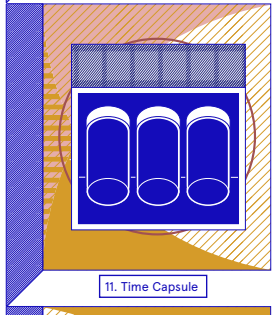
8. Solidary Storage



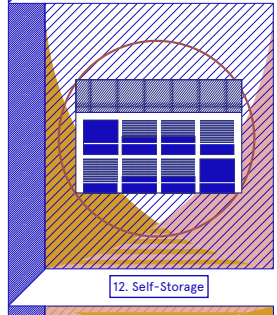
9. Petrol Depot



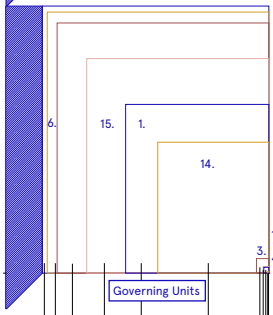
10. Water Reservoir

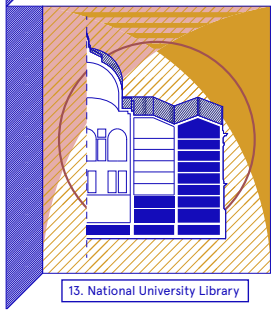


11. Time Capsule

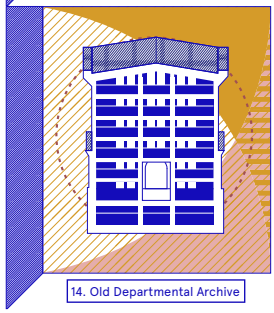


12. Self-Storage

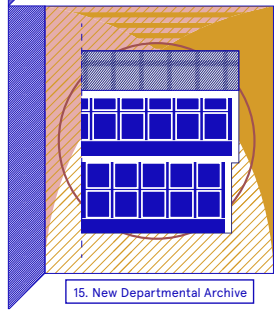




13. National University Library

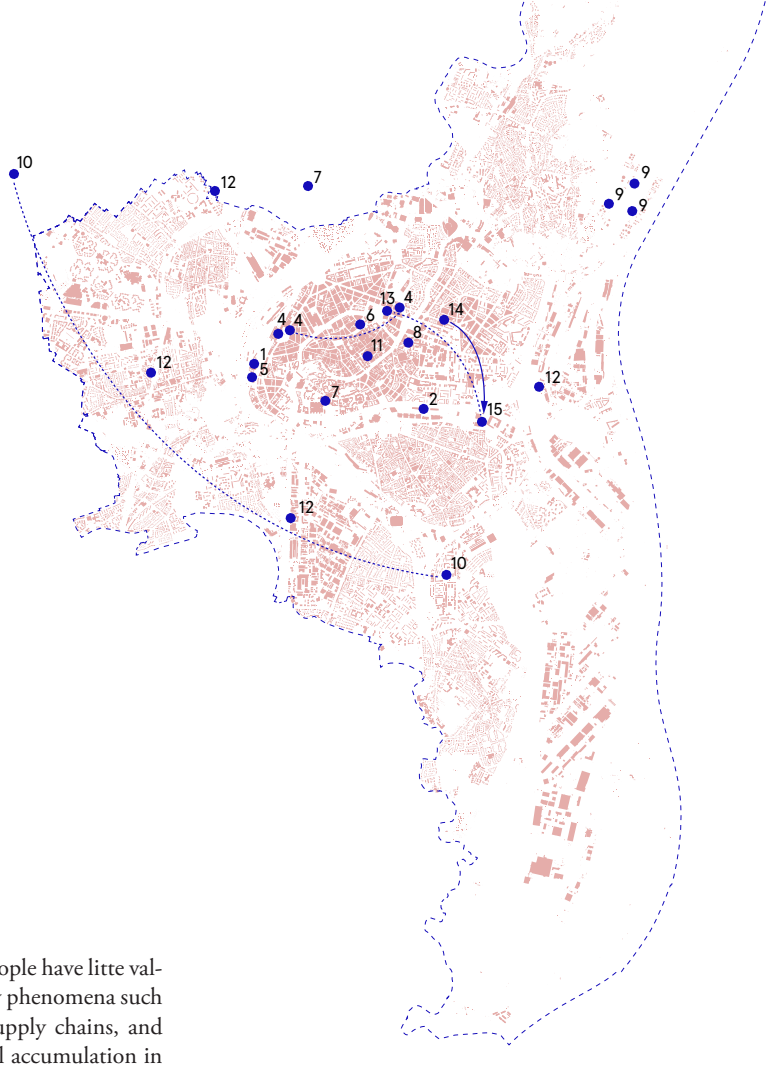


14. Old Departmental Archive



15. New Departmental Archive

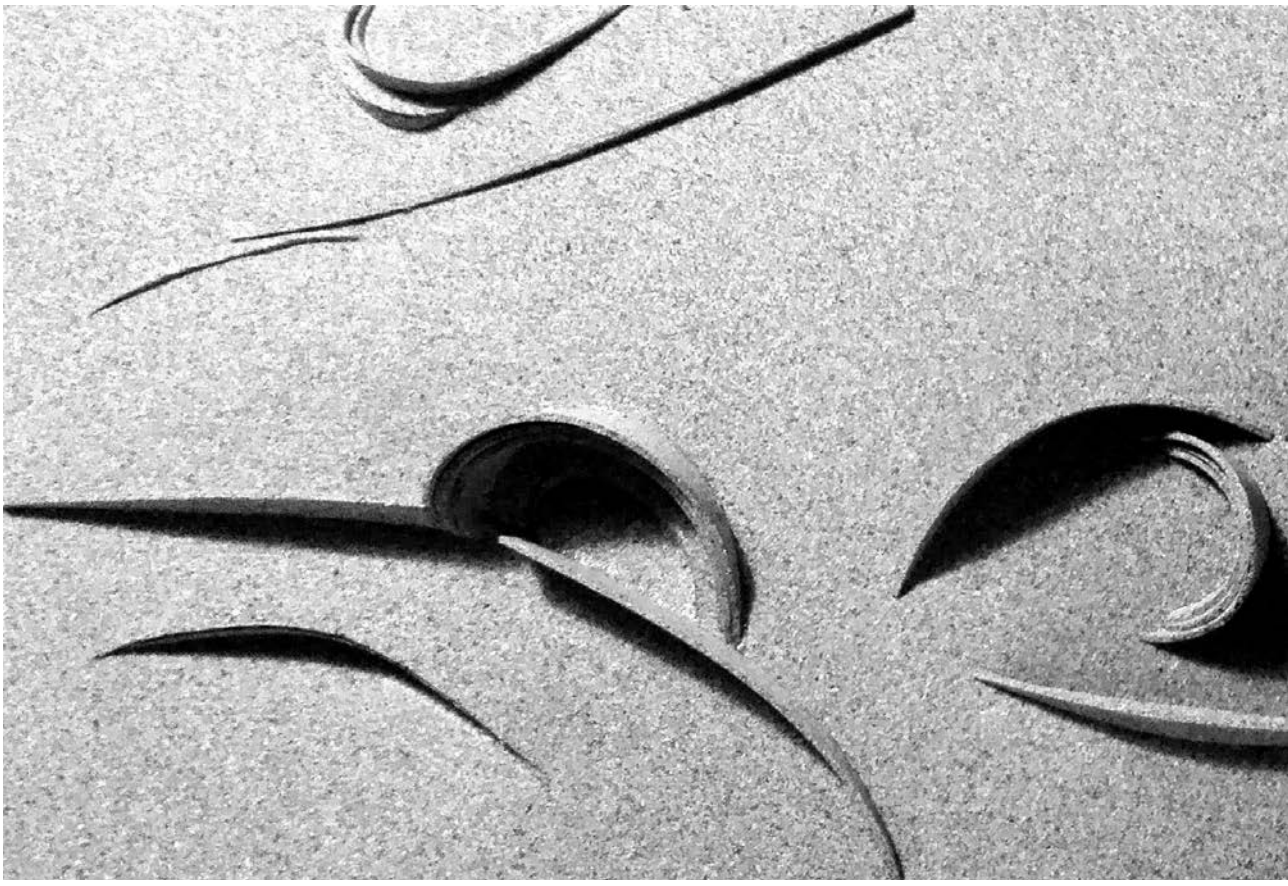
PERMANENCE



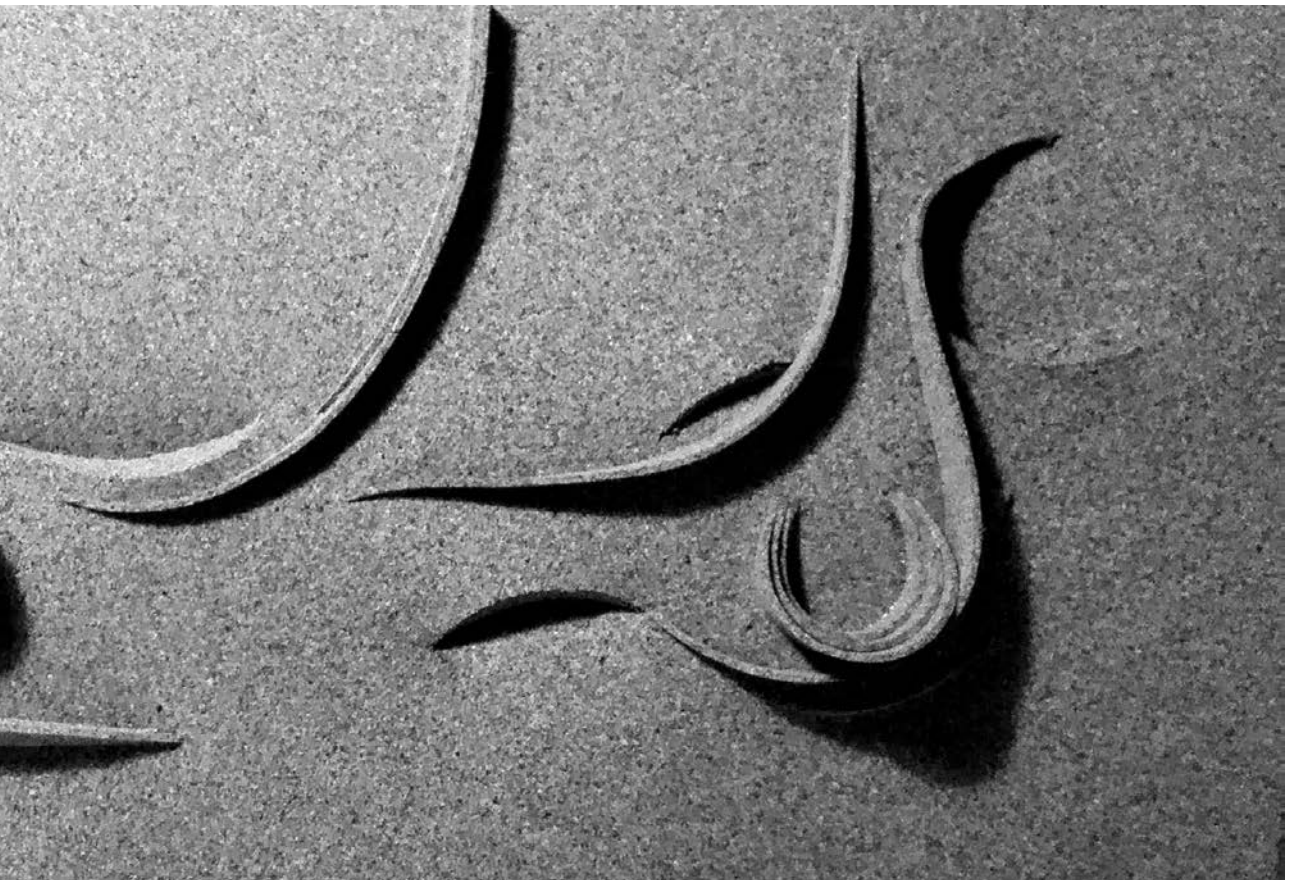
CONTAINER TECHNOLOGIES

The Seamless Paradigm demands flux - goods and people have litte value if not constantly transacted, circulated. Contemporary phenomena such as urban nomadism, business platforms, just-in-time supply chains, and service-oriented consumption promote minimal material accumulation in pursuit of supreme spatiotemporal efficiency. However, today as much as yesterday, we depend on, care about, and struggle with stuff - things with extensive properties impossible to ignore, and necessary to somehow contain. Container technologies produce a facilitating environment by providing margin, memory and predictability; by synchronising individual needs and collective interests. Such spaces are commonly considered auxiliary, passive and receptive, lacking other purpose than that of keeping and holding, and yet they need no manipulation to perform, produce, at maximum capacity. Containers create a systemic 'lag', which allows us to evaluate fluctuations, haeccities and tendencies in otherwise hyper-responsive networks. In the network of needs and desires that is the city, storage manifests itself as a vast array of artifacts for containment and supply, all revealing a background dialogue between current norms and limitations.

This map attempts to catalogue the formal, programmatic and discursive logic of select Strasbourg spaces designed to store, for shorter or longer periods of time, that which we value. Some follow very precise volumetric standards, whereas other approximate current and future demands - their configuration effectively determining reuse and iconic potential.

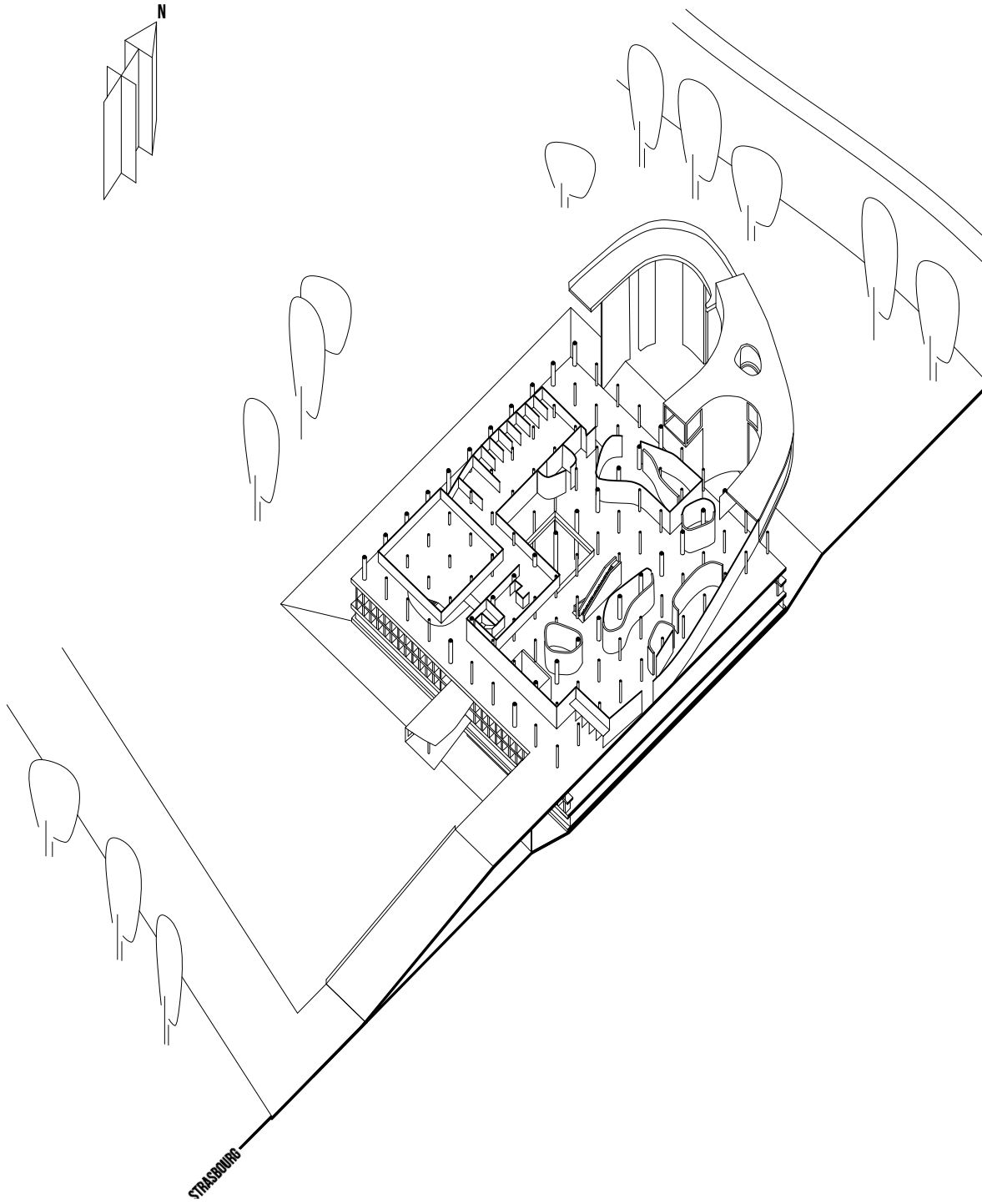



PARIS
HAUTEPIERRE
AIRPORT
COLMAR
KEHL



SEDIMENTED DEVIATIONS

Infrastructure space might be perceived as continuous, smooth and highly efficient. However, where the flow meets the materiality of static structures, and the speed and mass of the vehicle any trajectory but the straight and linear, specific anomalies occur. This model, based on three areas around the motorway entrances to the city, traces deviations from the 'perfect' flow as ridges and trenches carved into the landscape by the passing vehicles – their movements reshaping the territory like a desert wind. After all, the supposed smoothness of she surface cannot be achieved without this strange topography.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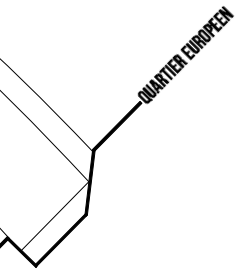
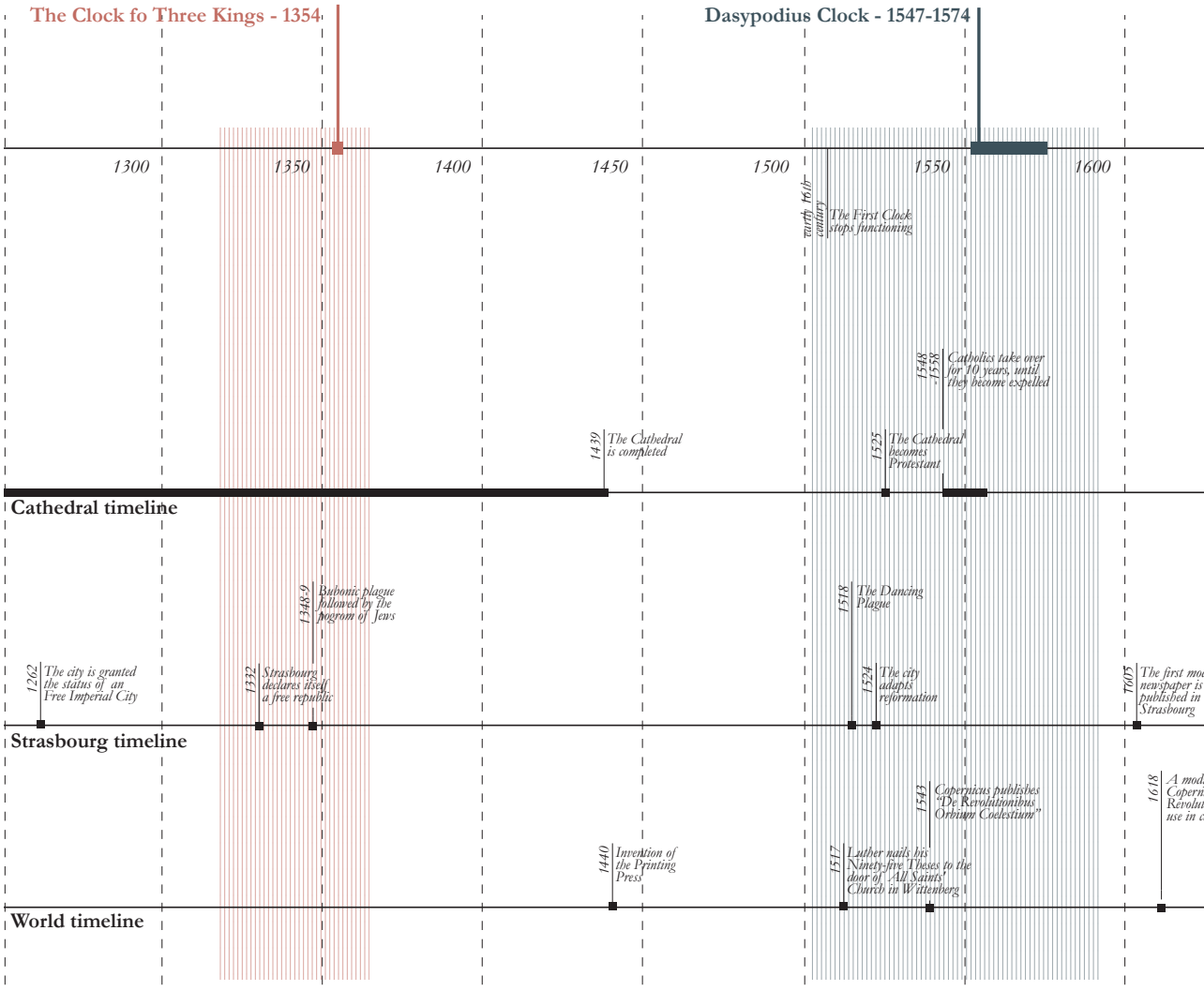
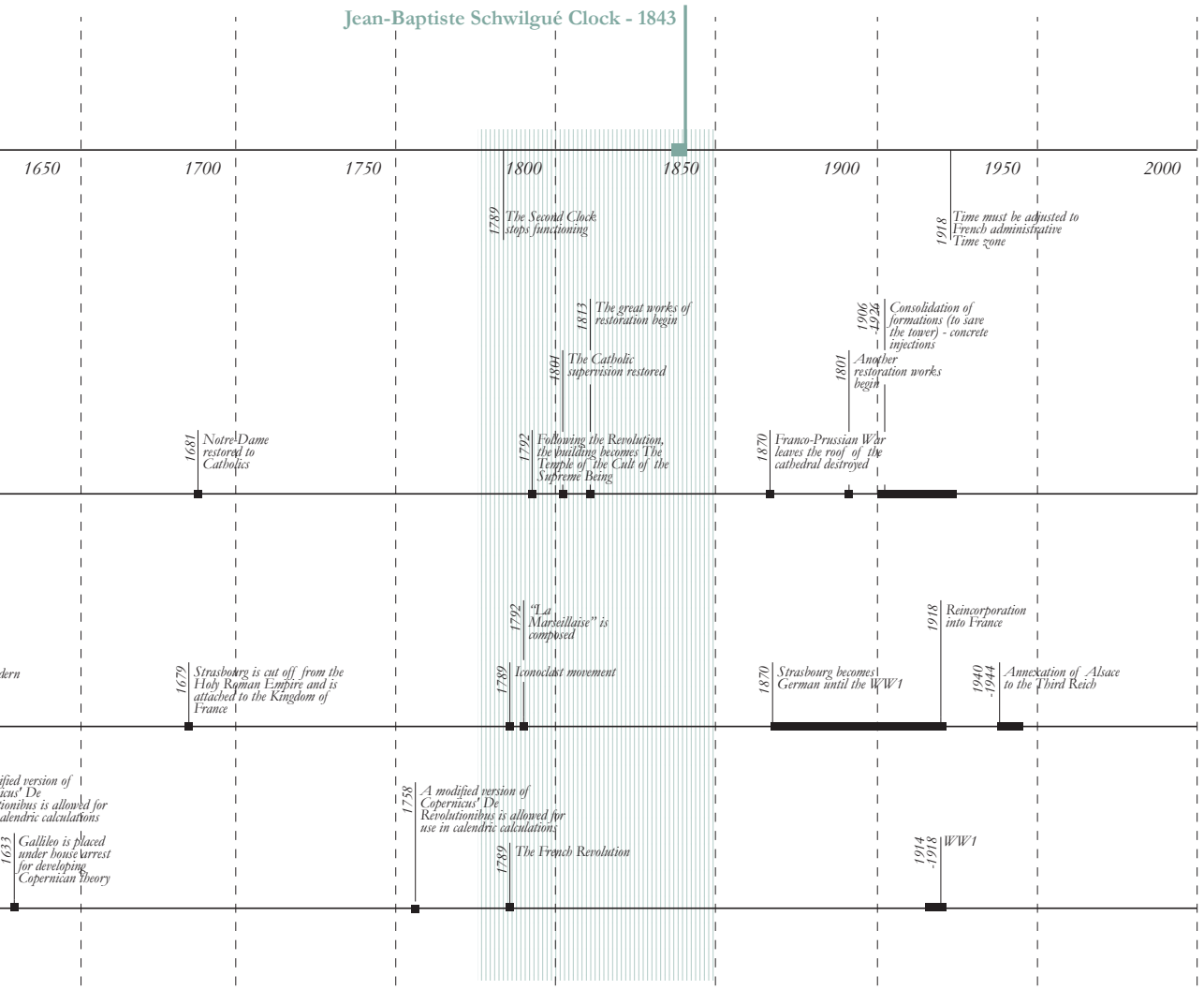
STRASBOURG



PALAIS DE LA MUSIQUE ET DES CONGRÈS

Situated near the European Quarter, Corbusier was called upon to design a conference centre. Corbusier, wanting to give something more to the locals decided to add a polyvalent theatre space which could accommodate a wide range of shows, from musicals to orchestras. In addition, Corbusier designed the entrance floor as an autonomous 'forum' accomodating an array of kidney-shaped rooms in a forest of columns. The kidneys offered a variety of activities for the locals like a disco, a bar and a restaurant. The overall massing and access is informed by Corbusier's preocupations with the flux of people. A large ramp bridged to the thrid floor, above the sunken plinth. From there one exited the building on a curved ramp to access the top floor and the roof. An outdoor cinema and an installation by Nicolas Schöffer would be the last piece of entertainment. But regrettably, Le Corbusier passed away just after handing in the construction drawings and due to political pressures this "Palais' remains unbuilt.


The Clock fo Three Kings - 1354
Dasypodius Clock - 1547-1574
1300
1350
1400
1450
1500
1550
1600
early 16th century
The First Clock stops functioning
1548 -1558
Catholics take over for 10 years, until they become expelled
1439
The Cathedral is completed
1525
The Cathedral becomes Protestant
Cathedral timeline
1348-9
Bubonic plague followed by the pogrom of Jews
1518
The Dancing Plague
1262
The city is granted the status of an Free Imperial City
1332
Strasbourg declares itself a free republic
1524
The city adopts reformation
1605
The first mo
newspaper is
published in
Strasbourg
Strasbourg timeline
1543
Copernicus publishes "De Revolutionibus Orbium Coelestium"
1618
A mod
Coperni
Revolu
use in a
1440
Invention of the Printing Press
1517
Luther nails his Ninety-five Theses to the door of 'All Saints' Church in Wittenberg
World timeline



STRASBOURG ASTRONOMICAL CLOCK

The clock is located in the Cathédrale Notre-Dame. The current clock is the third one on that spot. The history of the clock demonstrates the importance of time as a regulating measure in the medieval society and shows how it lost its indispensability towards modernity, with the growing emancipation of the society.

Similar to Wise's analysis of Pfaueninsel, the analysis of the clock's timeline, juxtaposed to the timeline of the Cathedrdal itself, Strasbourg, and the World, demonstrates how certain events get reified in things and how the course of history is fossilised within material realm.

The Clock of Three Kings

1 At noon it presented the parade of the Three Kings before the Holy Family. with rooster singing simultaneously.

2 Astrolab indicated the position of the stars in the geocentric systems in function of time. Needles marked the movements of the sun and the moon, the hours and their subdivisions. A Ptolemaic astrolabe indicated the position of the planets. The Heliocentric model of Copernicus had been known since 1543, but was not yet unanimously adopted. The order of planets in this system is: Moon, Venus, Mercury, Sun, Mars, Jupiter, Saturn.

Dasypodius Clock

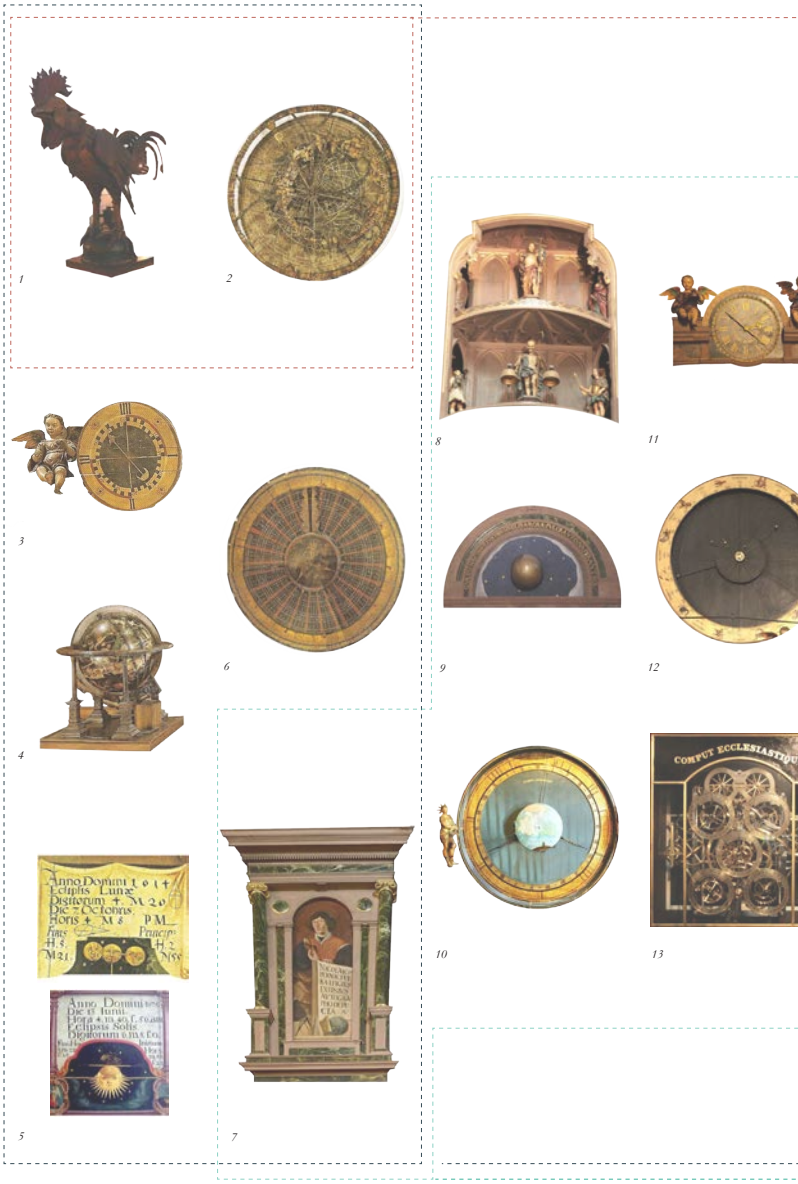
3 A chronometer next to the cherub whose needle points the current time (with quarter of an hour accuracy).

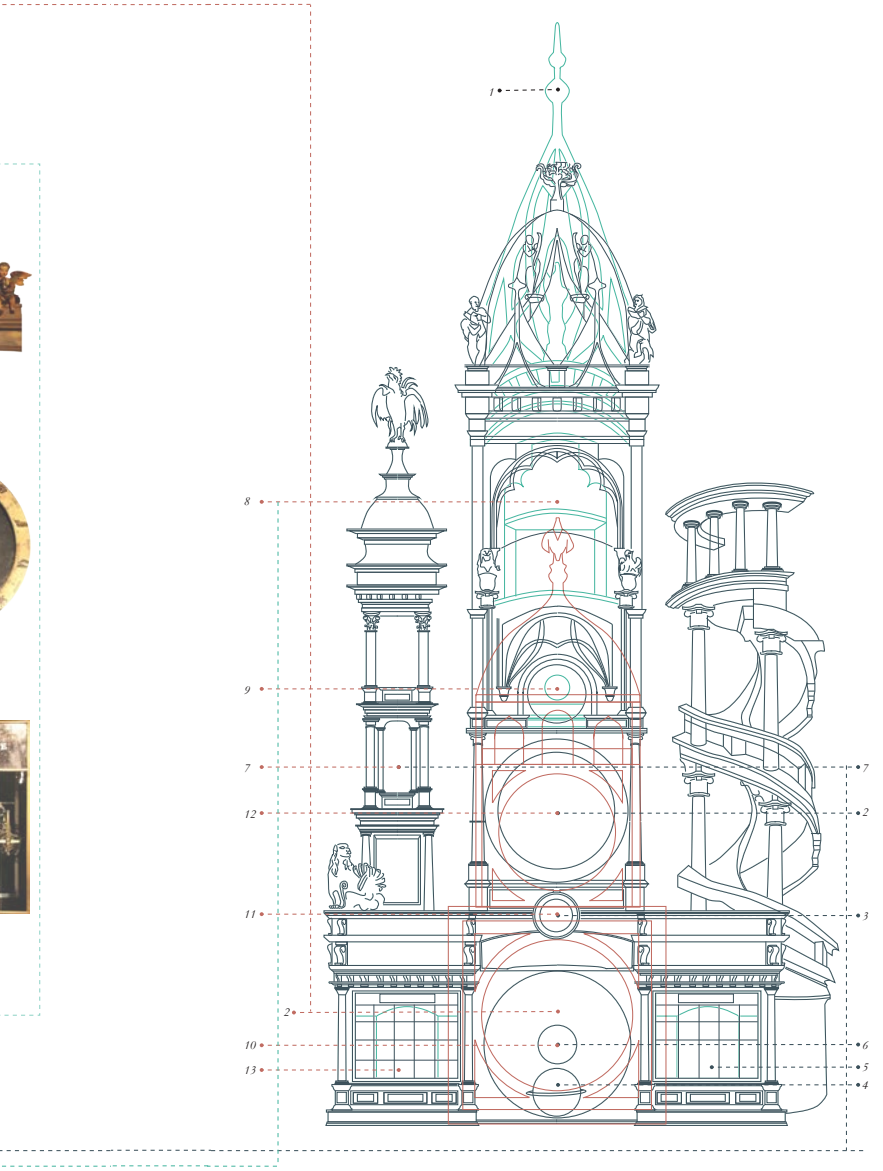
4 A celestial globe demonstrating 48 constellations and 1022 fixed stars described by Ptolemy.

5 Charts of lunar and solar eclipses for the following 36 years.

6 A calendar, divided into 366 sectors, each denoting a day of the year. The dates of the mobile holidays and times of the spring equinox are painted on the plate, which turns by 1/100 each year, requiring repainting every century.

7 To bring the city to the new level of knowledge, the creators used the modern computations of Nicolas Copernicus. He offered to send one of his pupils,





Conrad Dasypodius, with instructions. The portrait functions as a certificate of cooperation with the great man. 'Copernici vera effigies' – 'Real image of Copernicus'

Jean-Baptiste Schwilgué Clock

8 The upper figures depict 12 apostles, while the bottom procession symbolises 4 stages of life: childhood, adolescence, middle age and old age.

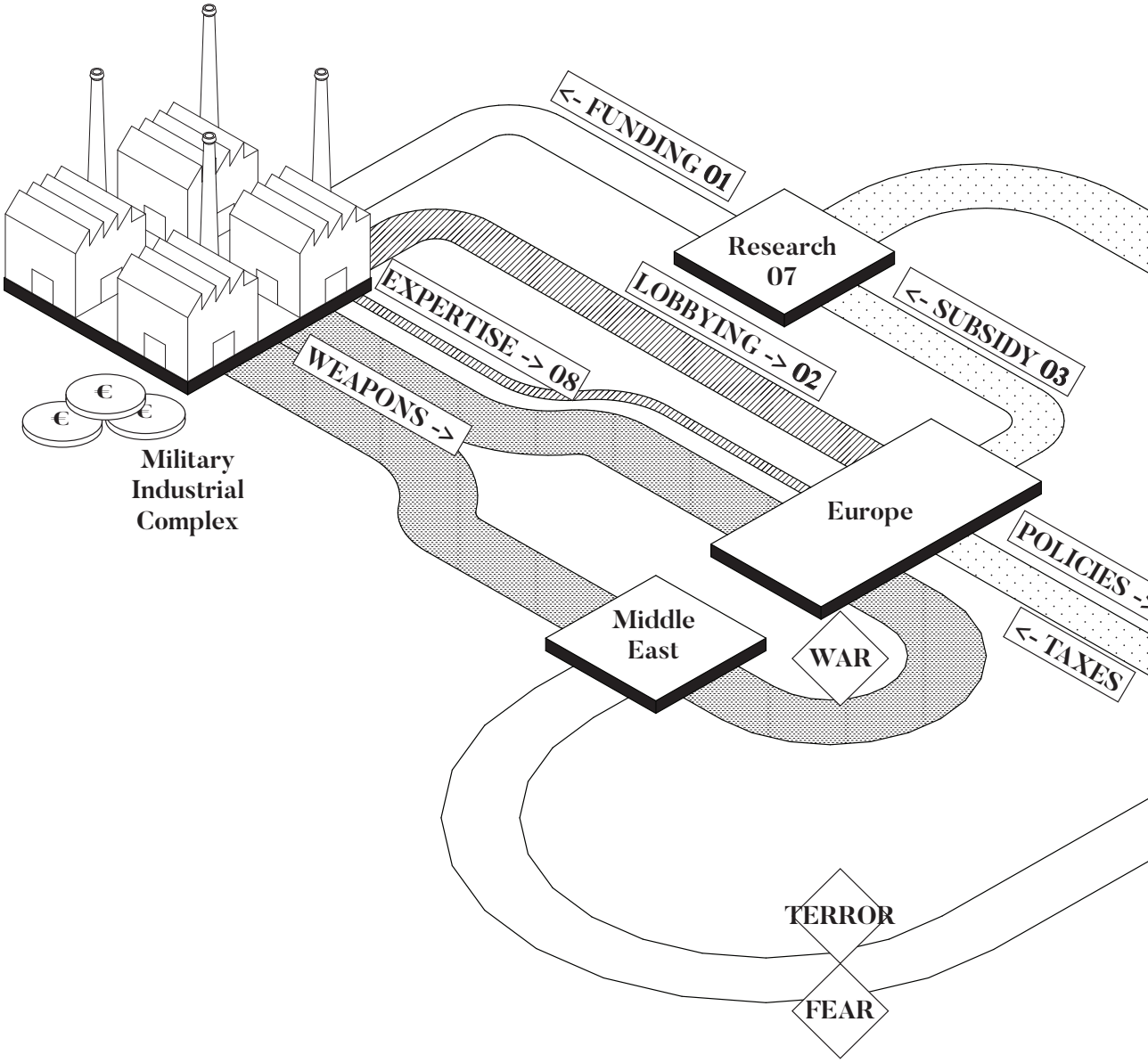
9 Globe showing the phases of the Moon, day after day. For a precise reading, it must be observed facing the clock. These phases are carried out by a hemispherical cap painted half black, half golden.

10 The perpetual calendar places the Earth at the center and represents the actual positions of the Sun and the Moon around the Earth.

11 The clock with double needles. The silver, showing Strasbourg's mean sun time and the additional golden needles, delayed by 31 mintes to adjust to the mean administrative time.

12 Heliocentric planetary arrangement

13 The perpetual calendar places the Earth at the center and represents the actual (not average) positions of the Sun and the Moon around the Earth. Contrary to what is often said, this mechanism is not a computer, although "comput" is the root of computer (computer). The "ecclesiastical computation" is in fact the "calculation of the Church".


<- FUNDING 01
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<- SUBSIDY 03
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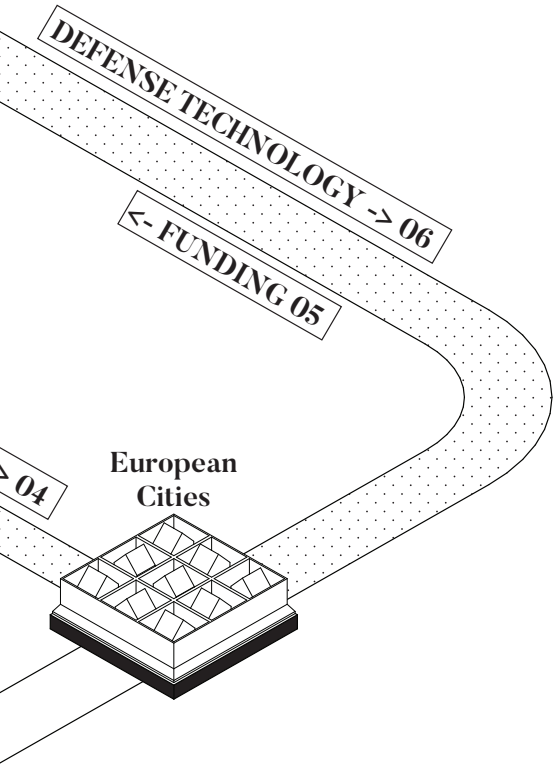
Europe
POLICIES ->
<- TAXES
Middle East
WAR
TERROR
FEAR



INSECURITY FOR SALE

There is a system currently in place which promotes the development of new weapons technology and defense technology. The European military industrial complex has expaned enormously over the last decade through an circle of funding and self-reinforcement. As a consequence, its products have been used to destabalize the Middle East and fortify our cities from ensuing terrorist attacks. The current situation is one of increasing application of military technology in the Western urban environment.

1
Funding amounting to well over 350 milion euro of research funding for amongst others; Fraunhofer Society, TNO, Thales and Airbus.

2
Lobbying. High-profile commissioners are lobbied by the military industrial complex.

3
Subsidies of new security technology through FP7 and H2020.

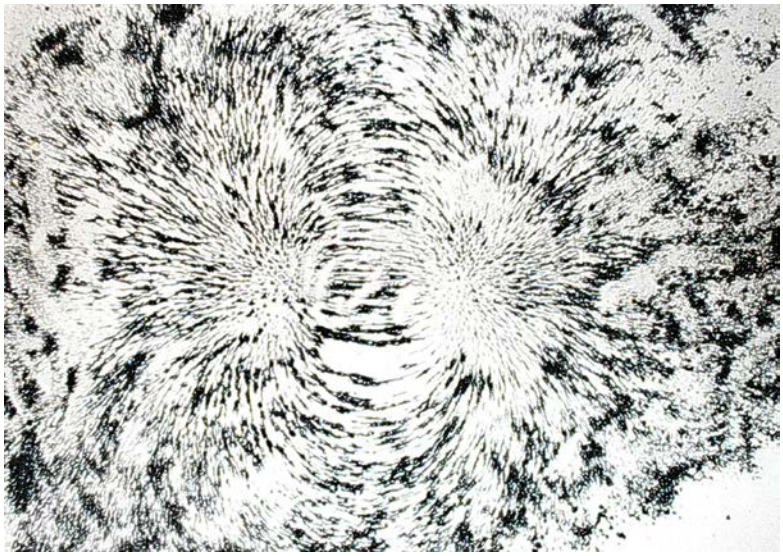
4
Policies and Funding. Policies from the parliament promote the implementation of new technology and tactics.

5
Funding. Interest groups such as the European Forum for Urban Security

6
Defense technology. Concrete planters, bollards, cameras et al.

7
Research. the European weapons and defense industry has grown threefolds over the last 10 years.

8
Expertise. The EU parliament gets expert opinion from the Military industrial complex.



REORDERING AND ALTERING FLUX

BRENDAN COSTELLO

Introduction

According to contemporary theories, the city has become complex, fragmented and multiplied. The resultant archipelago is bound and governed by systems of flux, creating relationships and intensities. The study of these systems, reveal the demand for a new architectural approach. What interests me is not the architects conventional practice of constructing, restoring, preserving, rather the city itself. Everything we need is there, hidden in the existing city, a potential ready to be unveiled and reordered. I came across five 'found' sites that embody hidden potential in Strasbourg by viewing the city as an accumulation of 'things'. 'Things' can be objects, fields, territories and borders, which are viewed for their spatial aspects rather than functional. The 'found spaces' have the potential to become sublime, which could aim to better organise the Strasbourger's everyday life.

I will investigate the definition of a 'found space' through James Turrell's Roden Crater. With this definition I will look at how to reveal architecturally the poetic beauty of such a space, first through Turrell's rurally pure Roden Crater and then through urbanistically contaminated Situationist International's 'détournement' and Eduardo Paolozzi's 'Jason'. Then, the synthesis of all three techniques may possibly inform my design method. Situationist International (SI) and Independent Group's (IG) theoretical beginnings will act as my theoretical backbone. SI's technique of détourning the material fabric of the city, and IG's morphological use of 'found objects' will aim to unconventionally reorganize and alter our new cities in flux rather than their beliefs of tackling the spectacle of capitalism and mass production. Flux generates 'new things' from 'old things' according to Elizabeth Grosz.[1] Therefore this essay seeks to prove that by focusing on spatial qualities and their inherent flux, greater attention will be placed on emphasizing the emotion and presence of the 'new thing'.

Roden Crater as 'Found Space'

It was a late afternoon in 1974 when Turrell first saw Roden Crater from his plane and decided it fit his requirements perfectly.[2] For, Turrell had discovered a 'found space'. A 'found space' can be detected by looking at the world as an accumulation of 'things'. The disassociation of use enables Turrell to sense the potential and presence of a space. This is especially evident for him in archaeological sites like Mayan Temples.[3] The definition of a 'found space' can be clarified using Roden Crater as an example. 'Found Spaces' tend to be disused, since the ancient vol-

1
G. Elizabeth, Mining Autonomy, p. 78.

2
C. Adcock, James Turrell: The art of Light and Space, p. 154.

3
Adcock, p. 179.

4
Adcock, p. 156.

cano is an extinct cinder cone.[4] 'Found spaces' are out of our concern, since the crater is one of several hundred in the San Francisco volcanic field.[5] 'Found spaces' contain their own historical presence. The palimpsest residue of hot cinder and ash soil surrounding the volcano tie it to its volcanic history, elevating the grandeur of the site and making it a 'powerful entity' in the eyes of Turrell.[6] 'Found spaces' contain the potential tools for revealing unseen phenomena to the naked everyday human eye. "Turrell in flight, experiences unusual perceptual phenomena, Roden Crater pulls the visual phenomena from the sky to the crater."[7] 'Found spaces' may be too inefficient or awkward to act on, as it meant Turrell needed funders to purchase the land and a lot of effort went into shifting large volumes of earth with bad access routes.[8] 'Found spaces' may share an emotional attachment with the viewer, for Turrell had fond memories of the area when he traveled to the near by Sunset Crater National Monument as a child.[9] "Found spaces' may fit the requirements for revealing certain criteria or phenomena. Since Turrell mainly wished to recreate the 'celestial vault' and the 'concave earth illusion' he knew he would need an isolated location with a "crater which rose from the ground between 600 and 1000 feet."[10]

James Turrell's main aim with Roden Crater was to enable the visitor to "see yourself see".[11] He wanted visitors to rediscover space and light by revealing the beautiful phenomena he has experienced and studies. Therefore certain terms and techniques can be noted from Turrell's actions on the 'found space', which is Roden Crater. Turrell's actions are site driven. The physiognomy of the site informs the location of his interventions at the most "dramatic and geologically intricate areas of the crater".[12] Turrell's undertakes physical site alteration through the excavation of spaces and the filling and removing of earth to achieve a smooth rim top.[13] He chose Roden Crater, as it did not need too much alteration relative to others. He also creates lens' to see the unseen in the 'found space'. For example the South Space "allows you to see distant spaces in the sky – spaces that might otherwise be wholly undetectable"[14] and he focuses the sound of a nearby waterfall with the form of a funnel and the sound of astronomical light sources with a pool.[15] Turrell embraces necessity when it comes to making the 'found space' habitable. Since a large amount of excavation was needed at the centre of the crater to fit the water storage tank that harnesses the substantial amounts of rainwater, the most interesting Central Crater Space was fitted just above it.[16] Approach is extremely important in the manner and sequence of revealing the 'found space'. Turrell designates an approach, which gives the visitor a visual history and places the space in time and memory. The visitor constantly shifts their relationship with the environment, especially if they come during another season.[17] As a result, approach has the power to "order your experience".[18] The architectural character of the intervention can use symbolism to evoke images in order to heighten the experience. Turrell cites ancient waterworks and cisterns at Massada and Quamran in Upper Fumarole Space because he deals with receiving water sound signals from across the desert and many light years away.[19] (See Upper Fumarole Space in figure 1 below). A varied perception of the 'found space' must be offered by creating various vantage points within the space. We see this in Turrell's use of slopes, stairs, location of apertures, levels, shapes of rooms and platforms.[20] The perception of the space can also vary by taking into account the ephemeral qualities of the 'found space'. For Turrell, the wind passing through the tunnels change the quality of light by the rippling of the water in his pools.[21] Finally, one of the 'found spaces' may reveal al the logic of the others.

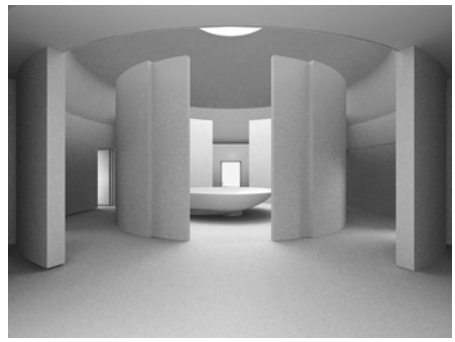


Fig. 1.

5
Adcock, p. 156.

6
Adcock, p. 157.

7
Adcock, p. 172.

8
Adcock, p. 179.

9
Adcock, p. 154.

10
Adcock, p. 179.

11
Adcock, p. 179.

12
Adcock, p. 157.

13
Adcock, p. 179.

14
Adcock, p. 171.

15
Adcock, p. 178.

16
Adcock, p. 179.

17
Adcock, p. 160.

18
Adcock, p. 161.

19
Adcock, p. 173.

20
Adcock, p. 168.

21
Adcock, p. 168.

Maps on the walls of the South Space contain the logic for the whole crater.[22]

SI's Urban Hijacking

The above method is all well and good when dealing solely with a rurally pure 'found space', but once you move to the city, the urban contamination requires additional techniques to deal with 'found spaces'. This led me to Independent Group's Eduardo Paolozzi's technique for revealing the poetic beauty of 'urbanistically contaminated' 'found objects'. His techniques will be explored later in chapter three. Since Paolozzi only dealt with objects and not spaces, I wish to couple his technique with the Situationist International's technique of détournement of the material fabric of the city. Détournement could be considered a technique for revealing the beauty of a 'found space' since Paolozzi's technique had "affinities" with Situationist's détournement according to Simon Sadler.[23]

Both IG and SI were both dealing with the urban contamination of mass culture and production and apparently their sensibilities towards it were quite aligned.[24] IG "let their eyes wander over the goods of postwar pop culture and decided to take whatever they wanted" whilst SI believed in "détourning a society of excess, not just plenty".[25] Both IG and SI believed that they should intervene in mass consumption and the capitalist spectacle if they were to revolt against the modern movement.[26] Today, mass consumption and the capitalist spectacle can be interchanged for the flux in cities as the space to intervene in. SI and IG's "interest in mass culture was exemplified in a neo-Dadaist sentimentality about everyday objects.[27] Their sentimentality towards the everyday meant they wanted to better organise it. Therefore they "shared the determination to penetrate the outward, spectacular, commercialized signs of mass culture and explore its interior. There one examined the everyday pattern of life."[28] By understanding and penetrating the system of flux one can reorder the everyday too. Whilst Paolozzi wished to "express the quality of mystery, of magic, which he finds present in the ordinary objects and events of the world – what he has called the sublime everyday life"[29], Situationist's believed continuous drift and détournement of the city could "revolutionize everyday life and release the ordinary citizen into a world of experiment, anarchy and play."[30] SI stressed that the Situationist city would be site informed. A new, peoples aesthetic "built out of the ruins of the spectacle."[31] After Constant's expulsion from SI along with his New Babylon, it was clear that the 'found' material fabric of history was to be colonized rather than creating site-less new structures.[32] SI shared a special interest for the street as it mixed the 'quotidian and the festive' and they needed to reveal this by "changing our way of seeing the street."[33] (See figure 2 below). The parts of the street SI obsessed over and the material fabric of history they wished to colonize could fit into one of the definitions of 'found space' derived from Roden Crater. Also, SI's ambitions to change "our way of seeing the street" had affinities with revealing the beauty of said 'found spaces'.

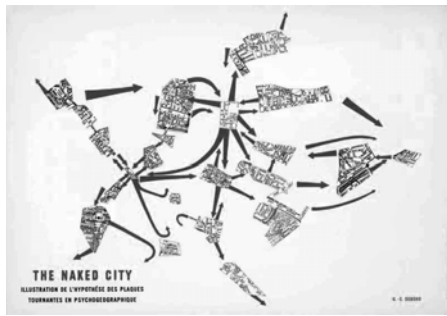


Fig. 2.

Détournement can be translated as 'diversion' but also "rerouting, hijacking, embezzlement, misappropriation and corruption."[34] SI believed that recycling the old city by means of détournement would create architectural character.[35] Similar to Turrell, symbolism and images of the origins of building could be détourned, like Aztec temples and Indian totem poles.[36] They held no regard for mixing architectural styles.[37] Unlike Surrealist's, which distorted objects, détournement focuses on reordering. Therefore the reordering of systems of flux acts as one of my main focuses. As mentioned in the

22 Adcock, p. 172.

23 S. Sadler, The Situationist City, p. 33.

24 Sadler, p. 9.

25 Sadler, p. 33.

26 Sadler, p. 15.

27 Sadler, p. 11.

28 Sadler, p. 19.

29 D.Kirkpatrick, Eduardo Paolozzi, p. 11.

30 Sadler, p. 69.

31 Sadler, p. 18.

32 Sadler, p. 153.

33 Sadler, p. 69.

34 Sadler, p. 17.

35 Sadler, p. 107.

36 Sadler, p. 108.

37 Sadler, p. 108.

intro this essay seeks to prove that by disregarding function as a starting point, but rather flux, greater attention will be placed on emphasizing the emotion and presence of the 'new thing'. SI aspired to emphasizing these qualities in their new architecture by primarily focusing on the atmospheric effects of rooms, hallways and streets for their gestures they contain. They believe that "architecture must advance by taking emotionally moving situations, rather than emotionally moving forms, as the material it work with. And the experiments conducted with this material will lead to unknown forms."[38] This method resonates with my détourned assemblage models that will be translated back into drawings to form parts of my design. In short the technique of détournement works on the basis that any two elements brought together will cause a relationship between them and thus create a new combination or thing. In a sense it is reordering. There is a 'minor détournement, which hijacks an element of no importance, therefore all meaning is derived from the new location it is placed. The 'deceptive détournement' is the opposite of the minor, as the element is intrinsically significant. Extensive détournement uses a series of both minor and deceptive détournement.[39] "It is the most distant détourned element which contributes most sharply to the overall impression, and not the elements that directly determine the nature of this impression."[40] The distortions of the element must be simple, as one must recollect what it was. Finally, the less rational, the more effective it is. The 'simple' distortion is reminiscent to Turrell's slight site alteration.

Paolozzi's 'Found Objects'

Similarly Paolozzi does not just assemble 'found objects' like the Dadaists and Surrealists; rather he reorders them and distorts them by transforming them into bronze. His technique for sculpture involved creating the wax forms and sending them off to either London or Paris where artisans would cast the statues.[41] Like an architect giving the builder the drawings. Paolozzi's technique to reach the finished wax piece was as follows. He sometimes pressed the 'found objects' into clay and removed them leaving a negative impression mould for the hot wax Sometimes 'found objects' were stuck together with clay and then a plaster mould for the wax would be made out of the aggregations. On some occasions Paolozzi would solder the 'found objects' together and then take an imprint of the new structures. "From all these methods, the sculptor had at the elbow, in wax form; a directory of masks, sheets of an alphabet of elements awaiting assembly."[42] "The wax sheets could be cut into pieces with a hot knife. The pieces could be heated, bent into new shapes and recombined like the fragments of a collage."[43] (Paolozzi pouring hot wax into a mould in figure 3). His technique can be translated into our modus-operandi workshop, where the his assembled found objects represent my assemblage model, and his resultant alphabet of wax sheets are my parts translated from the assemblage models. The final assembling and distorting of the wax into a sculptural mould would represent my final architectural drawings composed of parts. The casting in bronze would be the construction of the drawings. Similar to détournement, the varied imprints of 'found objects' on the surface of the bronze undergo a metamorphosis due to their placement relative to other objects. Like Turrell and SI, which evoke images through symbolism, the surfaces of Paolozzi's sculptures "exude layers of meaning connected with the sublime everyday life" and can evoke a "fantastic magical or

Fig. 3.

38
Sadler, p. 107.

39
G. Debord, G. J. Wolman, A users guide to Détournement, http://www.cddc.vt.edu/sionline/presitu/usersguide.html.

40
Debord, Wolman.

41
Kirkpatrick, p. 32.

42
Kirkpatrick, p. 33.

43
Kirkpatrick, p. 33.

haunting appearance."[44] Therefore reordering or détourning objects or spaces, which are 'found', one can achieve greater emotion and presence in their creation.

Paolozzi's Jason, for example, evokes images of "hollow gods, tower-men, damaged men, and humanized robots."[45] The un-heroic looking sculpture is then given the mythological name Jason, as if to transpose the heroic character into a more human scale. Paolozzi heavily relies on symbolism and imagery in order to evoke these sensations. The statue is assembled to rest in a classical 's' curve, reminiscent of heroic sculptures. The fused machine chunks echoes classic nudity. The tower-man image is evoked through the construction of the armless single mass. "The effect resembles a swaying, decaying skyscraper."[47] The tattered array of 'found objects' used depicts a damaged man. It is clear, from all these symbols and images a presence of "monsters, idols and gods" is produced.[47](figure 4)

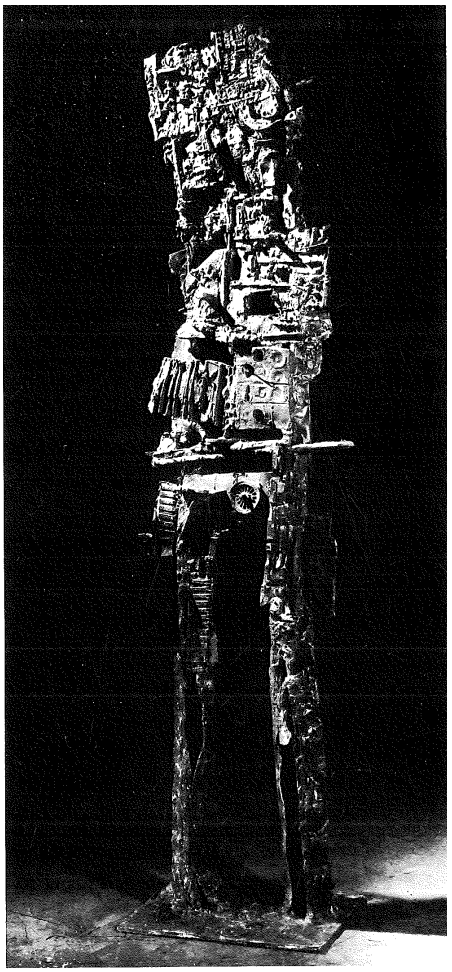


Fig. 4.

Common Techniques

A 'found space' can be detected by looking at the world as an accumulation of 'things'. 'Found Spaces' tend to be disused, out of our concern, contain their own historical presence, contain the potential tools for revealing the unseen, may be too inefficient or awkward to act on, share an emotional attachment with the viewer and finally they may fit the requirements for revealing certain criteria or phenomena. When acting on 'found spaces' we learn from Turrell that we should bare in mind that its should be site driven, physical site alteration is necessary, lens' must be created to see the unseen, necessities of habitation must be embraced, approach orders its revelation, architectural character can contain symbolism and evoke images, varied perceptions must be offered and that one of the spaces may reveal the logic of the whole.

SI and IG techniques had some affinities with Turrell. They all agreed on being site informed, for Turrell, the 'found space', SI the material fabric of the city and Paolozzi, the 'found objects'. All techniques sought to pick out elements from the 'found' and reorder them with some simple alterations. Either through détournement or a metamorphosis due to their placement relative to other objects and relative to the initial imprinted wax sheet. An important technique practiced by all three is the use of symbolism and imagery. Greater emotion and presence could be conveyed through the finished piece by having free range over the architectural styles and symbols they assembled together. The symbols could evoke feelings and create new meanings for the viewer. This is mainly achieved when focusing primarily on reordering and altering systems of flux and 'found' as a giver of form and not on function. Finally, all three aimed to organise a better everyday, for Turrell wanted to

44
Kirkpatrick, p. 33.

45
Kirkpatrick, p. 38.

46
Kirkpatrick, p. 38.

47
Kirkpatrick, p. 38.

help ‘see yourself see’, Paolozzi wanted to reveal the ‘sublime everyday’ and SI wanted to ‘revolutionize everyday life and release the ordinary citizen into a world of experiment, anarchy and play’. Thinking about the organization and the routine of the everyday person could inform the architectural organization. Varied perception of spaces for users means they could appropriate a space differently. Approach, according to Turrell, can organise the experience and perception, therefore drifting between sites and varying the points of entry can establish many new views of the city.

Adcock, C., James Turrell: The art of Light and Space, Berkeley, University of California Press, 1990.

Grosz, E., Perspecta 33 ‘Mining Autonomy, Cambridge, The Yale Architectural Journal, 2002.

Debord, G., Wolman, G.J., A users guide to Détournement’, http://www.cddc.vt.edu/sionline/presitu/usersguide.html. (Accessed 11/01/18).

Kirkpatrick, D., Eduardo Paolozzi, London, Studio Vista Limited, 1970.

Sadler, S., The Situationist City, Cambridge, The MIT Press, 1998.

Figure 1.
http://rodencrater.com/spaces/fumarole-spaces/, (Accesed 12/01/18).

Figure 2.
https://paulwalshphotographyblog.files.wordpress.com/2013/06/debo_009_05_01.jpg, (Accesed 12/01/18).

Figure 3.
Kirkpatrick D., Eduardo Paolozzi, London, Studio Vista Limited, 1970, p. 28.

Figure 4.
Kirkpatrick, p. 30.