

Re-use Architecture/

Two project proposals of commercial interfaces to
promote urban regeneration in the cities of
Turin and Copenhagen

MSc In Architecture Construction City

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**POLITECNICO
DI TORINO**

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Introduction/

What?why?How?Where?/

“ One of the great beauties of architecture is that each time, it is like life starting all over again. ”

— Renzo Piano

“To provide meaningful architecture is not to parody history, but to articulate it.”

- Daniel Libeskind

The “leftover” of the industrial cities are great potential for architects and urban planners to transform and adapt to the existing environment and making the physical spaces meet the needs of the present society. Instead of spread urbanization around in an uncontrolled way just to satisfy the interest of few, and as an alternative of promoting new consumption of land, helping speculation and bad urban design, there's a strong belief that the discipline should look more into the existing spaces which are not working anymore in a proper way due to the transformation of the society or the political and economic decision has been moved in others directions.

Living in a period where the demands are in constant growth while the resources are submitted to the highest pressure that over time will not be able to surpass. The history of cities, independent from their industry, have left behind abandoned objects that are not less than potential. We sustain that part of the success in the appropriation of a place is not only set by a good articulation, but by the remark of character. These architectural objects allow us to reuse primary resources with enormous potential to regenerate a piece of the city by its means.

This is the motivation of developing two parallel projects in different cities that had overcome long and still developing processes of urban regeneration since the deindustrialization process began in the 1980s. Turin and Copenhagen are both medium size, post-industrial cities that have developed

contemporary plans to redevelop abandoned and disconnected areas of the city with city planning strategies around the 1990s and 1995 (The PRG and the beginning of the Copenhagen City and Port Development Corporation). With the same interest of revitalization in different socio-economic and cultural contexts, as diverse heritage and architectural traditions. Parallel developments of two pieces of the city, both of similar characteristics: large dimensions and analogous urban interactions, as both are located near the railways but well connected to the urban tissue and city center, allowed us to exploit the best of urban integration strategies through public space design that reconnects the urban fabric more cohesively, accordingly to what each context offers.

Furthermore, the proposals have both the same base functional program: commerce, each mixed with complementary uses and flexible multi-use spaces, as an engine to encourage human interactions. The proposals aim to support the revitalization of the area nearby with a new commercial interface that aims to create flexible and interactive places the increase the use-value of the space while engaging the public space and the architectural features that each one of the existing buildings and their contexts offers. The project design focused not just in the disposition of spaces, but additionally in the integration between architectonic elements of the design to a flexible program. In the same way, the architectural language chosen for each of the projects seeks to define and stimulate a new sensibility towards the industrial style, looking to new strategies that conceives the industrial as an added value to the design. These by the inputs given from the architecture structural value, its history, and the architectural needs and traditions of each place.

**“Things change.
It’s up to you to
be adaptable!”**

— Hamilton South/ HL Group

INDUSTRIAL



CITIES



The Industrial City/ General Overview/

“ Old ideas can sometimes use new buildings. New
Ideas must use old buildings”

”

— Jane Jacobs

The Industrial city is defined by the periodic centrality of the economy in the industrialization period. This centrality of the main dynamics leads not just to functional architecture by the factories means, but as well to a new urban disposition derived from this main economical source. In the mid-nineteenth century, the cities were facing a piking strike of new industries that shaped most of the lifestyles at the time. The human scale was not a consideration for the architecture development, the buildings were to be built in the industrial scale of each production process. Heavy pieces of machinery, new productive systems, were all instrumentary that will fill up these spaces. Human interaction or scale was sett in a second scenario of the space for the workforce. It is important to remark not just the building but the new urban context that this will bring with it. Workers and their families will fill up with residences the previous void lands with new multifamily housing buildings. Factories came along with many supplementary services for their workforce. This supplementary services that came along are no less representative of the period since it includes the new sets of transportation that the time will hold, and with this sort of changes not just the lifestyle of the people change, but the scale of the city in which they lived did as well.

The Crisis/The Heritage

With the beginning of the process of “Deindustrialization,” and all the complexities it implies, the transformation of the cities were leaving not just an economical crisis prorogating, but a diverse amount of urban voids and alterations.

The scale of “urban voids” was set by the dimensions of the building that was constructed with the main objective of manufacturing. Even if they lack of human scale, the high levels of contamination and the lack of connectivity of the building to the city, are a few of the challenges of the reintegration of these buildings, their character of a development era of the cities’ history has kept them standing. Hence, a sum of conflicting relations in-between the city and its inhabitants.



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City Maps /1:Copenhagen/2:Turin.



(1)



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(4)



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Historical Photos /1,2,3:Copenhagen/4,5,6:Turin.
Various copyright: In references.

The Industrial City/

How to build an industrial heritage/

The Industrial city

Before the 1980s crisis strikes the beginning of Deindustrialization, many were the cities that focus their resources, economy and politics on a global trending machine production that had created for two centuries a characterized urban, physical and social, landscape. The overspecialization of a city's economic concentration gave a sense of character to it all, and by many it's still a stamp of recognition. Though, "Many cities with a visible imprint of a formerly flourishing heavy industry are tending to see their economies grow at a slower pace than other respective cities." (Euromonitor International, 2013)

The WWII, the post-industrial period and all the trigger changes of political and economic scenarios stated a breaking point for industrial cities. The flashing time-line in between one period and the other lead to an excess of agglomeration of non-necessary resources in the cities were new trends started to develop. Their adaptability to change was the deterministic factor for their desertion or re-emerging process.

The organization of capital and labor in the industrialization period for a mass production system will concentrate a large amount of both in a promising future for the working force that boost the population growth and, by consequence, the urban concentration. This represent as well the solidity of a gentrification process that in the moment of crisis will be one of the strongest social triggers for the urban desertion. "When exploitation replaces oppression, creative capacity disappears." (Lefebvre, 1996, 6).

"Former industrial cities had immense (if worn out) assets: imposing civic structures, town halls, concert venues, public libraries and swimming baths, universities, hospitals, parks and public squares, railways, canals, rivers and above all, technical skill – now hugely undervalued. These decayed and neglected assets promised a postindustrial

rebirth, unique to former industrial cities. Heritage became a starting point for recovery, as cities displayed their grit and determination to recover "with dignity." The vast infrastructure of these smaller cities has proved remarkably resilient in the makeover." (Power, 2016)

Different stories ending

In the transition from an Industrial to a Post-Industrial, the worst scenarios would lead to a vanishing city due to the acute population loss as a consequence of the migration in search of new opportunities. In less drastic cases there would be the shrinking of the city in the process of reinventing their local economies.

Other cities experienced instead, an implementation of new political and economic strategies that will allow them to adapt to the new demands and trends. Being leaded by the technological progress, the 4.0 industry, and the seek for a more sustainable and less resource-consuming economic structure.



(1)



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Photos /1,2: Robin Hood Garden by Alison and Peter Smithson

From the storytelling to practice

One of the biggest obstacles of the reinvention process of industrial cities is the treatment and definition of their heritage. By the TICCIH (The International Committee for the Conservation of the Industrial Heritage) the industrial heritage is defined as following:

“Industrial heritage consists of the remains of industrial culture which are of historical, technological, social, architectural or scientific value. These remains consist of buildings and machinery, workshops, mills and factories, mines and sites for processing and refining, warehouses and stores, places where energy is generated, transmitted and used, transport and all its infrastructure, as well as places used for social activities related to industry such as housing, religious worship or education.”

Is the recognition of its value the one responsible for the physical treatment to the remainings of the industrial spaces. The interest of looking forward to the re-use of the resources and possibilities of the abandoned architecture, or sections of the city, is the origin towards developing a sense of appropriation that will avoid its continued degradation in time. Still there are contemporary debates on the existence and reliable definition of industrial heritage, and by consequence, its conservation or regeneration. Though, there is no discussion in their impact and extension, even if fragmented.



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Photos / 1,2,3: Tour Bois-le-Prêtre reuse and refurbishment 1959 - 2011 © FREDERIC DRUOT ARCHITECTURE

The Industrial City/ How to deal with them/ Pakard Plant bridge/



(1)



(2)

Detroit has become the example of the shrinking cities in the post-industrial effect discourse. From its economic boom as a motor city with the arrival of Henry Ford in 1903, the Ford Motor Company generated the biggest demographical and economic growth in the city. The motor city was blooming, with its pike point in the 1950's, when the degrowth began. The now ghost city had one of the biggest automobile factory identity that reached a global sale, in its name and product. The Packard Plant bridge was, at the time, a symbol of the automobile factories success and expansion, built in 1939 to join the north and south sections of the Packard Motor Company Plant.

After the 1950's failure of the industry began, subsequently from a pike of production success during WWII, the symbol on this economic threshold changed to a remainder of what the ghost city has now become. Following a period of degradation, until January 23, 2019, when the bridge collapsed.



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(4)

Photos /1,2,3,4: Pakard Plant bridge transformation from 1939 to 2019 © Camilo José Vergara

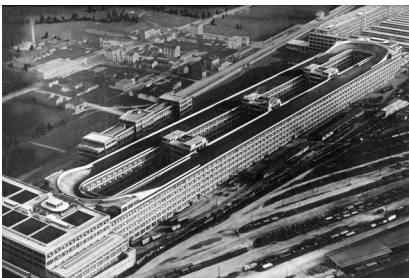
The Industrial City/ How to deal with them/ Lingotto/

As the Ford company, Fiat in Italy, and more specifically in Turin, is a symbol of a gold era for the industry of the city, with international impact. The building constructed for the factory was non less representative in dimensions and symbolism. In the 1920's, the 5 workshop floors building, with 500m of length and 4 internal courtyards was built with a test track in the rooftop that will make it uncomparable to any other automobile manufacturing complex. It was one of the first examples of modular construction in reinforced concrete.

Non the less, the Fiat Lingotto Building factory closed in 1982. Two years after its closure, the company announced a competition that was later commissioned to RPBW (Renzo Piano Building Workshop), to do an adaptive reuse project to the building that will allow it to be a multi-use complex that prevent

the it to fall into a degradation process and avoid losing its value and cultural allegory.

As one of the most distinctive stock of industrial architecture and modernity aspirations at the time, the building is an example of industrial archeology for many of the European cities. Even after the factory relocation, the capability of adapting a building of challenging dimensions has been one of the cases were is evidence the potential of such structures to remain one of the active hearts of the neighborhood, and an attractive visit point of the city.



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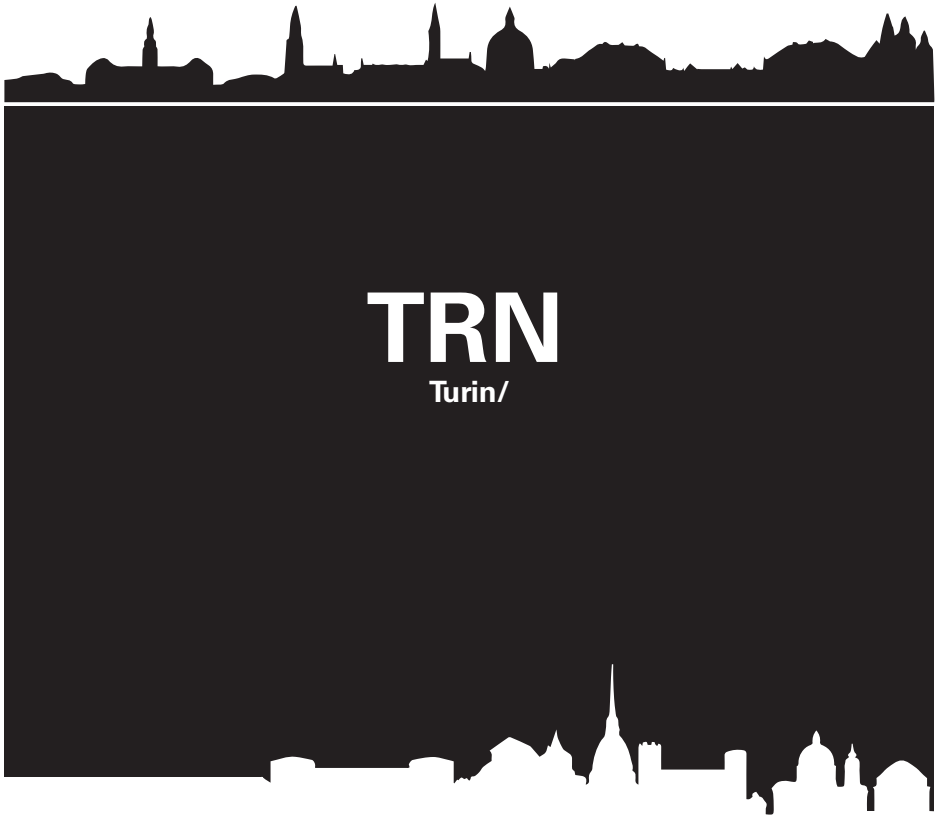
Historical Photos /1,2: Lingotto Turin

Actual Photos /3,4: Lingotto Turin

2 Post-Industrial medium size cities to study/

CHP

Copenhagen/



Copenhagen/ Harbor/

Country: Denmark

Region:Capital

Districts

- Amager Øst
- Amager Vest
- Bispebjerg
- Brønshøj-Husum
- Indre By [Downtown]
- Nørrebro
- Østerbro
- Valby
- Vanløse
- Vesterbro/Kongens Enghave

Area

- City 178.46 km2
- Urban 606.5 km2
- Metro 1,767.52 km2

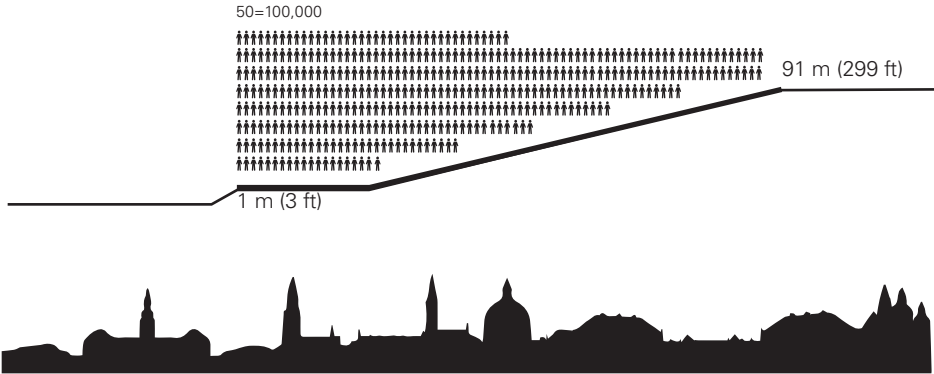
Population (2020)

- Total 1'346,485
- City proper 795,080
- Density: 6,800/km2

Elevation

- Highest elevation 91 m
- Lowest elevation 1 m

COMPARABLE INFORMATION



Turin/

Automobile industry/

Country: Italy

Region: Piedmont

Metropolitan city: Metropolitan City of Turin

Districts:

City centre

San Salvario

Crocetta

Cenisia

Barriera di Milano

San Donato

Santa Rita

Aurora

Vanchiglia

Area

• Total 130.01 km²

Elevation

239 m

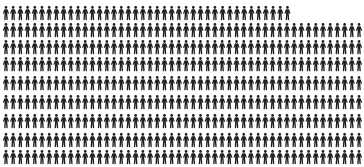
Population (2020)

• Total 1'792,163

• City proper 886,837

• Density: 6,800/km²

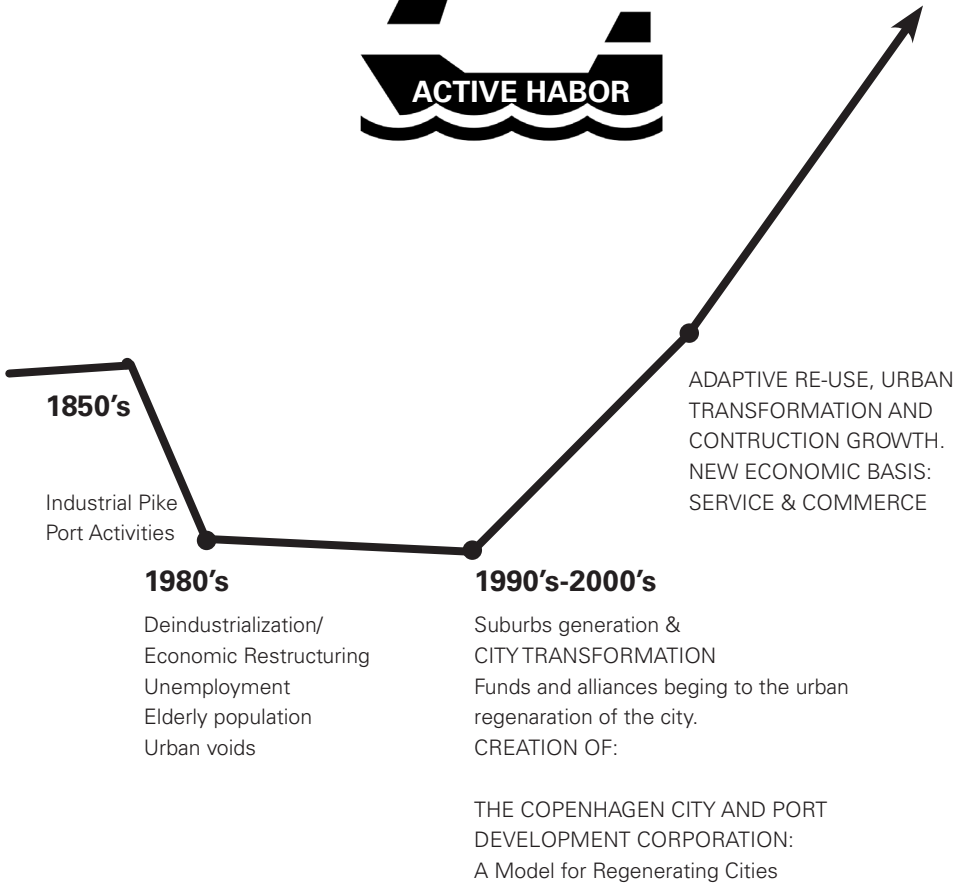
50=100,000



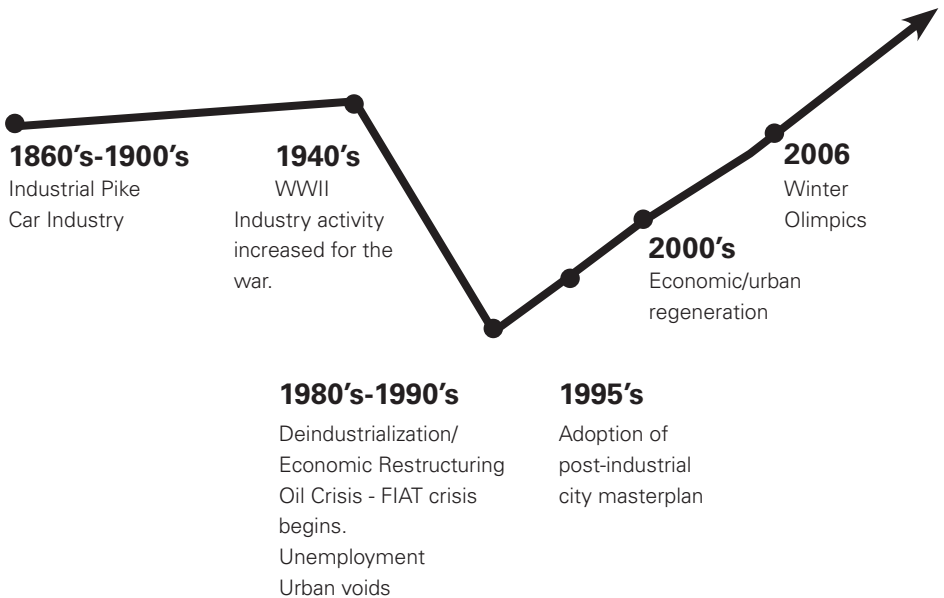
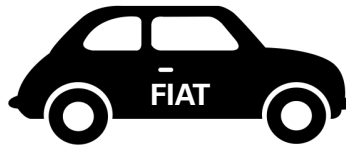
239 m (784 ft)



Copenhagen/
Harbor/



Turin/ Automobile industry/





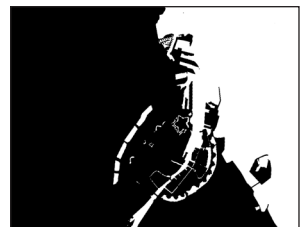
Copenhagen/ Map of dismissed industrial zones/

In the past, the harbour of Copenhagen, was congested and polluted as the industrial sector was the main economical power which drove the city. The sea coast and the inner canals were full of cargo ship and craned. Today the situation is completely different and the city was transformed in a liveable post industrial city where the human scale is the focus of every activities. This improvement in the urban quality was possible by the understanding of the potential left by the industrial areas. Dismissed and abandoned areas were, and still are, focus for architectural intervention which, through a strategic city-plan, are able to re-activate the zone and making an urban regeneration.

- 1 - Nordhavn** 2,200,000 square meters of industrial harbour
- 2 - Langelinie** Cruise ship loading dock
- 3 - Refshale Island** The B&W shipyard was Denmark's biggest industrial workplace
- 4 - Holmen** Navy Base
- 5 - Paper island** Storage of coal-salt-paper
- 6 - Island brygge** Factories and industry
- 7 - Carlsberg city** Breweries
- 8 - Meatpacking district** Cowsheds and slaughter houses
- 9 - Sydhavn (south harbor)** Industrial train tracks, industrial harbor and storage halls
- 10 - Svanemølle** Power station, train and train remise, industrial train track



1905: The beginning of the industrial city



1945: The industrial city



2000: Post-industrial city

Turin/

Map of dismissed industrial zones/



1910: The beginning of the industrial city



1950: The industrial city



2000: Post-industrial city

The industries settlement in Turin created a boom that developed the most significant growth of the city. With a proportion of 2/3 of the families of the city being active in the industries economy as their base of sustent.

Because of their placement the city sprawl was significantly bigger in the north-south direction. The industry predominaton was the automobile manufacturing, headed by the fiat as the main company of production. Followed by the textiles and then continued by the works of wood and leather, food, rubber and fibers. The pike of the city gorwth was around the 1945 with the first boost that WWII started, after this year the impacts of the war, physical - lack of resources and bombing, made the city growth was halt with the economy and gradually restarted proportional to the city recovery.

1 - Lingotto Car factory

2 - Ex-Osi Ghia an industrial area of 52 000 square meters used, starting from the 1950s, first by the Ghia car production and subsequently by the OSI - Industrial printing plant

3 - Settimo Torinese Ex-Iveco

4 - Dora Ex Michelin, tire industry, Cimimontubi, Fiat, Paracchi

5 - Aurora district Ex Nebiolo, weastinghouse, foundry

6 - Mirafiori Factories and industry

7- FIAT and ex state railway station

8- Fs: (Ferrovia dello Stato)



Copenhagen/ A Model for Regenerating Cities/

The Copenhagen city and the Port Development Corporation

With the acknowledgement of a challenge ahead, the city of Copenhagen established a model for the regenerating of cities based on their own needs and what was going to be a cracking point for the global realities in the Post-industrial scenario of cities:

“Cities across the world face increasing demands at a time when public resources are under enormous pressure.” (Katz; Noring)

Understanding the amount of undervalued or even unrecognized/unknown resources left in the city by lack of use, abandonment or lack of information, the solution was centered in the public resources but to acquire a high private level management to assure its success. By the observation of already applied strategies in other parts of the world, where tax rates went uncontrollably high, they designed and imposed a model based on the private management of publicly owned assets to increase the profit and agility of the redevelopment that will increase the value of the city. A capitalization of undervalued assets described in the book “The Public Wealth of Cities” by Stefan Fölster and Dag Detter.

Through the coalition of the the Copenhagen (CPH) City (public) & Port Development Corporation (private) this model “has made Copenhagen's industrial harbor a vibrant, multipurpose waterfront while channeling the proceeds of land disposition, revaluation, and development to finance the construction of an expanded metro transit system.” (Katz; Noring, 4)

With the undeniable reality of industries going out of the port city, the municipality had to take action before the unemployment derived by the crisis at the end of the 1900's did not took all the opportunities of the city to be developed and prove its possibilities of economic growth.

Background

When the deindustrialization phenomenon began, the north european Port city started having a short of budget together with one of the higher rates of unemployment and a reduction of working population while an incremental in the elderly percentage in the 1980's. A gentrification process took place, leaving the city center with unproductive population that couldn't contribute to the tax rates for public investments needed in the city.

Recognizing that the city crisis was in all the fronts: social, economic and politic. The strategies to be taken must then cover all of the 3, beginning with one of the most challenging in the contemporary society: the political compromise. In 1990s the national and local government of Copenhagen create a historical alliance to move the economy of the city. The alliance committed to bring back the interest in the city by investing on public assets that were already undervalued and unused, in order to increase its value with a lower investment and unaffected tax rates, by the configuration of publicly owned but privately run corporations that will help regenerate large scale segments of the city. These will then bring back new citizens, active working population that could stabilize the tax structure and economic flow of the city once more.



(1)

Photos / 1: nordhavn / New artificial island of Copenhagen

Solution

The political alliance was a first advantage step to start running the model. Through the critical shackle of public/private corporations that allowed the use of public sell revenues into the city improvements with a private management that made the process more independent from the political changes that could lead to a public investment project to get delayed or even cancelled by new political parties. This process unlocks the most defying scenario of a city regeneration when overtaking huge scale, long-term projects, representative to the city but normally ruled and overtaken by governmental entities that will have the poplitical constraints that the new corporations created by the national and local government of copenhagen created with the privately run corporations.

"Co-owned by the city of Copenhagen and the Danish national state, the corporation has benefited from the smart valuation and disposition of nationally and locally owned land. Mads Lebech, CEO of the Danish Industry Foundation and a member of CPH City & Port Development's board, explains the importance of the corporation's governmental partnership:

(Katz; Noring)

"The national government owned the Port of Copenhagen, but they could not develop it without local government that regulates building permissions, land zoning, and conducts urban development. Together they could do a lot. Alone they could do nothing!" (Katz; Noring, 7)

It is a chain process of the public property, political flexibility and private management for maximizing revenues.

The large scale project ambitions take on hand plans of development for the next 20, 30, 50 years of developments, with metro lines and even new land creation for the cities wealth to grow. The Key points stated by the autors of *THE COPENHAGEN CITY AND PORT DEVELOPMENT CORPORATION: A Model for Regenerating Cities* bring together bullet points for the political and economical treatment of potentialities that all cities have. One of the greatest advantages of the alliances is not just the unlocking of burocratic processes but the acknowledgement of ignored, or sometimes unknown, resources that just need to be triggered.

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Photos /1: Port of Copenhagen

2:aerial view of the harbor of Copenhagen

The Copenhagen model/ Key points for Global cities/



"Make public ownership transparent"

A key element of the success of CPH City & Port Development is market knowledge—knowing what assets (land, buildings, etc.) are owned by the public and the market value of those assets.



Bundle assets by merging public entities

Public ownership in many cities is often fragmented across multiple authorities. And the levels of government that direct these entities (and the laws and regulations that govern them) are also complex. Adapting the Copenhagen model may require national or state reforms as well as local political will.



Encourage state and local government collaboration

The evolution and management of CPH City & Port Development represents a triumph of collaboration by the national and city governments. Despite political friction occurring in many nations, several dynamics—a municipal fiscal crisis; a radical scale-back of a national government; a unified vision of urban growth across key public, private, and civic stakeholders—could provide the impetus to experiment with new institutional models and forms of collaboration.



Insulate development from political interference

CPH City & Port Development operates with remarkable insulation from political interference. Changing the culture and behavior of politically weighted public authorities is important since the success of this model depends on its ability to operate with agility and to be adaptive to shifting market demands.



Enable long-term thinking and stewardship

CPH City & Port Development is a remarkable example of long-termism pursued by both the corporation and many of its private financial and development partners. The Copenhagen model offers a way for cities to avoid using the disposition of public assets to fill short-term budget deficits."

The first phase

The first corporation was created in 1992 for the development of a 1,2 square mile area between the city, the airport and the bridge that connect to Sweden. A protected land publicly owned by the state but at the moment in use by the military. The area of Ørestad, by which the corporation takes its name, The Ørestad Development Corporation, was the first to be created in 1992, owned by the municipality and the ministry of finance the municipality was in the responsibility of the zoning of the area from a protected land to a multi-functional purpose: retail, commerce, education and housing.

As most of the already known regeneration strategies, and the most significant trigger of change for the city, a metro line was constructed that will connect directly the city to the airport, and will launch the development of the whole area by one single operation, privately managed. The corporation task will have the aim to collect the money for the construction of the first 2 lines of the city metro, which they did by a loan supported by the land value. Which in the beginning of the process will represent large debts from the corporation, but done to accomplish the construction of the infrastructure before the land development. In this way the value of the asset would increase significantly, the revenues at the end of the process will overcome the debts and give the funds for more public investments with the assembly of a new active neighborhood.

Second Phase

For the second phase the focus of development was the Port of Copenhagen, the area that covered the principal economic entry during the industrial era of the city as a large container terminal. The vision to recover the Port would have to begin with the covering of its deficits by the poor management it had and the speculation of even fewer entrance and movement of the port after the bridge with Sweden would open in 2000, by putting up for sale the unused land to developers.

In this case the management of the harbor development was given to the Port of Copenhagen. Unlike the speculated scenario of both ports, the one of Copenhagen and the one of Malmö (Sweden), the port activities were well managed and extended. The management was done since 2001 by a joint company of the two ports: Copenhagen Malmö Port (CMP) and generated the largest profit of the century history of the port in the first year.

(Katz; Noring)



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Photos /1: Ørestad with Copenhagen inner-city in the background
2: aerial view of the port of Copenhagen

Copenhagen/ A Model for Regenerating Cities/

Final phase

By the year of 2007 the Copenhagen City and Port development configured a new entity that put together the previous two corporations of the first and second phase of the city regenerations: The Ørestad Development Corporation (Phase1) and the Port of Copenhagen Ltd. (Phase 2). - As shown in the following graphic. In this case the property of the entity was distributed almost equally between the State (45%) and the City of Copenhagen (55%).

By the moment of the configuration of this entity, with the metro construction in process, a transit construction company took the responsibility for the metro expansion, completely independent from the new merged entity.

Following the established methods of the first two phases, the new entity has now developed numerous areas of the city of Copenhagen with the same model of alliances, dovernance,

and financial operations since 2007 until the actual date. Using the profit from the redevelopment projects and invest it in infrastructure construction.

The smart management, organization and understanding of the model assures a cycle of operation were the investments on the large infrastructure with success will always increase the resourcefull public asste value to be developed, and enble new projects. Unintl the contemporary state of the model, with the greatest of all the projects being the North Harbor area, that ment developpe a large landfill project to satisfy new market demands for land. Though this new developments go beyond public project developments the mixing of public developments and private sells enables more agreements for new redevelopments. Though the corporation only serves for publis purpose and not the market, reason why it will close one the debt for the redevelopment projects is paid and the corporation becomes obsolete.

(Katz; Noring)

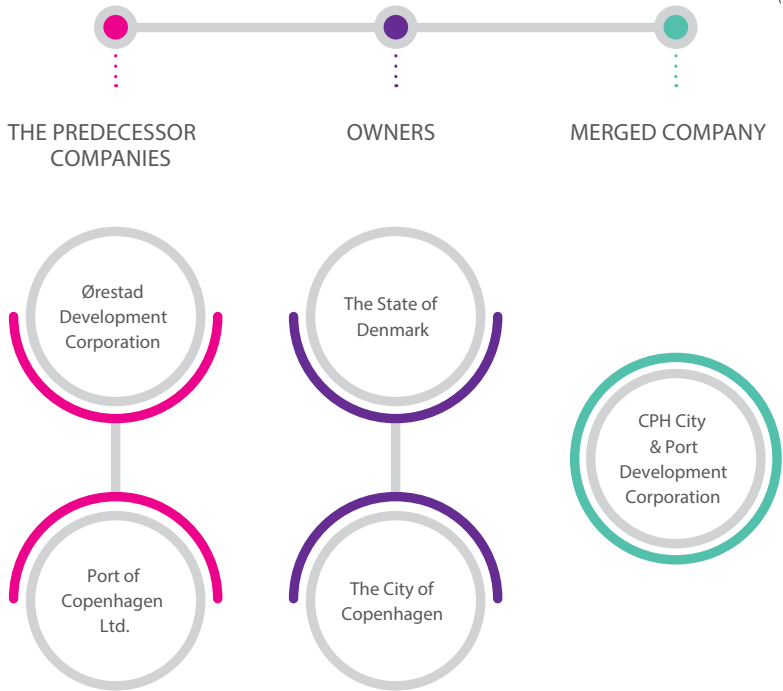


Diagram / New merged entity. (Katz; Noring, pg. 15)



(1)

Photos /1: The areas developed by CHP City & Port development (Katz; Noring,)

Turin/ Transforming the city/

Turin Meaning

Over time the city of Turin has overcome unimaginable changes, sometimes being underrated in its influence in Italian history. Its position and historical background have always connected the city with European trends and innovative inputs. It is a historical capital and an industrial hotspot.

Industrial Turin

Since the early decades of the twentieth century, Turin becomes the capital of the great automobile industry, based on a formidable concentration of scientific knowledge, technological experiences, availability of capital, and a strong role of the public administration. The municipality puts the emerging hydroelectric industry under public control, municipalized transport, builds the aqueduct, lighting, and engages in the sector of education, assistance, and social housing. The FIAT since 1899 would become the economic and population growth engine of the city.

FIAT, the wars, and the crisis

The wars' influence on the industrial market created a boom of demands for machinery products that contributed to the potential growth of factories and companies all over the European territory. Between 1922 and 1939 the population of Turin would be almost double, by a growth of 40% (Power, A. 2016). But the effects of WWII would be the opposite of

WWI. The fact of the city being a target would destroy many factories by bombing, creating physical and economical crisis all over. FIAT's 'crisis' triggers the processes of social and urban transformation. In the mid-1990s, around 3 million square meters of industrial areas resulted in abandonment, thousands of small businesses and related businesses closed, social unease also manifests itself in the hundreds of suicides of people expelled from the manufacturing labors.

It is in this conditions that the Municipality of Turin, between 1986 and 1995 completed the Regulatory Plan (PRG 1995), with an almost unanimous political and cultural convergence, intending to create a long-term change based on the potentials Turin had to an alternative future, based on the following fundamental choices:

- A new urban structure, with new politics for integration strategies.
- Investments for mobility infrastructures aimed to privilege restricted urban areas, to which to entrust the task of qualification and tertiary specialization.
- Seek for a strategic alliance between land ownership, identified in the major industries of Turin (Fiat, Michelin, Savigliano, ex Teksid) and the State Railways.

(Erba, V.)

Faced with a scenario like this, the choice of the mayor of the moment is that of:

- Accept the deindustrialization processes.
- Try to accelerate the turn towards the outsourcing of the city.

Post-Industrial city

The PRG was the base for a master plan transformation for the Post-Industrial Turin consideration. It was a first vision of change that with time will create new perspectives of the city development.

PRG 1995

In a first step the large industrial areas that were no longer in use were identified (Figure 1), to further on define what will be called the "ZUT" - Zone Urbane di Trasformazione/ Urban zones of transformation- and the "ATS" - Aree per terziario e servizi / areas for the tertiary sector and services (Figure 2). The identification of the hotspot areas configurated a connected chain of redevelopment sections of the city for one of the greatest and most ambitious aim of the regulation plan: the connection between the north and south of the city through one single infrastructure that will enable the city transformation. This extension axis of connection was identified as "Spina Centrale", divided into 4 main sections for its development - Spina 1, 2, 3 and 4. (Figure 3). The introduction of new activities to the obsolete industrial areas will also serve as complementary structures for a new city concept. From the fabric city (the city that knows to do) to a city of culture and knowledge. (DIST, Staricco, Luca, 2017)

The innovation in the plan would then be the combination of the use destination and the morphological change of the city plan by the implementation of an infrastructure strategy that would reinforce the city structure and connection, a debate that was already in the table since the 1950's.



Figure 1 / 128 dismissed industrial areas (DIST, 2017)
©Dansero, 1993.

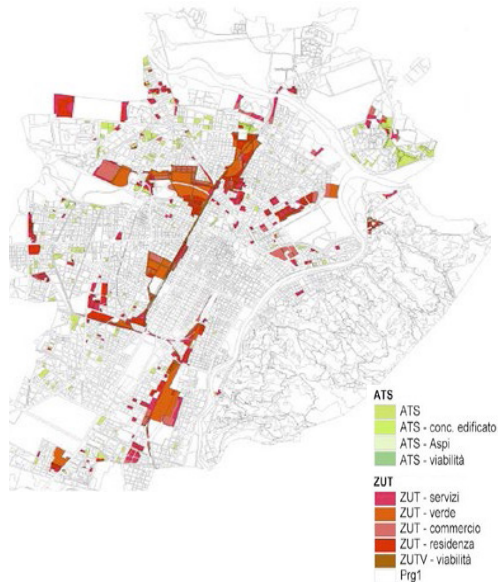


Figure 2 / PRG Turin. ZUT and ATS identification (DIST, 2017)
©PRG Torino, 1995.

Turin/

Transforming the city/

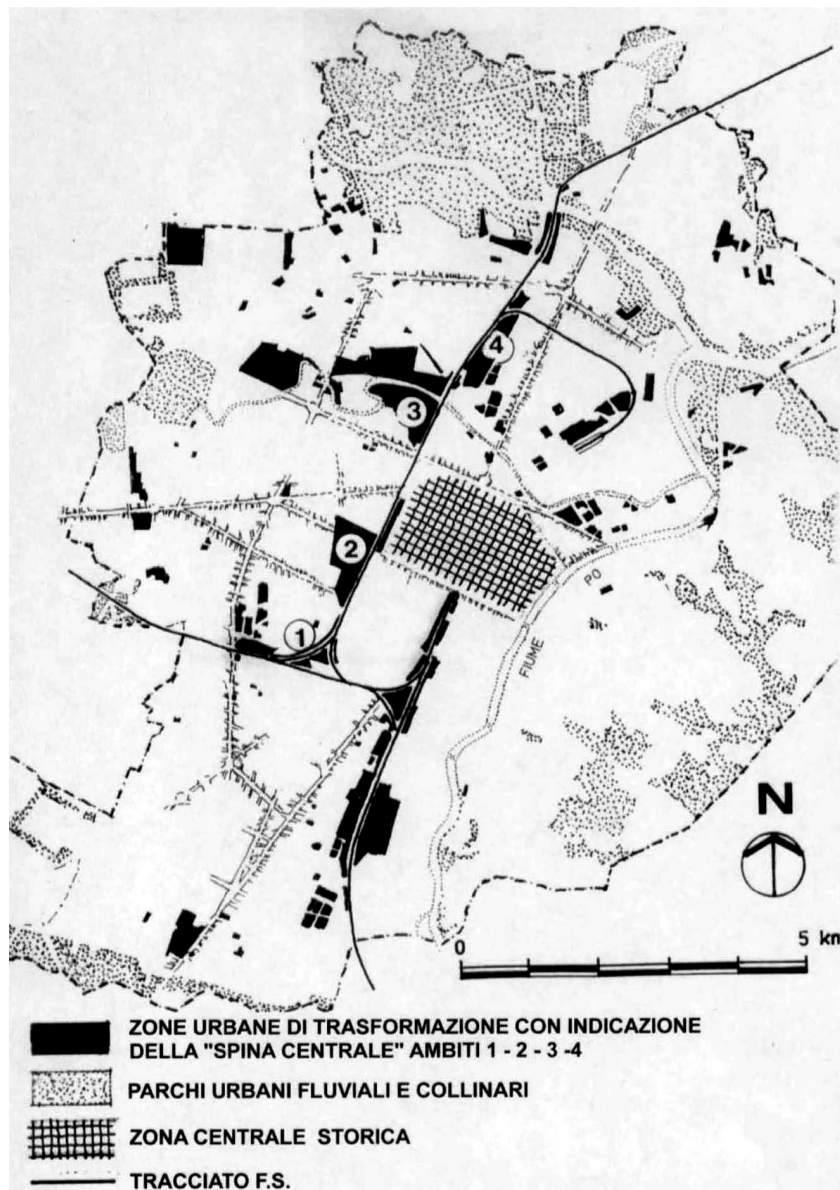


Figure 3 / Urban zones of transformation ZUT and the Central Spine division ©Radicioni, Lucco Borlera, 2009, p.271.

“ The task of the architectural project is to reveal, through the transformation of form, the essence of the surrounding context. ”

— Vittorio Gregotti

New masterplan

The main tool is the drafting of a new master plan entrusted to the study of the well-known Milanese architects Vittorio Gregotti and Augusto Cagnardi.

At the time of the formation of the PRG, in 1995, Turin had 950,000 inhabitants. The forecasts for 2007 were 900,000 inhabitants. The settlement capacity of the PRG was 1,150,000 inhabitants, very oversized, taking into account that the demographic decline in recent years had significantly slowed down and the number of single families has had a significant growth at the time (Macramè, 2007).

Key points of the PRG

The base structure of the plan to be a reconfiguration/reorganization of already urbanized areas rather than implementing new conditions for expansions was one of the most innovative and challenging properties that characterized the PRG. The riquification axis and priorities could be synthesized into 3 main focus:

- The operation of reorganization was then centered, as mentioned before, in the reuse of the dismissed categorized areas of the city, around the 10 million square meters.
- In addition, a main focus on the riquification of the areas near the rivers, specially the Po river, as the principal natural water corp that passes through all the city. Giving recognition and value to one of the most characterizing assets.
- The central axis of the railways that, as the river, go across the city from north to south, that with the first riquification process of the complementary dismissed areas to be redeveloped would create the strenghten and connected relation of a new active axis across the city. (Spina Centrale)

with the development as well of the “corso Marche”, a more focalized infrastructure development of public and private transport that integrates the metropolitan project with the main access to the city.

The political actions that came to give support to the Central axis development was another innovative action of politics in the first large scale master plan operation that was about to transform the city by focusing the attention of investment to the central axis, rather than letting the regular real-state market to focalize in the central areas that weren't the most problematic. The new axis would not only consider the potentiality it could create by itself, considering the large areas it gathers, but the areas it connect to. In the south of it being the developing area of Lingotto, that shared most of the qualifications of the dismissed areas considered for the master plan. The programs of qualification were 3, regarding Spina 1,3 and 4, since number two, being the central part of it all, had the most promising conditions for a redevelopment by itself.

- Spina 1: Tertiary economic sector and residence.
- Spina 3: commerce, residence and Tertiary.
- Spina 4: Mainly residence.

Even if the overall plan had a solid structure, the application of a master plan with this scale and demands brought upon diverse problematics of the execution, specially regarding Spina 3, the largest and more problematic.

For enabling the operation of execution were then needed external risources from national and from the European Union for financial support, as a unified management of the city to overcome the contingencies that many existing configurations will create to redevelop the neighborhood, specially the most populated. (Corsico, F; Perletti, M., 2001)

Turin/ Transforming the city/

The Olympic games accelerator.

In 2006 the Winter Olympic games took place in Turin. An awarded decision that took place in 1999. The financial and political changes of this award were crucial for the generation of many of the central axis development, specially for mayor zones, as Spina 3. This not only because of the financial entrance for the adequation of the city to the games, but also for the derogation of political decisions that were strategic to let the requalification processes take place without setbacks. One of the mayor contributions and accelerator factors of the Winter Olympics, was the conclusion of the first metro line of the city, which give a solid structure of development and connection, still to be extended and concluded.

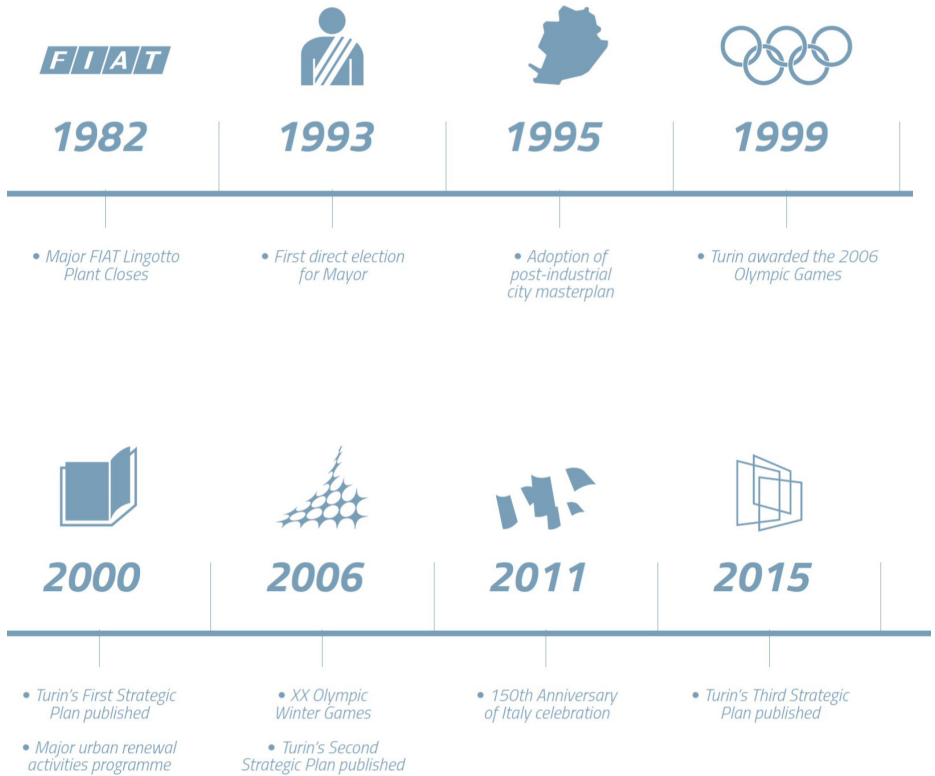
Though, such specialized activities have large scale spaces demands that at the time was not difficult to supply, but would leave, in the moment of its finalization, more urban voids of large scale to be appropriated and redeveloped once more.

New visions

However positive and negative effects of the first strategic planning of the city, it was a base of developing studies and consecutive plans that promoted a more stabilized economic structure with the city solidification. "While the first round of strategic planning was launched to develop a new vision of the city's post-industrial future, the second aimed to reinforce and solidify the city's economic restructuring to realise that vision. The third round of strategic planning, however, was launched as a local response to a sharp global crisis and a national economic recession that revealed structural challenges in the local economy, and this context shaped the framework of the entire planning process.

The most fundamental decision was to engage the metropolitan area of Turin, 38 municipalities in all, to join forces to confront crisis through a truly collective planning process." (Metropolitan Turin 2025)

The efforts to promote the city of Turin to a much strategic planning guide city has been non-stop in the local corporations that promote its development and political engagement. In may 2000, Torino internazionale was founded as an organization that promotes, leads and mobilize strategic planning for the city of Turin, with the local and Metropolitan city support. Now developing the Third strategic planning called Metropolitan Turin 2025, with the objective of making of Turin a city of opportunities. The planning aims to create a larger metropolitan area in which there is a political engagement of all the municipalities in it for an integration of their services and demands, with a promotion of the academic and research fields of innovation and an engaging section for entrepreneurs to leader a more vibrant metropolitan economy. The engagement of the 38 municipalities will imply an agglomeration of existing assets to potentiate in a collective planning process. (Metropolitan Turin 2025)



/ Timeline of the Turin Strategic plans by Metropolitan Turin 2025

ADAPTIVE



REUSE






Adaptive Re-use/
Definition & Criteria/

“ Old is the
new new.
Architecture
and the adaptive
reuse of industrial
legacy. ”

— New ideas must use old buildings.

Jane Jacobs, 1961



Adaptive reuse is the action of giving a second life to an existing site, building or infrastructure that has lost its original function for which was designed, by giving (adapting) a new function to it. Different approaches are possible in an adaptive reuse, from a minimal transformation given by the adaptation of requirements and uses to a practical and physical intervention. The variations could derive from many factors like the actual state of the architectural object, the structure, the budget and the new use it is designed for. Usually, the intervention aim to be strategy for an urban regeneration of the whole areas, using an old dismissed building in order to bring back life in a different way. It is right into the architecture that it is actually possible to develop a project of regeneration by the understanding of elements and spaces. Incremental construction, redundancy of space, and freedom of distribution are its key features. It is by those

elements that the final result and the success of the project depends on, but even more important is the ability of the design in being able to read the existing identity of the building, visible and invisible, and organize it into a new program that, in functionality and in distribution, is able to respond to the new needs of the areas and, specifically, of the site.

The quality of the adaptive reuse in making an urban regeneration possible is the consequences of a plurality of forces that the design is able to take from the heritage and from the identity left from the existing and from the new elements, spaces and function, which are fundamental to achieve social interaction. The design should have a sense of continuous during the active life of the "building, bringing vitality from its openness to time to the past, to the future and to life." (Robiglio.M, 169)

Re-use/ Urban renewal or regeneration/

With the understanding of the contemporary scenario for the city planning, the sustainable seek to look on the used and avoid the uncontrollable expansion that can lead to incremental governmental problematics and lack of urban contingency, the urban discourse turns its attention to the concepts of urban renewal or urban regeneration, erroneously assumed as synonyms while in the practice being contrasting applications of two different urban strategies. While urban renewal recall large transformation involving most of them significant demolitions and reconstruction, without a sensitive sense of conservation of the existing or pre-existing, the urban regeneration, as its name implies, is “widely recognized as a comprehensive and integrated vision and plan to solve the multi-faceted problems of urban areas and to improve the economic, physical, social and environmental conditions of deprived areas.” (Barosio, M. et al., 369, 2016).

Even if one could imply that while the vision and urban strategies explained before of Copenhagen and Turin both search for one of this methodologies, Copenhagen more inclined for an urban renewal and Turin for a urban regeneration, the large scale of the projects integrated operations of both. With a common ground of recognition for the industrial value they had, in large scale or architectural pieces. This allows both cities to have numeral cases of adaptive reuse strategies for recovery and redevelopment interventions. In a chronological basis, the crisis strokes them both at the same time but not with the same impact. Giving Turin a larger period of time to recover with the use of their politic, economic and social strategies than from the City of Copenhagen. The scale of the cities and population agglomeration and occupancy of territory was another crucial factor for the divergences between a more regenerative process for Turin, and the opportunity of Copenhagen to enlarge renewal, or completely new, urban development interventions. Considering that after the 1950's the population diminution in Copenhagen didn't stop, being in to the moment of crisis, 1980's, the half of the population in the city that Turin had at the same moment.

Though both shared “The integrated approach to regeneration built up a framework in which public and private partners work together with the aim of improving overall urban quality.” (Barosio, M. et al., 370)

The vision of the **ADAPTIVE REUSE** definition as a comprehensive approach of the possibilities that the different eras of crisis leaved behind may categorize it as one of many urban regeneration strategies that search to maintain or recover the value of existing resources.

Even if it is not the most popular kind of intervention, the accurate selection of an adaptive reuse project is as well a tool of awarness and promotion of the potentialities of the existing, in an economic and cultural point of view. As the peculiarities achieved by this kind of projects have a character of their own, brought by the history and representative architecture, structure or space disposition of the buildings.

“Adaptive reuse, also known as recycling and conversions, refers to the reuse of a building by adapting it to accommodate a new use or uses. Gaining impetus from both the HISTORIC PRESERVATION movement and proven economic feasibility, adaptive reuse has prevented the demolition of thousands of buildings and has allowed them to become critical components of URBAN REGENERATION.” (Costello, 2005, 6 - *Encyclopedia of the City*)

Adaptive Re-use/ Typologies/

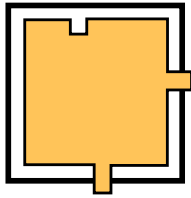
Typology of adaptable industrial building

The intervention of an adaptive reuse needs a deeper explanation which differentiate it from other type of reuse. A first and important factor is given by the existing structure that is reused and integrated in the link between old building and new design.

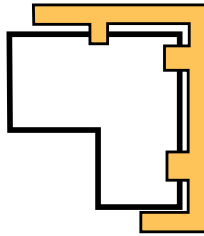
The category of industrial building has some peculiar features which help to standardize the analysis thanks to the use of steel, iron, concrete and wood, concerning the materiality and the internal freedom, rigid structural modules and technical performance defining the quality of the space.

This standardization of the elements of an industrial building give us two main type: multi-story frames and big sheds. The two types taken for the development of the parallel project in this thesis. A multi-story framed building in Turin and a big 3 bay shed building at Copenhagen.

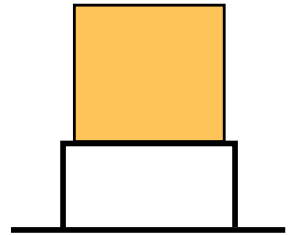
IN the majority of cases, the frames were used as warehouses and for small manufacturing; the goal was to multiply space for light production by multiplying the natural ground in artificial vertical platforms. The sheds were used for wrapping space around heavy production. Both were generic, potentially infinite spaces with no distribution.



Insertions



Parasites



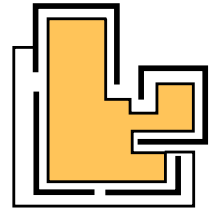
Parasites-Stacks



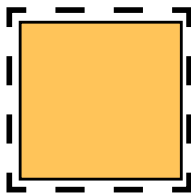
Parasites-Juxtaposition



Wraps



Weavings



Peeling



Transplanting

In Bollack's book, *'Old buildings new forms; New directions in architectural transformations'*, she deals with the forms of transformation. There are five forms following by changed patterns, she describes specific case studies with five diagrams: she named those as 'insertions', 'parasites', 'wraps', 'juxtapositions', 'weavings'.

The indoor space of these buildings was conceived in a second stage by the disposition of machines, the disposition of the assembly line and the placement of special equipment. Consequently, In the design phase the space freedom was the main goal and the perception of the space was strongly influenced by the rhythm of the structure. The only rule was considered the means of production as drivers of the design. The main constraints were connected on three different categories. The first one derived by the physical characteristics of the area and consequently from the surrounding environment, the plot size and form and, the buildings around the area. The second category of problematics were resulting from the requirements of production, light, air, load, power generation and transmission, etc. The last group refers to the characteristics of construction materials, maximum span, height, load, etc. It is actually hard to talk about typology as usually a type is defined by the internal distribution and here even the vertical connections are often located out or on the floor perimeter in order to maximize the freedom of the indoor space in each floor (mainly in the multi-story buildings). Defined by Max Webber, there were also the abstract "ideal types," configured by wrapped or layered empty space, rather than concrete building typologies. Nevertheless, as industrial architecture until the mid 20th century was not ruled by the codes of civil construction in cities, there is an interesting standardization represented by few repetitive schemes and layouts in different cities and times. In terms of timeline we can find the first cases of multi-story factory with the beginning of the industrial textile mills while the shed are a by-products of railway construction. Both were highly standardized: the construction of sheds through unifying steel profiles, joints, and geometries or by developing light concrete vaulted or trussed systems; the construction of multi-story frame even more so, with successful national and international patents. Sheds and frames were also adopted in different scale and places as both are easily to build and replicable in different scenarios. It is possible to find warehouses inside different mixed neighborhoods of housing, office and workshop in different cities. Now-a-days is possible to find these sites specially in the Post-industrial cities, where for economical, political and social reasons, the sites were left and abandoned, leaving to us a series of isolated voids in the existing urban fabric.

The peculiarity of the function covered by these buildings, as they followed the heavy production, had as a consequence an important system of infrastructure supporting them all around the urban context. In many cases these infrastructures were not in use anymore after the industrial building was abandoned and they need an intervention.

Industrial Buildings are today important resources inside the urban fabric that can be re-used in different way to bring life back to these urban voids. In addition, they are made by the use of heavy materials which were very frequent in the industrial period and probably, in some cases, essential to the previous functions. Steel, clay, wood, concrete and glass in huge quantities used to build the space of the production. It is extremely important that urban planning and architecture are able to reuse these objects and give a second use to those materials. As Matteo Robiglio expressed in the book *Re-USA, 20 American stories of adaptive reuse*, the question is "How can these possibilities be activated by reuse? The adjective "adaptive," as stated above, defines a line of minimal action particularly fit to current times"

Adaptive Reuse VS Preservation

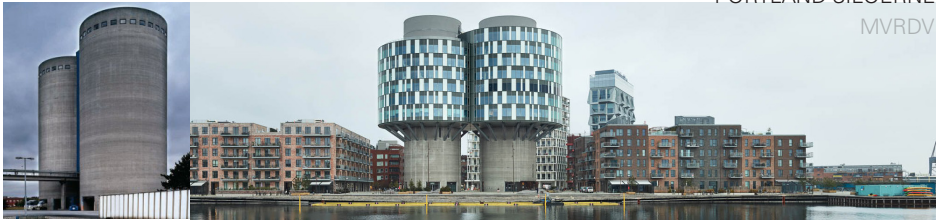
"Adaptive reuse architecture connects history and innovation in unexpected forms. Its dissonant balance of conservation and transformation drives the culture of heritage away from the quicksands of patrimonialization, injecting fresh content other than museum memories into old buildings, linking obsolete forms and emerging programs in fertile hybrids, and grafting new technical artifacts onto old relics. While heritage preservation confirms that the past is forever past and freezes it in one defined instant extracted from time, adaptive reuse reinserts the past in the time of the city and opens it to new uses and new significations, embodying simultaneously continuity and discontinuity, and permanence through social, technical, and economic change." (Robiglio, M. 2017, 214)

“ The past is another country that everyone can visit. ”

— Charles Jeffrey,
he is an emerging British fashion designer.
His quote is from the Lauren Cochrane article
on his 2017 Loverboy show, in The Guardian,
11 June 2017.



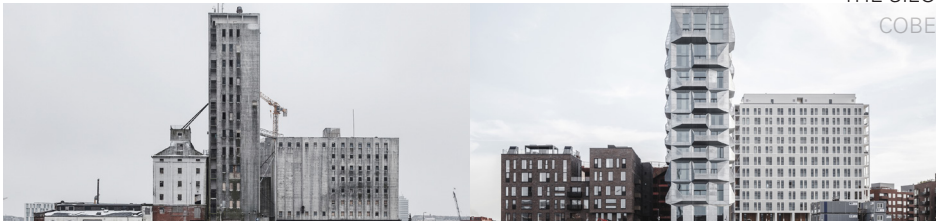
Adaptive Re-use/ Examples Copenhagen/



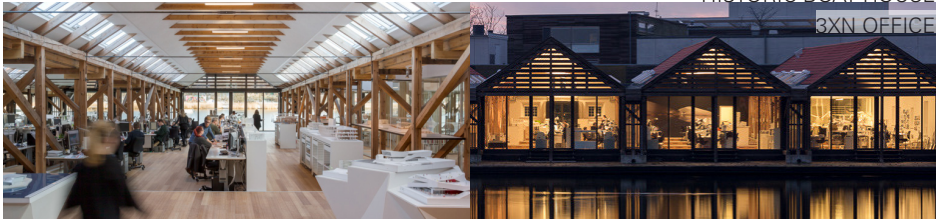
PORTLAND SILOERNE
MVRDV



STREET MEKKA
EFFEKT

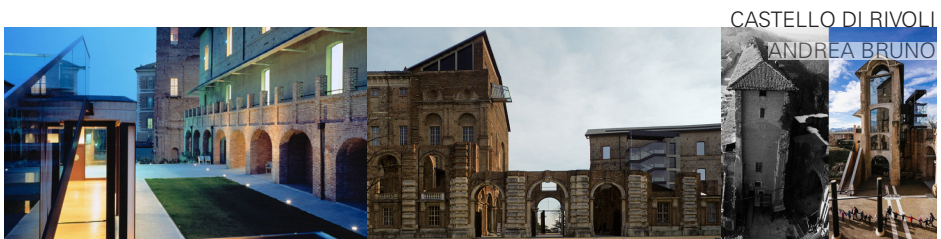
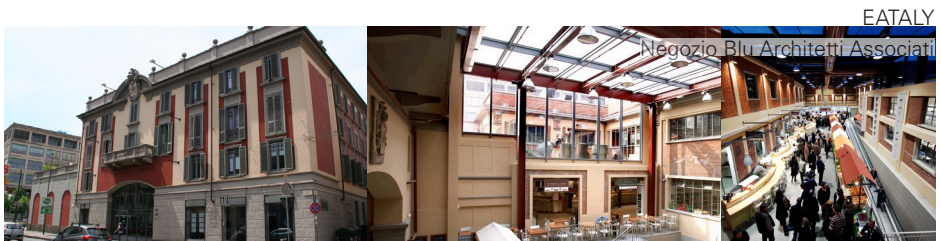


THE SILO
COBE



HISTORIC BOAT HOUSE
BXN OFFICE

Adaptive Re-use/ Examples Turin/



Adaptive Re-use/
Examples Copenhagen/

RED CROSS VOLUNTEER HOUSE
COBE



HELSINGOR MUSEUM
BIG



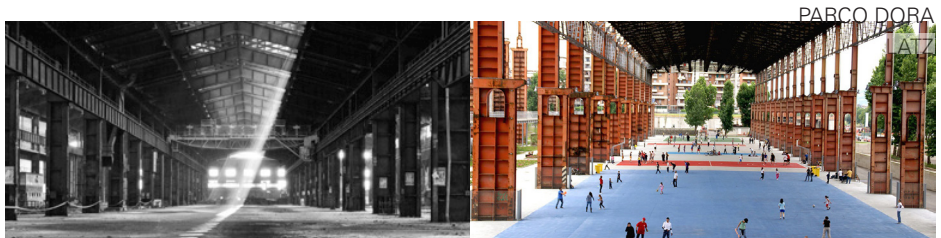
ADEPT



WENNBERG SILO
LYNENBORG



Adaptive Re-use/ Examples Turin/



INTERVENTION



PROGRAM



**“First life, then
spaces, then
buildings. The
other way around
never works
”**

Jan Gehl

Intervention Program/ Urban Regeneration Frame/



With the conviction that the strategies for a possible urban regeneration in an specific object relies in the articulation of the buildings to the city and the complementation of this articulation with a human interaction support that brings exchange and appropriation. There are two gross tools of intervention used to achieve so in the projects proposal: The public space design and the reinvention of a commercial structure architecture.

Articulation/Public Space

It would be useless to do an attempt of a program insertion into a building if this object does not create a dialog with its immediate context. Therefore, the public space design is the greatest weapon to set a new communication of the spaces proposed.

The aim of a good design of this space will lead to the elongation of the building life and its adaptability to hold new and different uses in the short and long period.

Social Life/New Commerce

The basis of the commercial structures is exchange. Through history this exchange has varied, from a mixed human interaction activities and products, until it got into a merely capitalist manufacturer of product exchange, without much of the social integration. But what it has been constant is the point of attraction that they potentiate. With the critics on the pure capitalist stores but the potentialities that they have as social attractors, the different commerce has been studied to extract the criteria and strategies for the intervention of the projects.

Public Space/ From the urban to architecture/

To be able to recall the basic strategies to the design of public space its recommendable to seek into the past and the first threads of the value of diverse encounters in one same place. The agora might be the first legitimate example and case of study of scholars, the practical study that express what after many years and evolution of society has been call the value of public structures, or "throw togetherness" as Stuart C. Aitken called them in 2010 with his article "Throwntogetherness': Encounters with difference and diversity". The productiveness of space is then considered in its potential to enable new realities to develop.

As for the concepts of the Agora to retake and reconstruct in the contemporary reality, and complement with more updated statements, is the capability of conceive the void as an understudied configuration by its physical limits (the enclosure) and controlled, but mainly public and open. With its etymological meaning being place of gathering, the agora recovers an urban configuration of the central powers and activities at the Greek polis where the agglomeration of political, social and cultural symbols and powers concentrated, assuring the place as a live hotspot. The importance of civic, political and cultural symbolism for the life of the Greek polis cannot be stressed enough (Ampolo, 2012, 12).

With the passing of time and evolution of the society and its urban container, the agglomeration of activities in a specific place decreases by the dissipation of larger cities. Though, the reflection of architecture without the consideration of the use of its surroundings is dismissing one of the most essential aspects of potential. Lefebvre expressed in his book *The Production of Space* (1974) a very potent idea of space as a social production rather than a container of activities or unrelated physical limits. This conception of space as a social construction refers to a disciplinary transition from the XIX century to the XX century in which the social theory set its attention to the spatial patterns when the socio-economic practices met the built form.

The peculiarity of urban space is its interaction towards and within society, its configuration and the representation of its use. The use of urban space then may be seen as unproductive

by itself, but it has to be seen as for what it represents and beholds, the exchanges done by its use. "In the use value of each commodity there is contained useful labour, i.e., productive activity of a definite kind and exercised with a definite aim." (Marx, 1867, 31)

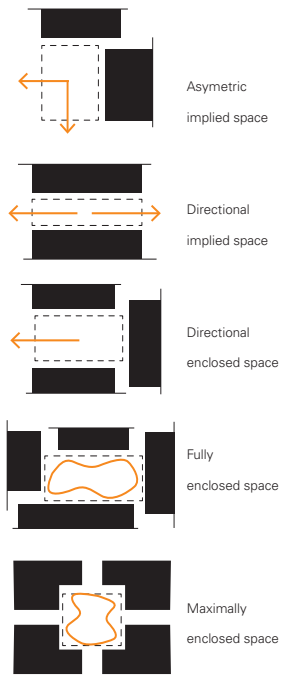
Public space in different scales

After recognizing the value its pertinent to understand its scale. The use value of the public could be translated depending on the relation it has created with its immediate context. This scale is measured not just by the dimension of space, but by its capacity of interactions at the same time.

The most immediate understanding is by its perceptive form. The configuration of the void by the placement of its containing architecture could immediately relate it to a more optimal function or a more practical use, as for the place of transition in comparison to a place for stay. (See figure 1).

The aim of this comprehension is to make applicable the considerations of the potential of the public in architectonic interventions. Exploit its level of activity and create an equilibrium between the enclosed. Open the activity and types of encounter.

Studies and principles have already been done, and Jan Gehl's studies are taken as framework for the projects development. Recalling some of his studies, published on his well-known book, *Life Between Buildings*, the rate of activity of a project can radically change according to its outdoor relations and quality of space (See figure 2). This is just one of the reasons why it is necessary to include the public space as part of the project design if the aim is to have a liveable project, offering the opportunity to support even the activities that are not included in the initial project outline.



Configuration/

Figure 1 /Urban void generic forms by context placement..

Potential/

Quality of the physical environment

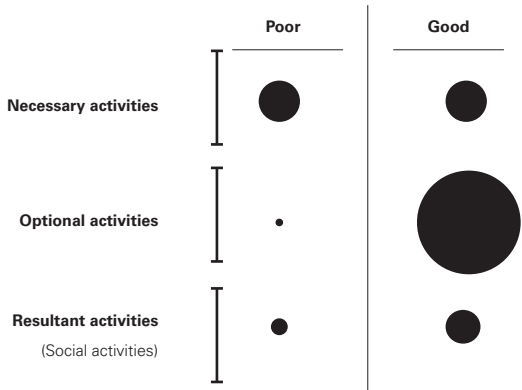

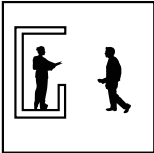
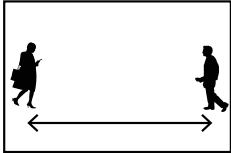

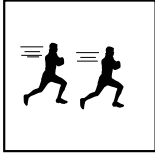
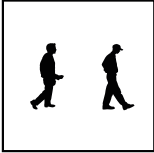

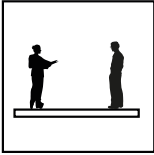
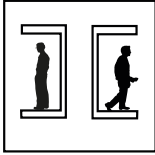
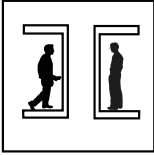


Figure 2 / "Graphic representation of the relationship between the quality of outdoor spaces and the rate of occurrence of outdoor activities." © Jan Gehl , Life Between Buildings. 2011, 11

Public spaces/
Intervention strategies/

“We envision how buildings can contribute to our public life aspirations, in terms of height, massing and scale, as well as functionality and interaction”

— Gehl

INHIBITING CONTACT		PROMOTING CONTACT	
Visual and Auditory		Visual and Auditory	
		1. Wall	1. No Wall
		2. Long Distance	2. Low Distance
		3. High Speeds	3. Low Speeds
		4. Multiple Level	4. One Level
		5. Back to Back Orientation	5. Face to Face Orientation

"3 main ingredients:

- 1) Space: scale + form + climate**
- 2) Life: Inherent to the given area.**
- 3) Buildings: Height, scale, massing and functions"**

- Gehl

Jan Gehl and David Sim, Creative director at Gehl, have both developed a bases of criteria for what could be a dialogue of the space in between buildings , in order to be able to create a *Soft City*- Sims latest book on the topic. Many of their theories are further shown to express the criteria taken to the development of the public space design.

" Soft City is based in three principles:

- 1) Give chice through enclosed spaces: Design enclosed spaces that allow partial or open socialization, giving people the choice of how public or private they wish to be.**

- 2) Make walking a priority, design consistent, high quality walking infrastructure, with continuous sidewalks, curb extensions, varied surfaces so that when people walk, they are prioritised.**

- 3) Blur line between indoor and outdoor. Design flexible building edges with adaptable windows and doors helping invite indoor activities out, and outdoor activities in."**

Because of the coherency they serach within the vity these 3 principles set a fundament of design to serach for the fluidity of the flows in and out the building, with a congruent relation to the environment

that make the building a part of the city.

Gehls Architects work on placemaking have shown how beneficial it could be for a community the development of "placemaking".

Jan gehls facination for the appropriation of space made a glorious enciclopedia to gather the community concepts and public space essentials:.*Life Between Buildings* is one of the essential resource that gathers together a bit of every ingredient: life, space, scale, variety and adaptability.

"Social activities occur spontaneously, as a direct consequence of people moving about and being in the same spaces. This implies that social activities are indirectly supported whenever necessary and optional activities are given better conditions in public spaces." (Gehl, 12)

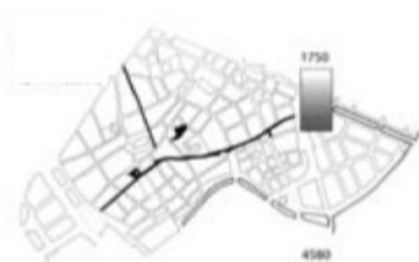
The trigger of this activities he defines them not just in terms of the context, since this is the one that gives the activity a CHARACTER, but in terms of CONTACT. A factor that can be DESIGNED, in order to promote it and understand how to promote it. The interaction of senses is the primary tool in design, and they can be modified by the alteration of space.

A place can modify the intensity of contact, and therefore all the interactions that derived from it. By these concepts Gehl makes explicit the playful game of design in regard to people's SENSES. Creating sensible spaces would then refer to the design thats able to instigate sensations in the active person in it.

Public spaces/ Intervention strategies/

"Activity as attraction," as many other authors and scholars in the matter, the flexibility of space that allows a major quantity of diverse activities in it will assure increasingly the attraction of people to get together. It gives the opportunity to create a wider timetable of use, specially if it is allow the mix of activities that will bring along different public to it (age, gender, families types,tc).

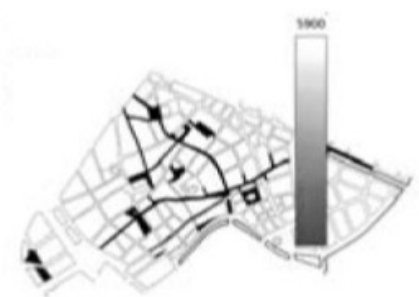
Is this one of the many reasons why the street turns to be one of the key elements to create a place of being, and not just a transitory set of different speeds.



1968
20,500 m² pedestrian area



1986
55,000 m² pedestrian area



1995
71,000 m² pedestrian area

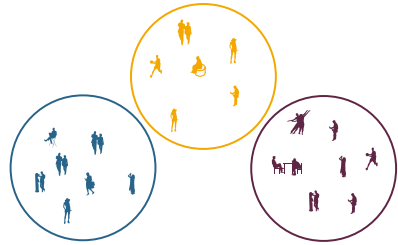
"Each quality improvement in the city of Copenhagen has been closely followed by an increase in the use of the public spaces. The improvements have – literally speaking – given room to a much wider range of human activities. While the city population has not increased the interest in using public spaces passively and actively definitely has." (Gehl, 32)

Copenhagen Images + pedestrian area graphics/*Life Between Buildings*, Jan Gehl, 2011, 32

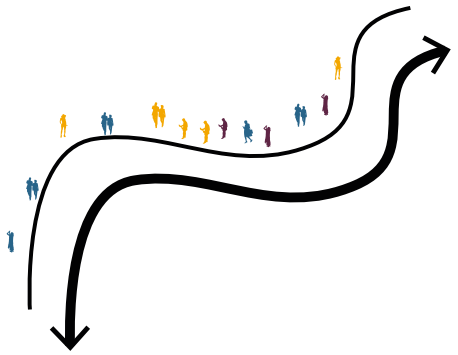
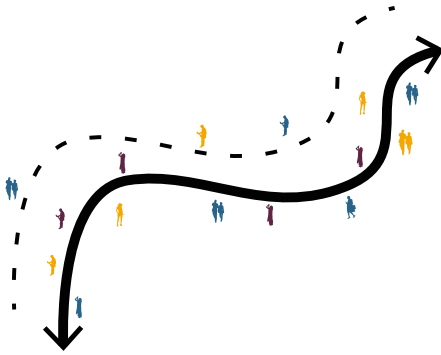
Public spaces/

The outdoor space quality and integration/

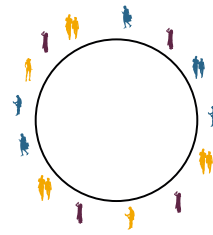
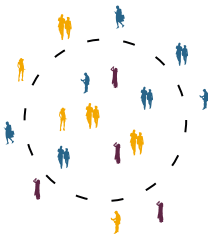
Through spatial integration measures, the social inclusion of people in urban settings can be designed. Public spaces can play a key role in improving people inclusion by acting as places for intercultural dialogue and exchange. Segregated areas can be opened up thanks to careful physical architectural interventions.



To integrate or segregate



To invite or repel/



To open up or close in

Public spaces/ “Spaces for Walking – Places for Staying”/ Jan Gehl

Walking



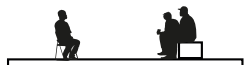
The pedestrian is the sensible percipient of space, by which the tools to play with in design are: dimension, pavement materials and speed paths. Considering as well the perspectives that the pedestrian has from the path towards the architecture, the experience through the path.

Standing



The stationary moments should be prevailed, if possible. Taking advantages of the edges and shading, considering the stopping pattern of a walk is a strategy when designing the paths in a project. “If the edge fails, then the space never becomes lively.” (Christopher Alexander, *A Pattern Language*)

Sitting



When defining the preferable stationary spaces, optimal conditions should be involved to propose a sitting opportunity for longer contemplation, staying and participation. Depending on if it is an active or passive space the sitting orientation, types and options should be proposed.

Seeing, Hearing, and Talking



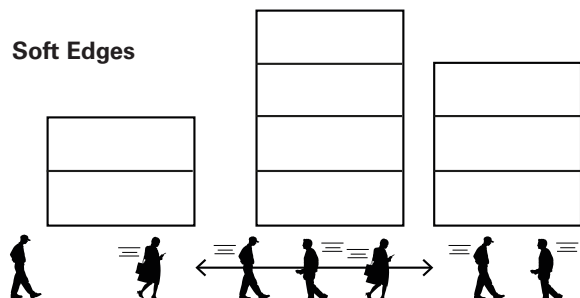
The public is the consumer of the space. The stimulation of the senses are the triggers for the main interaction. Offering a plane space to the public will make the place lack of interaction. Distance and lightning are the main design criteria; the sight perception depends mainly on this two.

A Pleasant Place in Every Respect



The sum of all the favourable conditions: speed and time of transition, climate, sound, security and senses incitement, is the perfect offer for the public. Protection is the main goal that gather almost all the design criteria together.

Soft Edges



The relation of the building with the outdoor is the defining space. Could be a limit or border depending on its offering and permeability. Their height, functionality and promotion of flows are decisive to the type of relation they create with their immediate outdoor space, preferably designed, and with the city itself.

Public spaces/ Other strategies/

According to the PPS (Project of Public Space Incorporation) the 10 strategies to improve the public space quality and integration to the city are:

- 1. Improve Streets as places**
- 2. Create Squares and parks as multi-use destinations**
- 3. Build Local economies through markets**
- 4. Design building to support places**
5. Link a public health agenda to a public space agenda
 - basic infrastructure
6. Reinvent community planning
7. Utilize the Power of 10+ : 10 places of quality or more in the neighborhood.
8. Create a comprehensive public space agenda.
- 9. Smart small and experiment, using “lighter, quicker, cheaper” approach.**
10. Restructure government support public spaces.

In the other hand, Mathew Carmonas' work in the article that analyses many of the regulations and experimentations of public space in England arrived to the following conclusion:

“Successful public spaces are:

- 1. Evolving (whether formal or informal in nature).**
- 2. Diverse (avoiding one-size-fits-all).**
- 3. Free (with secure rights and responsibilities).**
- 4. Delineated (clearly public in their use).**
- 5. Engaging (designing in active uses).**
- 6. Meaningful (incorporating notable amenities and features).**
- 7. Social (encouraging social engagement).**
- 8. Balanced (between traffic and pedestrians).**
- 9. Comfortable (feeling safe and relaxing).**
- 10. Robust (adaptable and distinct in the face of change)”**

This to show other conclusive studies were many of the bulletpoints are shared, and so are the ones that are considered indispensable for our strategic design.

Commercial structure/ Definition & Overview/

With a consumist society culture in its rising point, United States is the first scenario of development for the big scale commercial structures that would then become a world wide trend for the shopping bussiness: Malls. In the 1950's the Austrian architect Victor Gruen, that at the time was living in the USA, was one of the pioneers architects considered expert on this subject. He describes the commercial program as a motor for promoting social interactions, which was his actual main goal. With this perspective he promoted the retail centers as strategies of intervention that would help the urban development of the designated area where it is located.

It is not until nearest years to the 1970's that it arrives to Europe, following the North-American references. The first mall in Copenhagen was opened in 1966, The Rødovre Centrum. The developer of the project was the land owner of what at the time was a large area of gardens and fields. Aage Knudsen (gardener and land owner) was inspired by his son references to the United States projects of big shopping centers. In April 1st of 1966 the largest closed commercial structure of Europe was built. In Italy the date of arrival of the first shopping malls is similar, in the 1970's.

The commercial structures might then be classified in 3 main categories: By location, size or type.

Regarding the location, this could be either urban, if located inbetween the city borders or the closest peripheries. Or suburban if they are located in a distant area from the city that has a low density of population within its borders.

According to the NUEA (Norme Urbanistiche Edilizie di Attuazione) attachment C of the Volume I - direzione centrale ambiente, sviluppo, territorio e lavoro - The commercial structures corresponding to the retail - now wholesale - may be classified as well by its size.

For the bigger scale structures - wholesale or mall - the classification according to the same document there is a subdivision of categories by type, divided into: Classic, Sequential, Natural and/or Public.

Commercial structure/

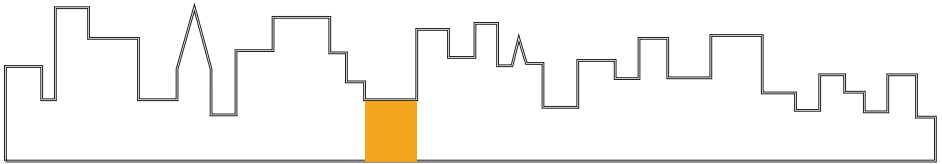
Classification/

Respect to the city

Suburban



Urban



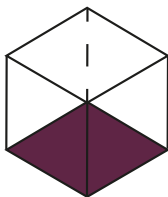
Commercial structure/

Retail Classification/

By Area

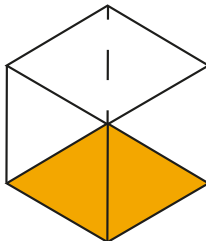
Local

Max.: 250 m²



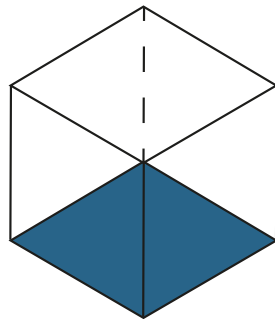
Medium

250 m² - 2500 m²



Big

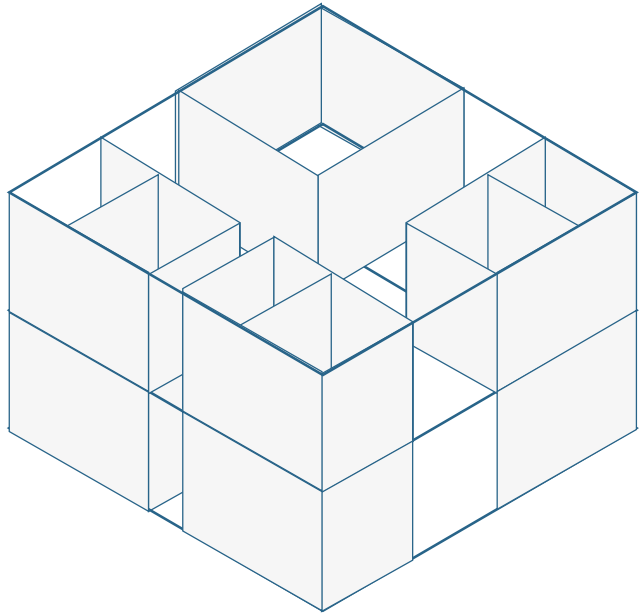
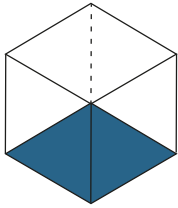
Min.: 2500 m²



Commercial structure/

Classification/

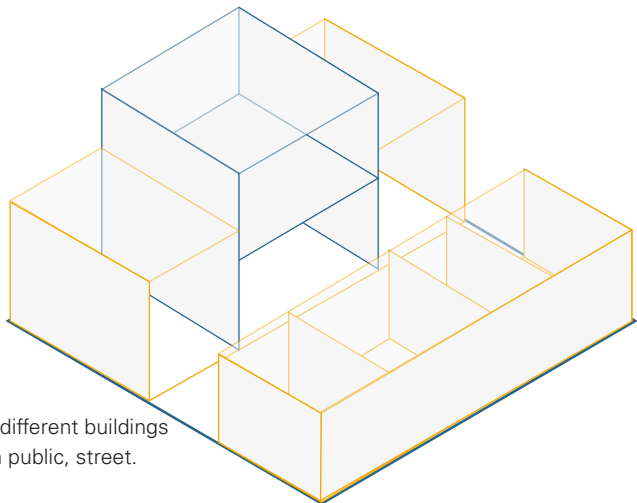
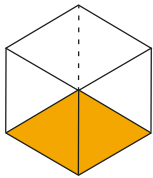
By Type



Classic/

Concepts:

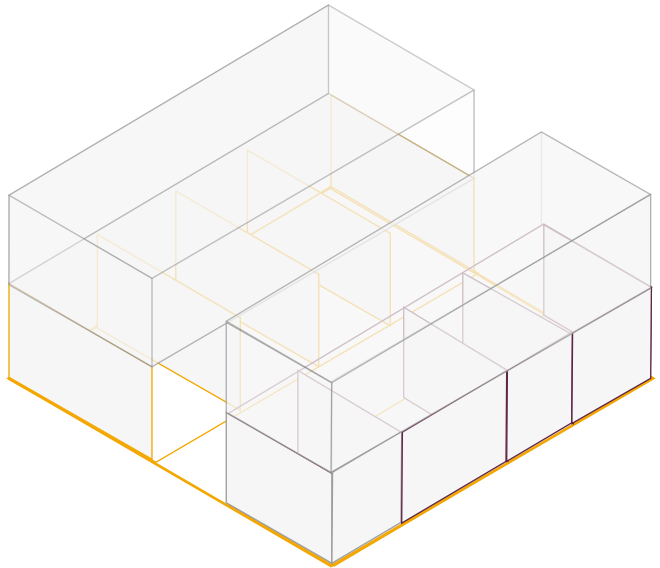
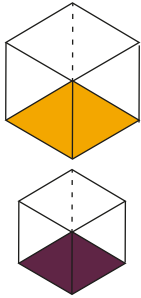
- Single building
- Internal circulation to retail and services
- Anchor store: assure the attraction of people



Sequential/

Concepts:

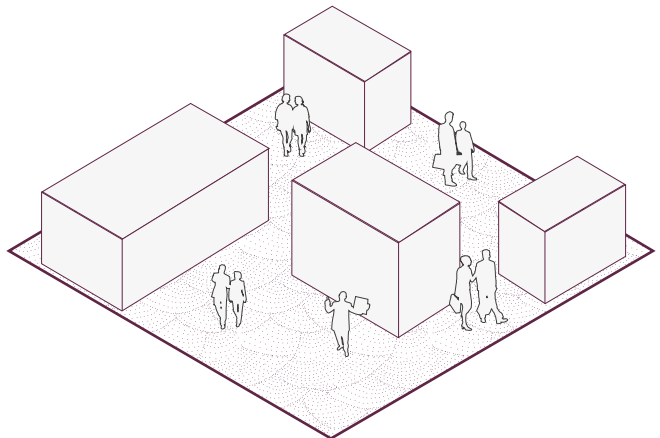
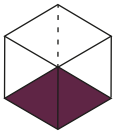
- Functional stem of one or different buildings connected by a shared, non public, street.



Natural/

Concepts:

- Diversified uses of services and commerce.
- Facing a urban street or square.
- Associated management of services.



Public/

Concepts:

- Markets placed on public areas for retail.

Commercial structure/

Case Studies: Adaptive Commercial Re-use



La Serrezuela/

LA SERREZUELA,

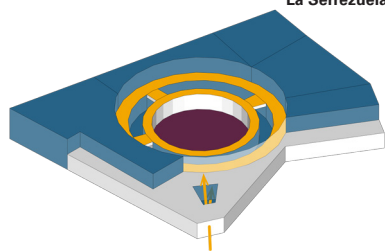
Location: Cartagena, Colombia

Scheme:

Ring circulation

Main central cultural anchor.

Roof square - public space



The reference example, brings together a concept of adaptive reuse to the old Bullring inside the “Old City” of Cartagena. The City center is itself clasified cultural heritage by the UNESCO, including the old building that belonged to one of the most prestigious families in the country.

With the challenging task of creating a contemporary shopping center with the existing structure and inside the city of historical houses and street fronts, the architecture set the heart of the project in the all structure ring. Being the most adaptable and livable part of the project.

Before being taken for the adaptive re-use project after more than a 100 years after iits original construction, the bullring became what in the time was called “Circo - Teatro” (Circus- Theater), being the scenario of cultural events and, once, of the Caribbean Music Festival. Functions that, even after the nomination of national heritage in 1995, didnt save the building to deteriorate and fall into oblivion.

This historical fragment of the buildings transition in time was recalled in the contemporary project in the building street facade, that aimed not just to recall the past, but gave a sense of place to the city center guidelines.



Steet Facade/ ©Andrés Valbuena – Revista Axxis

The circulation follows the old ring, and what in the traditional malls is configured as a covered commercial street with the two sides of the path being aligned to the showcases inside in this project is an emphatic and respectful gesture towards the architecture heritage in the center. With a gap in between the structure and the main corridos the spatial perspective for the visitors cannot ignored what was before and the new architecture engagement to it.



La Serrezuela, Circulation around the Bullring/ Photo done by Candidates



Social Square/ ©Revista Axxis

Commercial structure/

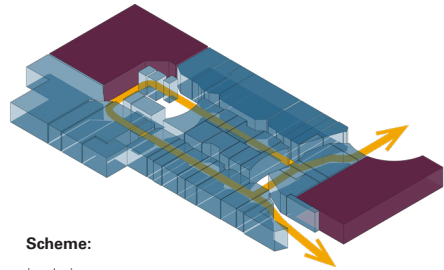
Case Studies: Adaptive Commercial Re-use



Fiskertorvet Copenhagen Mall

Fiskertorvet Copenhagen Mall

Location: Copenhagen/ Denmark



Scheme:

Cul-de-sac circulation

Double anchor.

The transformation of Copenhagen Mall aims to turn this once isolated complex into a welcoming urban locality fitting for one of the World's most liveable cities. The expansion includes a total of 151,000m² of retail, commercial and public spaces and a planned direct integration of the new metro station, due to complete in 2023, that will create a new gravitational point for the entire area. The new design with near 360 degrees of open and active facades at the ground level will foster life between the building and the city, creating a new vibrant addition to downtown Copenhagen.

The new stop on the Metro line will be incorporated into the South-western expansion of the complex, creating a new gravitational point for the entire area. As well, the new facade

design is revitalized with warm tones of ceramic lamella tiles, creating a dynamic carpet, sweeping the entire building mass and unifying its structure.

The new and improved parking strategy will include an expansion of bicycle parking spots. The proposed extension of the iconic Bicycle Snake will also improve the logistical flow around the existing main entrance and will provide better connection to the new neighbours, such as the new planned IKEA city store and the meatpacking district across Dybbølsbro station.

A new outdoor space build around the existing main entrance will lead to a public roof/top park and connect with the new and improved Dining Experience corner, offering some of Copenhagen's best views to the inner harbour.



Aerial Render/ @schmidt hammer lassen architect

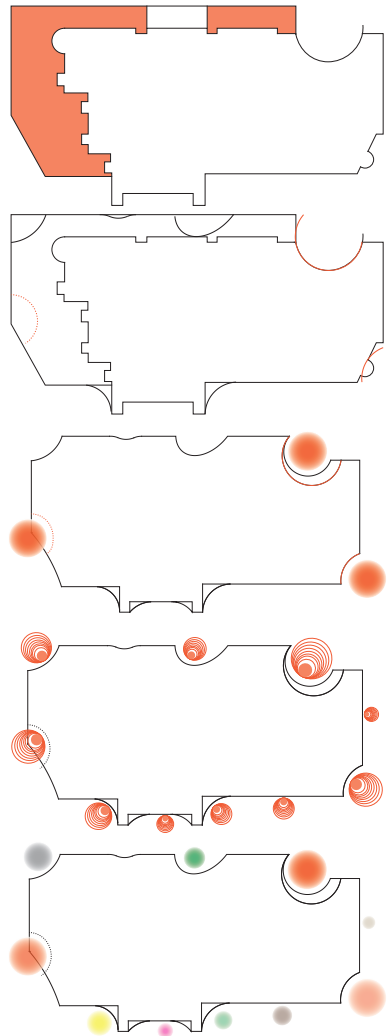


Restaurant corner Render/ @schmidt hammer lassen architect

We do not want to create a mall, with a hotel and an office building on top. The new building must face the entrance to Copenhagen as one urban sculpture. One identity.

Identity or branding today is about how we emotionally experience a given brand. Not how the brand as a product is in itself. This dramatically affects how we see and experience buildings, spaces and places - at eye level. We call this "place branding" - how to create brand equity through urban spaces, buildings and places. One of the world's leading experts in place branding, Professor Mihalis Kavaratzis of the University of Leicester, clarifies that a good brand strategy needs to work with both external and internal brand values.

The external brand value relates to the building and the aesthetic and visual identity it signals when experienced from afar. The internal brand value relates to the personification of the brand, i.e. the experience of the company at street level through the urban space and landscape. Both the external and internal brand values are necessary to create a complete and trusted brand. According to Professor Kavaratzis the traditional, iconic building therefore cannot stand alone. The identity and values expressed by the building must be present all the way down to street level - in the urban space where the company meets

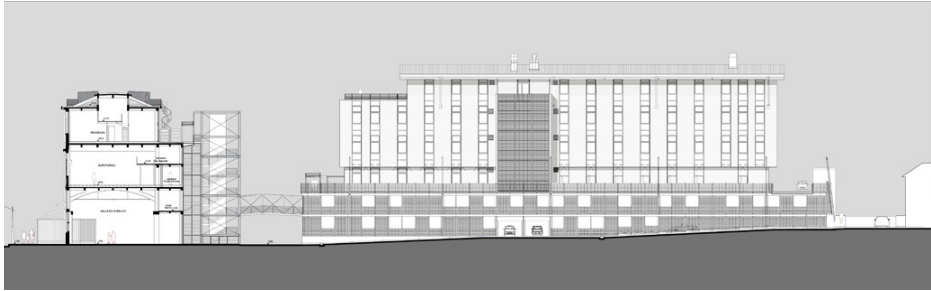


its customers. In this way, the brand becomes emotional, trustworthy and personal. While a brand that fails to reach outside its own buildings risks being seen as untrustworthy, withdrawn and impersonal.

Conventional building marketing emphasizes only the external and visual identity of the building - as an icon admired from afar. But modern place branding emphasizes the complex interplay between building and the street level, the urban space and the landscape in a complete value-borne identity - where the brand of the company lives and breathes together with its customers, collaborators and clients. (SHL-Schmidt Hammer Lassen)

Commercial structure/

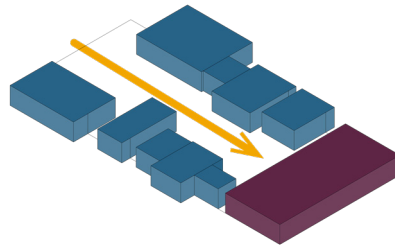
Case Studies: Adaptive Commercial Re-use



Facade- before the reuse/ ©Studio Granma 2465-3020

Ex-Officine Savigliano

Location: Turin / Italy



Scheme:

Linear circulation

Single anchor at the circulation tips.

Ex-Officine Savigliano is a commercial gallery that reuses an old industrial building into the urban regeneration program of the city of Turin. The aim was to preserve the identity of the old industrial place giving a new character based on the new productive models. The program is composed by commercial activities, workshop, residences and office giving to the area a new centrality which link the city and the new park. The new volumes together with the standardization form of the industrial building defined by the rigid rhythm of the structure were crucial. The old gallery, which was used for the transit of trains, was reinterpreted as a new core for the distribution of commercial spaces and activities. Part of the commercial volumes facing the gallery come out from the building, breaking the regularity of the facade

with non-repetitive rotations, different sizes and depths, and articulate the gallery and the large external pedestrian space. To underline the contrast between old building and added parts, the boxes are made by containers painted in red. Six new buildings, inserted behind the historic building, are arranged in a comb and host spaces for companies with high technological requirements. The covering is in aluminum panels alternated with glass strips. Large windows open onto the city and the new pedestrian walkways. The different transparencies of the glass increase the light and dark effects and emphasize the industrial memory of the area.



Facade- before the reuse/ © MuseoTorino



SNOS- before the reuse/ © MuseoTorino



Ex Officine Savigliano, Torino/ ©Edizioni Condé Nast S.p.A. -



Ex Officine Savigliano detail/ CC BY 3.0 IT



Ex Officine Savigliano interior view/ © 2020 Mole24



Ex Officine Savigliano interior view/ © 2020 Mole24

New Commerce/ New criterias base/

A Portland Design initiative/

COMMERCIAL-MASTERPLANNING

Developments must consider the connection of retail with adjacent spaces by focusing on communicating with people as communities contribute in making a sense of place by generating life and animation.

We believe that the design of public-centric places in conjunction with endorsing an animated commercial interface contributes to create a successful development. By understanding and defining the wants and needs of consumers as part of their customer journey within a holistic masterplan, all component parts: shops, restaurants, cafes can endorse a real sense of place with true commercial value.

This is the glue that binds retail developments together, responding to and connecting with the public realm, encouraging permeability for people to circulate and explore by endorsing experience and spirit into the retail environment.

Shelves \implies Product \implies Sale

Stage \implies Stories \implies Share

“

”

NOT **ONLY** SALES PER SQ **METRE**

ideas per m ²

engagment per m ²

senses per m ²

surprise per m ²

delight per m ²

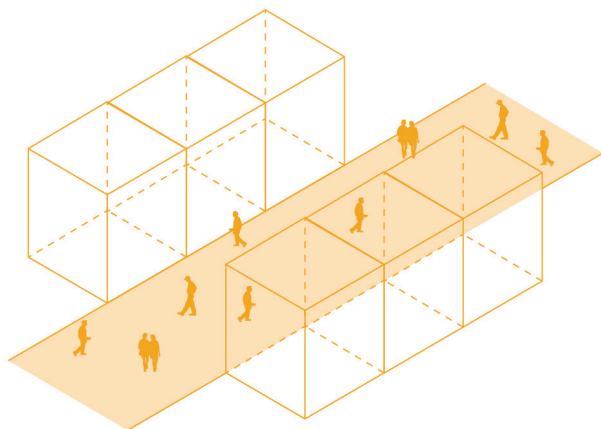
smile per m ²

clicks per m ²

shares per m ²

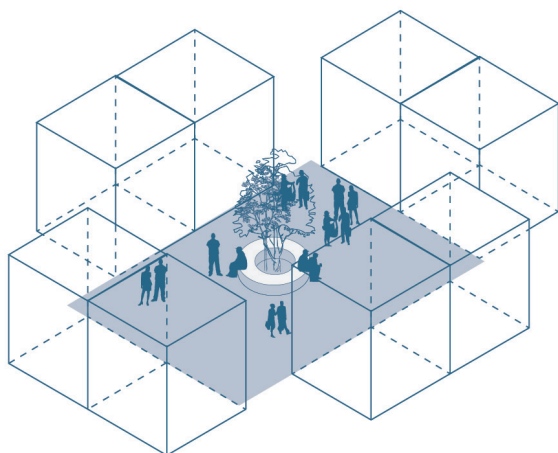
dwell per m ²

New Commerce/ Innovative program proposal/



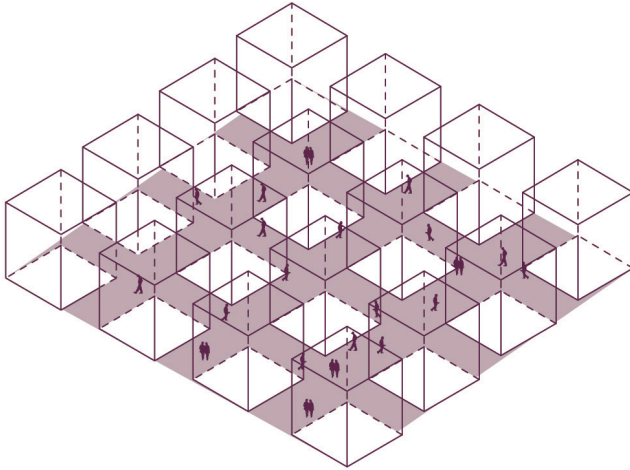
The Avenue Energy

A system to promote a dynamic organization. In the centre there are always human activities. The street and the linear interaction: from a path to a place in movement



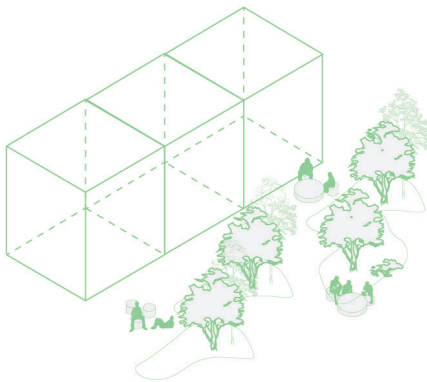
The Square Energy

Give choice through enclosed spaces. The square as enclosed space allow open socialization and interaction. It could become the "place of staying"



The Grid Energy

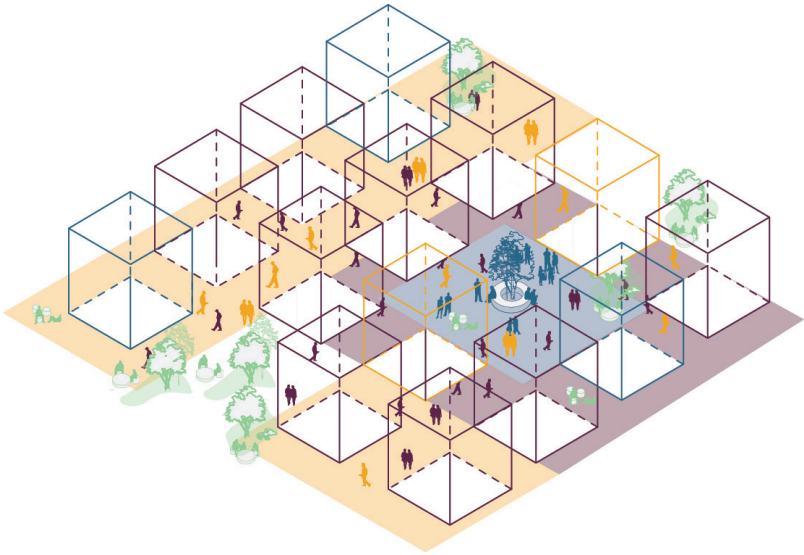
Traditional orthogonal grid patterns generally have greater street frequencies than discontinuous patterns. Orthogonal geometry also minimizes disputes over lot boundaries and maximizes the number of lots that could front a given street.



The Park Energy

An urban green zone is based on a renewed relationship between men and Nature. A green park define a new balance between Architecture and Nature

New Commerce/
Innovative program proposal/



Energies Fusion
Energies interweave
to create an edgy
fusion

"It's a tough time to be a retailer and a great time to be a shopper. We know that customers increasingly want it all. More brands, more stories, more service, more experiences, more convenience and more value. The design of future retail should be agile content, flexible infrastructure and multi-sensory immersion. A harmony of analogue and digital experience."
(Portland Design)

Today's task of the design and architecture of the contemporary and future retail seats on the adaptability and recruitment of people. The digital world creates a determinist competitor in terms of time, agility and avoidance of the queue. The competitive factors that bring upon the traditional retail experience rely then in the use of space and human interaction that the digital world can never afford to imitate in all its sensorial capabilities.

Henri Lefebvre sustained in his book "Right to the City" that "(...)the urban core becomes a high quality consumption product for foreigners, tourists, people from the outskirts and suburbanites. It survives because of this double role: as place of consumption and consumption of place." (1996 ,9)
The productive centers that dated from the Middle age as the first commercial cores need to be updated to experience or experimental centers rather than a centrality of economical power, that for the actual dates is supported by a technological web that covers larger distances.

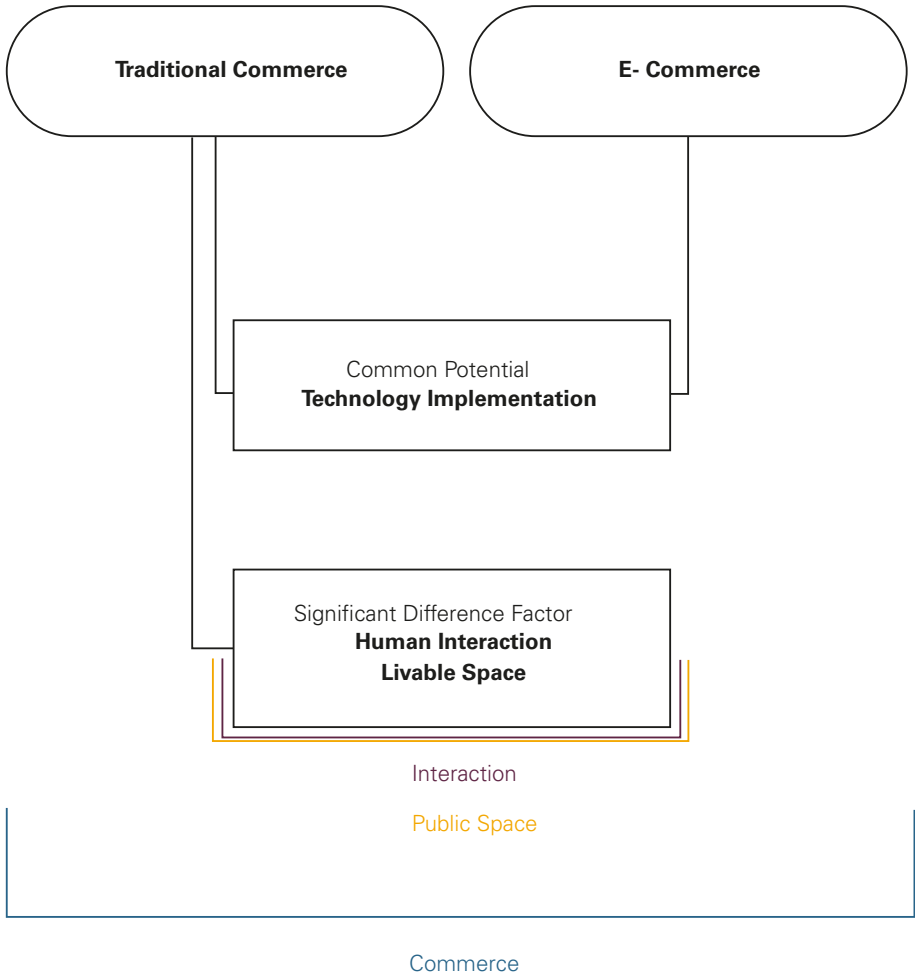
The customer-centric vision has then become the core of consumption design platforms and spaces. All the senses must be engaged in every step of the way, so that the recruitment of new public is assured as NO PLACE WOULD DELIVER THE SAME IDENTITY . The design should then follow not just the alignment of space, but the people and their interactions in it.

**“ Retailers need
to stop thinking
about making
shopping
entertaining...”**

**... and concentrate
on making
entertainment
shoppable
instead. „**

— Hamilton South/ HL Group

New Commerce/
Contemporary debate/



Types Toolkit



Public Space



Interaction



Commerce



Green



Playground



Sport-spot



Out-meeting

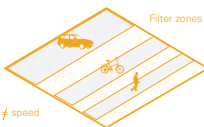


Natural Design

Water contact



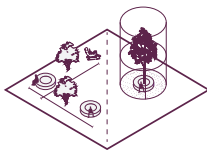
Out-eating



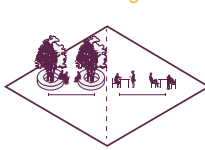
Transit



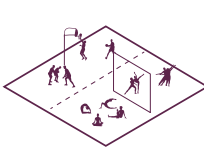
Out-Isolated



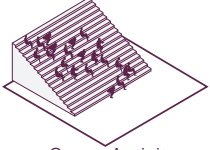
In-Isolated lounge
Free with zone



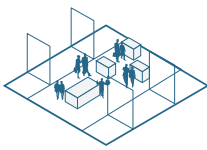
Visual
1st Degree contact



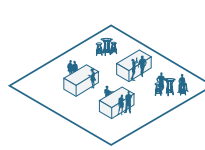
Group Activity
Active



Group Activity
Receptive



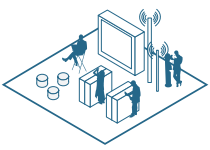
Pit-Stops
Street Pop ups



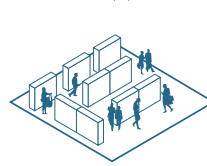
Assisted



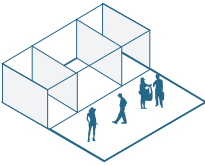
Contact



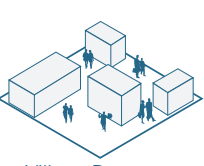
Digital



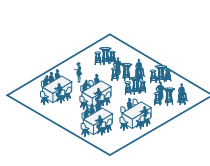
Paths pick-up



Show room

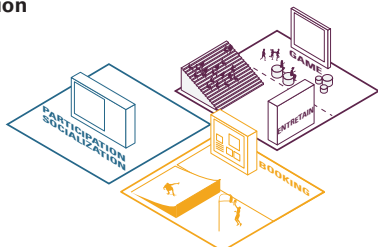


Village Pop ups

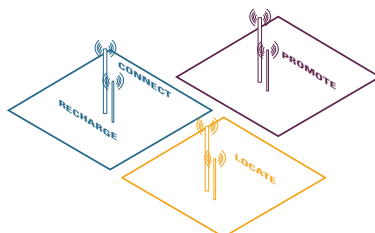


In-Eating

Technological Integration



Interactive wall



Connect Zone

PROJECT



PROCESS



Project Process/COPENHAGEN

Urban Analysis & Transformation Scenarios/



Ørestad

The site is located at the end of one of the main commercial axis of the city: Østerbrogade, in Ørestad neighborhood. This street is a strategic connection between the city center and the north part of the city

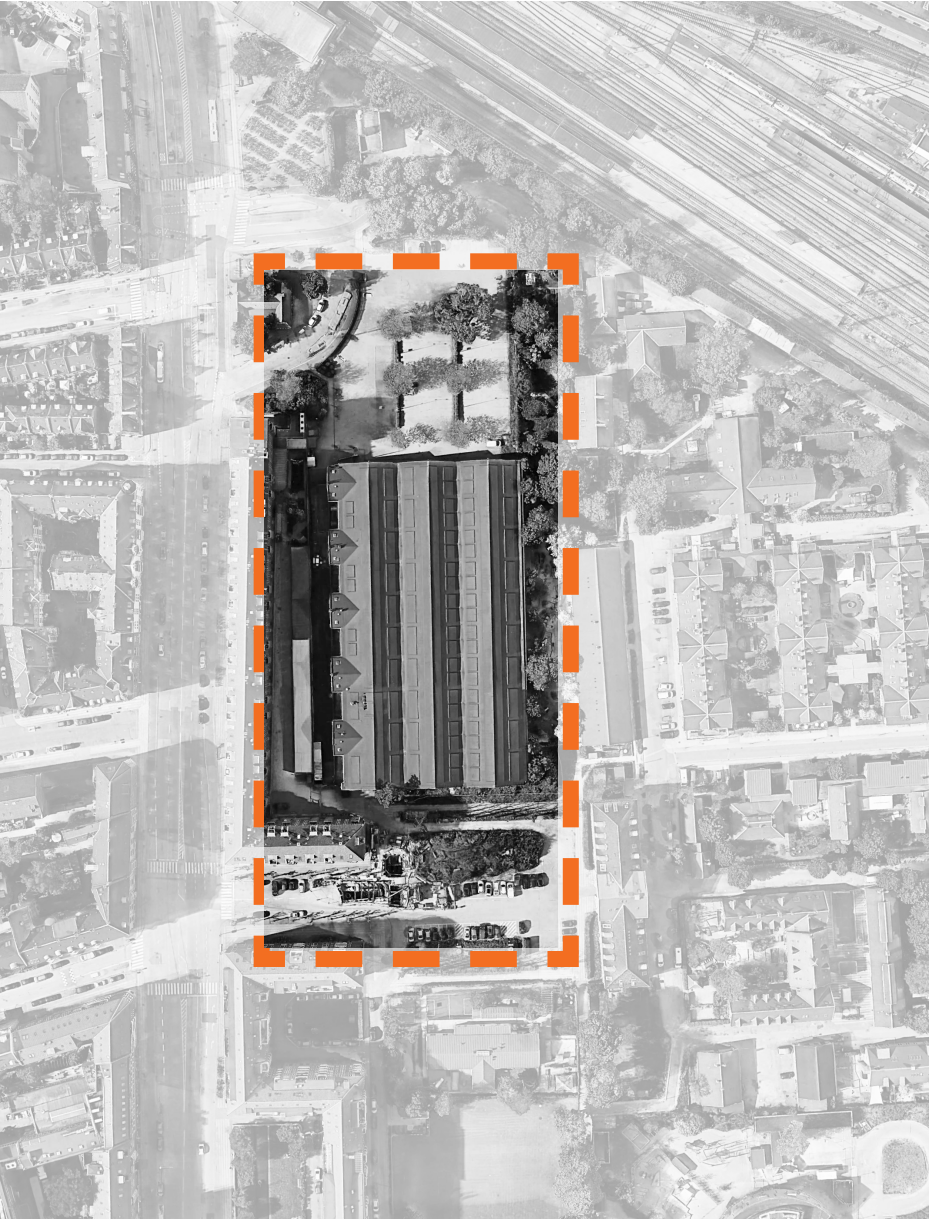
Svanemøllehallen.

Project Process/Turin

Urban Analysis & Transformation Scenarios/

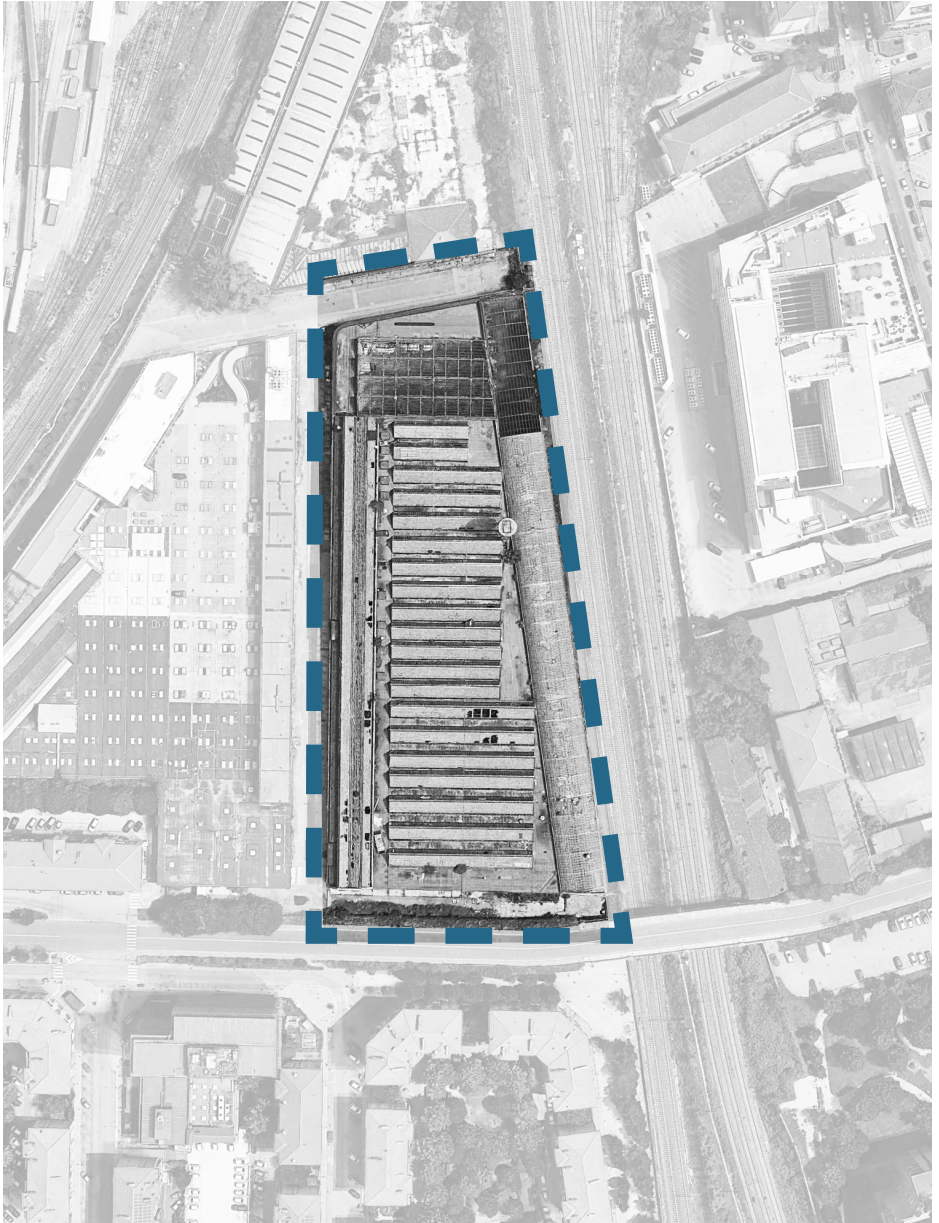


Site/
State of art/



Svanamollenhallen

**Site/
State of art/**



Ex OSI-GHIA

Svanemøllen/ Historical data/



Svanemøllen area

Svanemøllen is the name of an S-train station and an urban neighborhood in the Outer Østerbro in the north east of the City of Copenhagen , where the Coast Line and S-line passes under the Beach Road . Today the name is used as synonymous with the neighborhood, but originally there was a wind turbine that was later supplemented with steam power . Its top peak burned in 1892 , while the lower part, a tavern frequented by the troops of the armed forces, was sabotaged in 1944 .



There is also a sewer pump station, whose vent tower is designed as a minaret (1906 by Hans Wright). In a large area that was fulfilled in the years 1911 - 18 , there is a residential area, remise and ranger areas as well as the Swan Mill mill . Below is Denmark's largest marina. In June 2010 , the Swan Mill beach was inaugurated. The beach is an artificially landscaped beach designed by Thing & Waino landscape architects, White architects and Ramboll engineers.

In the area around the Swan Mill is also the Composer Quarter . The Swan Mill has also given its name to the Swan Mill Road , the Swan Mill Bridge , the Swan Mill Hall and the Swan Mill barracks .





1906

Svanemøllen Remise

The hall was built as the Svanemøllen Remise tramway remise in 1906 and operated as such until 1969.

1969

In the following year it housed the Tram Line 6, until it was converted into a bus operation building.

After that, it was for some years, among other places, the home of the Railway History Society's carts.



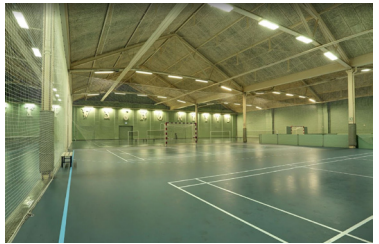
1975

Since 1975 sports have been cultivated in the 7,200 m² large hall.



2007

For a larger million, the hall underwent a much-needed renovation in 2007, where sports flooring and bathing facilities were significantly improved.

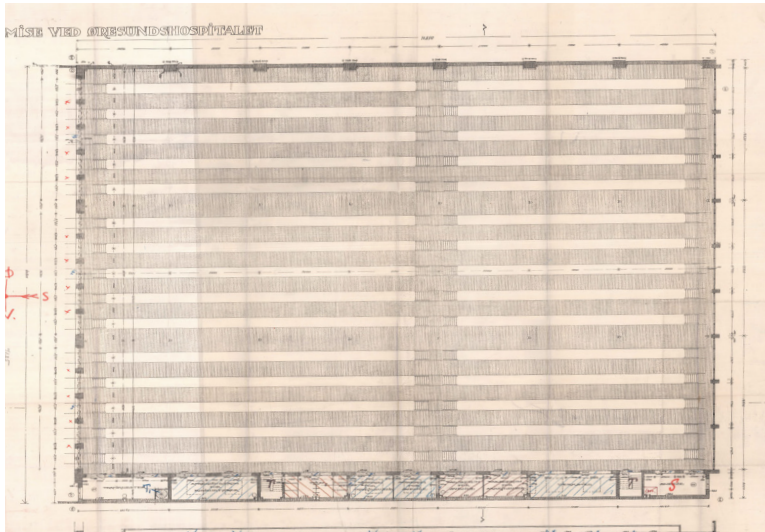


The names " Svanemøllen Remise " and " Svanemøllehallen " originate in the then old mill, Svanemøllen , which was located in the area close to the current location of the hall. The mill no longer exists.

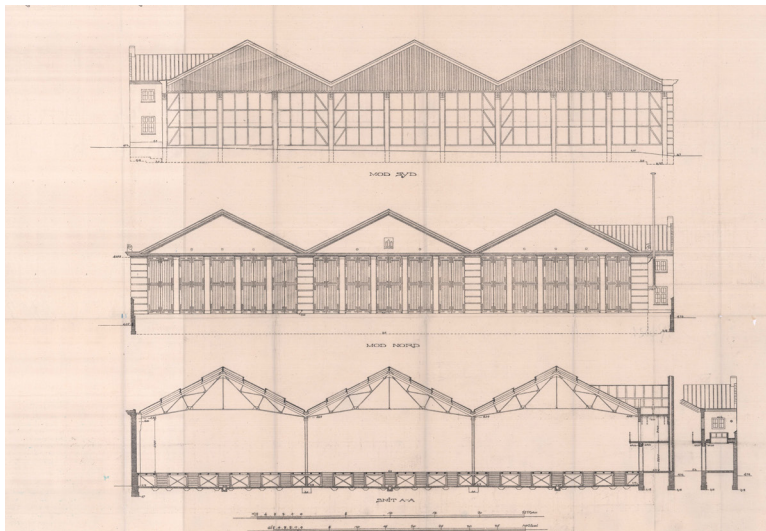


Svanemøllen/

1906: Historical Technical drawing/ Tram remise



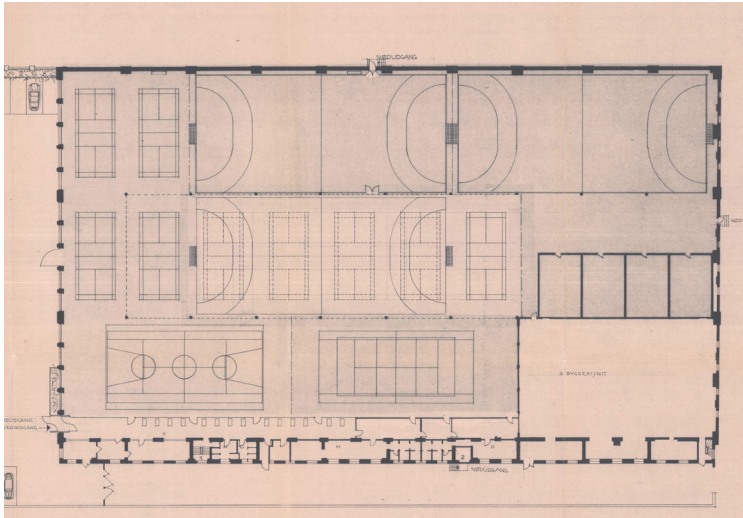
Svanemøllen Remise plans: filarkiv.dk archive



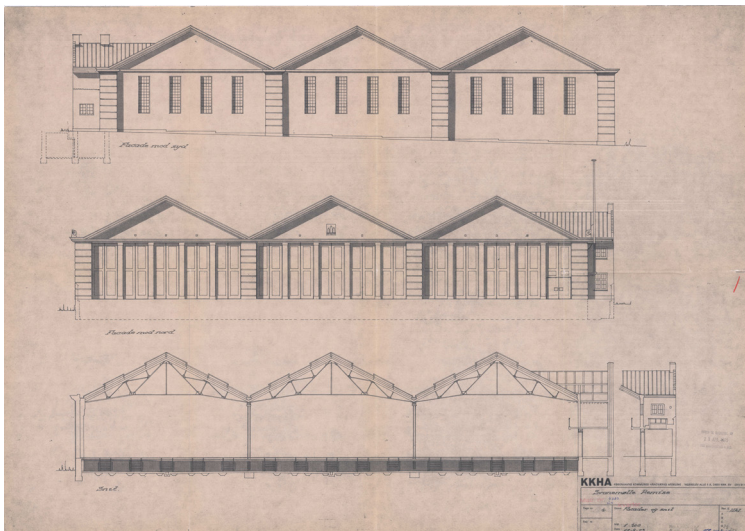
Svanemøllen Remise section and elevations: filarkiv.dk archive

Svanemøllen/

1975 : Historical Technical drawing/ Sport center



Svanemøllen sport center plans: filarkiv.dk archive



Svanemøllen sport center section and elevations: filarkiv.dk archive

Ex OSI GHIA/ Historical data/

The configuration of the area is documented from the first years of the twentieth century. The complex of buildings that were selected as project site is strating to be configured from the 1936 with the proximity of WWII.

The plot was bought by "Società Anonima Trafilati", and the main block of concrete was built to be a warehouse and production center of arms.

In the 1940 the lateral expansions were constructed, being first the west brick building, followed by the vault roof building in the east side.

(Archivio edilizio della città di Torino, Protocollo 1936_1_10179_dt_01)

As for the north-west entrance of the existing building, it was constructed when the property was bought by the OSI-GHIA in the 1960's. Starting the following years of story for the complex of buildings and the development of the area.



1962

With the first commissions coming from Innocenti and Fiat the factory arrived to 645 employees and had a manufactory rate of 50 cars a day.

1965

1,000 employees already work in three shifts and 120 cars leave every day, of which 60 are cars of the Ford Anglia Torino type.

1936

1960

April - Luigi Segre (Ghia) and Arrigo Olivetti (Fergat) opened the "Officine Stampaggi Industriali (OSI S.p.A.).

The factory is located at via Agostino da Montefeltro 8, in front of the Ghia establishment.

The main activity will focus on small series production, both for the models designed by Ghia and for third parties.

Ghia is then now as ine of the first car bodies in Italy, that went from manufacturing to the industrial production.





1966

OSI expanded its production area to include two buildings and the number of employees reached the 2,000.

1967

There is a noticeable reduction in the daily production and in the number of employees when the Ford and Innocenti stopped their commissions to the OSI, beginning its ceasing period.

At November the Centro Stile is closed.

1968

The OSI owners close the automotive production. The factory continues its activity in the molding sector by subcontracting to other companies.



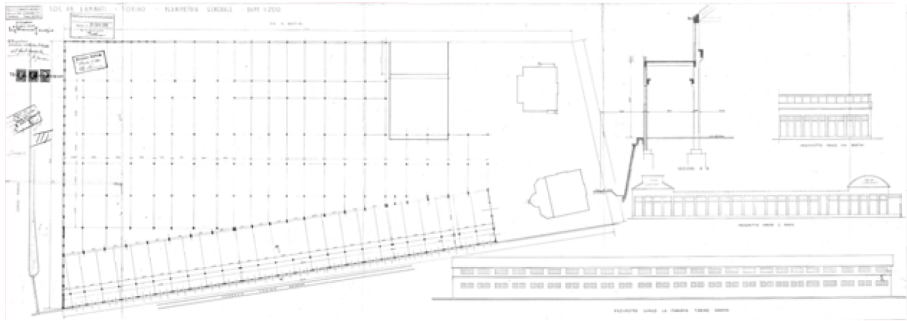
The buildings complex was abandoned and deteriorated in time. Weather and vandalism has been the main causes of its decadent phase of emptiness.

Nowadays, the building is a complete ruin, and the municipality had the incentive of a restructuring of the area that has not happen. The restructure operation planned to demolish most of the buildings, retaining just a couple of buildings of the factory. In its place the projects were supposed to host residential, commercial and wholesale businesses, complemented with some services and offices. The winning project in 2010 planned to set a pedestrian square and underground parking as well.

The project was never begun, and has kept this area waiting for new proposals and interventions.

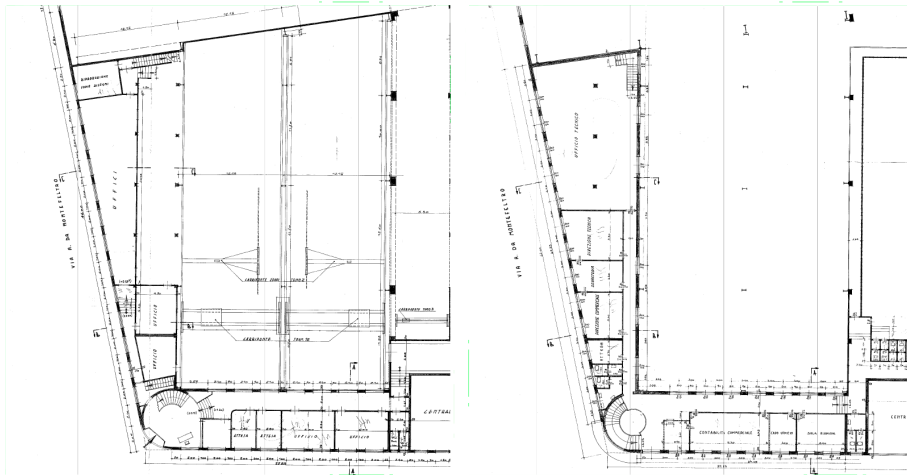
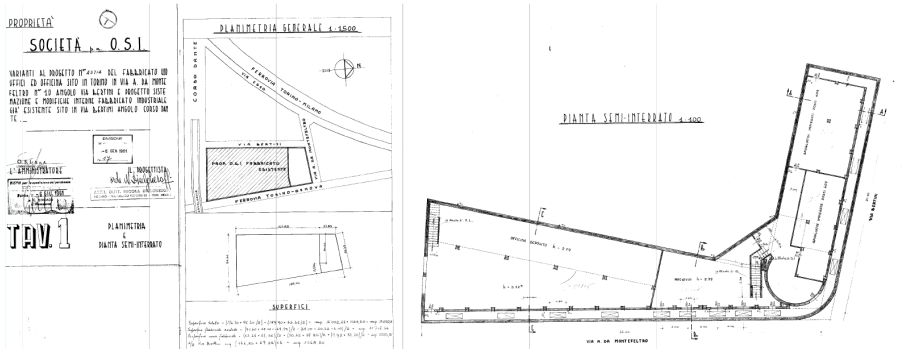
1 ELABORATO PROGETTUALE 1940 ING. JACAZIO SCALA 1/500

SCALA 1/500



2 ELABORATO PROGETTUALE 1961 ARCH. DIULGEROFF

SCALA 1/200



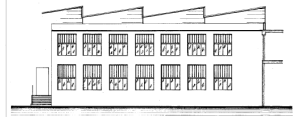
PROSPETTO SU VIA BERTINI



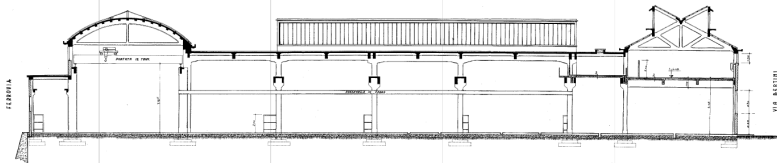
PROSPETTO SU VIA A. DA MONTECELTRO



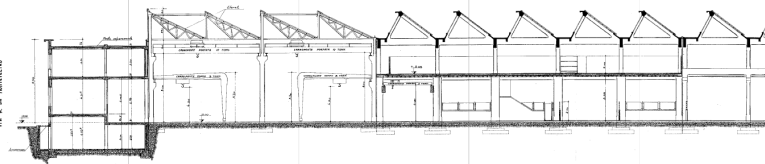
PROSPETTI FABBRICATO



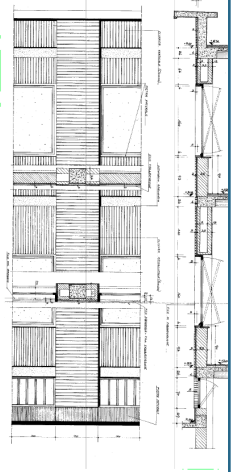
SEZIONE TRASVERSALE LUNGO VIA A. DA MONTECELTRO



SEZIONE LONGITUDINALE LUNGO VIA BERTINI

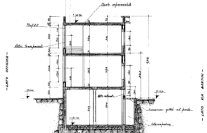


PARTICOLARI FACCIATA s. so.

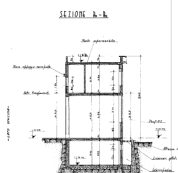


CORRADO BATE

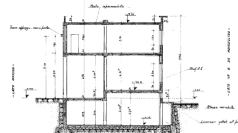
SEZIONE A-A



SEZIONE B-B



SEZIONE C-C



Copenhagen/ Urban Analysis & Transformation Scenarios/

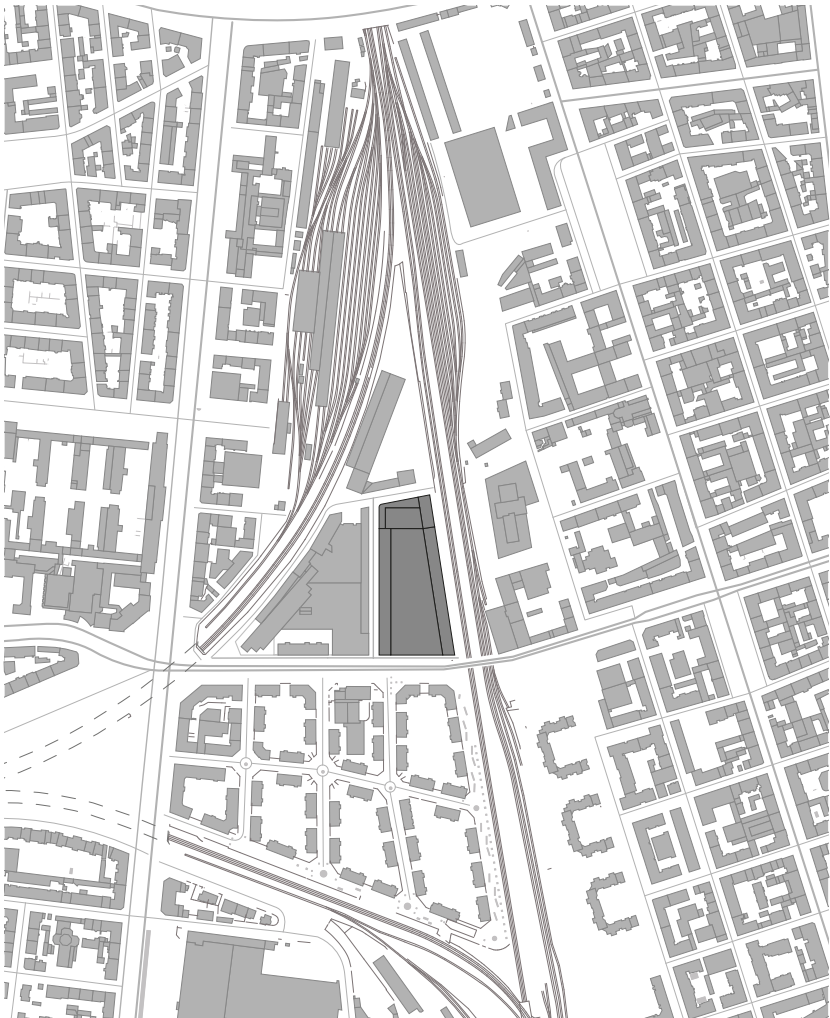
Fills and Voids: The site is surrounded by a range of different urban spaces that are more regular and dense towards the south part and become gradually less dense and inhomogeneous towards the north. To make the project a successful new centrality it will need to act as a connector between some of these places and make the flow between others feed into the spaces around the site, making the project the natural route to take. Osterbro has a compact center and many of the popular downtown areas are within close proximity to each other. Today they can feel individual, isolated and disconnected by the railways' system, but it is easy to imagine them connected into a coherent and a lively city center that would encourage more pedestrian and bicycle movement between the different places.



Turin/

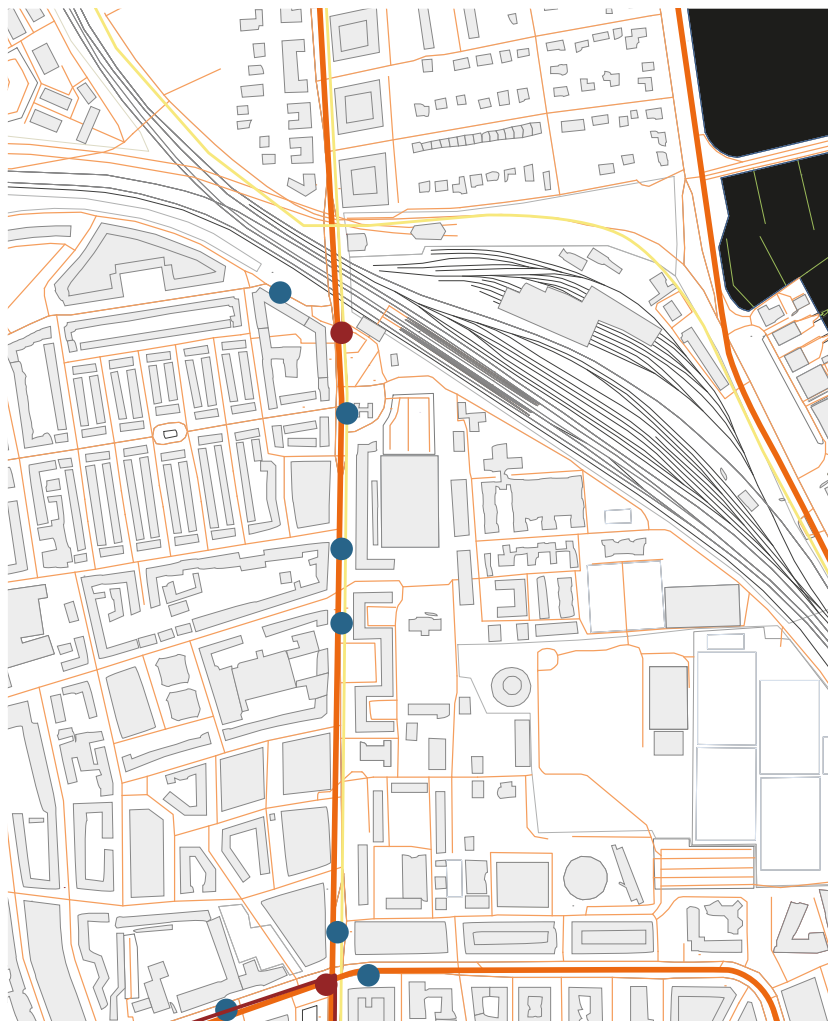
Urban Analysis & Transformation Scenarios/

Fills and Voids: The plot is located in a difficult site in between two of the main district of Turin: Crocetta and San Salvario. The urban fabric is quite dense and following the usual regular block of Turin. The System is broken from the sharp division made by the railways which make the building be located in a railway island that makes the clear division between the neighborhoods. The plot become an important and strategic point in order to reconnect this two districts.



Copenhagen/ Urban Analysis & Transformation Scenarios/

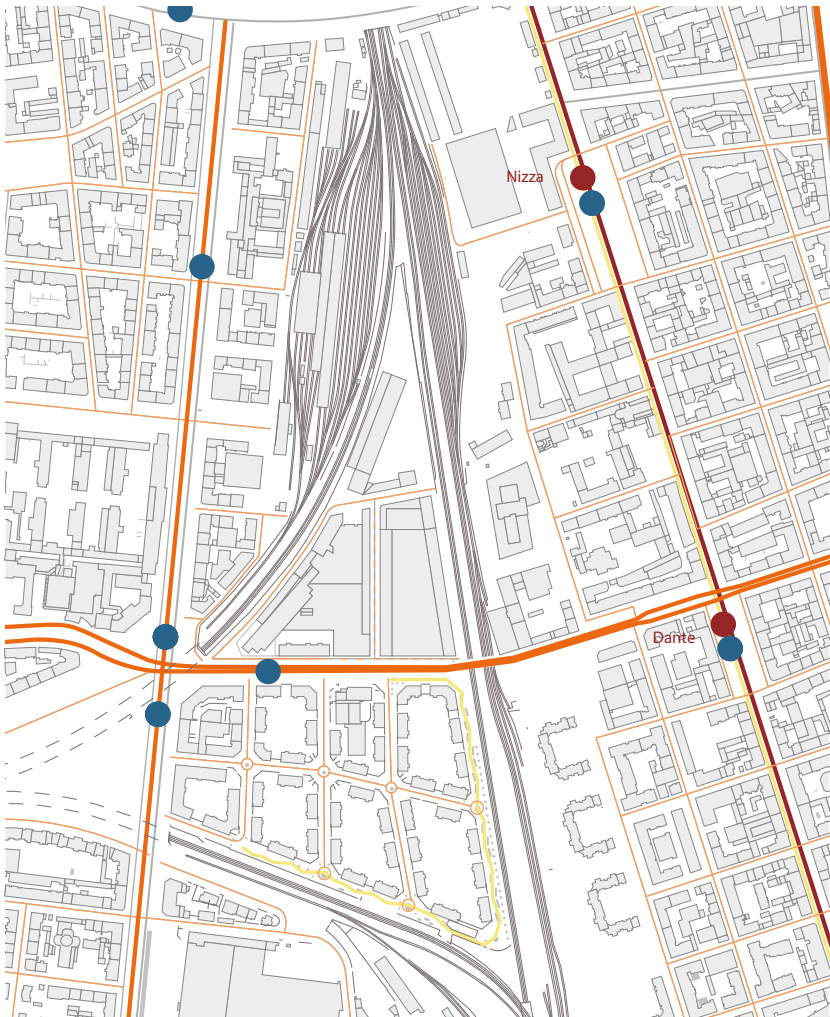
Mobility and connections : The site is placed in a strategic point due to the fact that the Svanamøllen metro station is facing the building. The plot is located right along the main street of Østerbrogade in which a very well developed system of public transportation is designed. Also the cycle path, which is a fundamental infrastructure in Copenhagen, is present in the whole area connecting the center of the city with the suburb.



Turin/

Urban Analysis & Transformation Scenarios/

Mobility and connections: The main features in the infrastructure system are the presence of an important railways system which marks the division between San Salvario (east) and Crocetta (west). The hierarchy of roads follows the standard of Turin in which there is the main street (Corso Turati e Corso Dante), side street, urban street, and local street. The area is well served by public transportation as lines 4 and 42 pass by the plot and, more important, it is located between two metro stations. Recently, a pedestrian and bike lane was built on Via Nizza.



Copenhagen/ Urban Analysis & Transformation Scenarios/

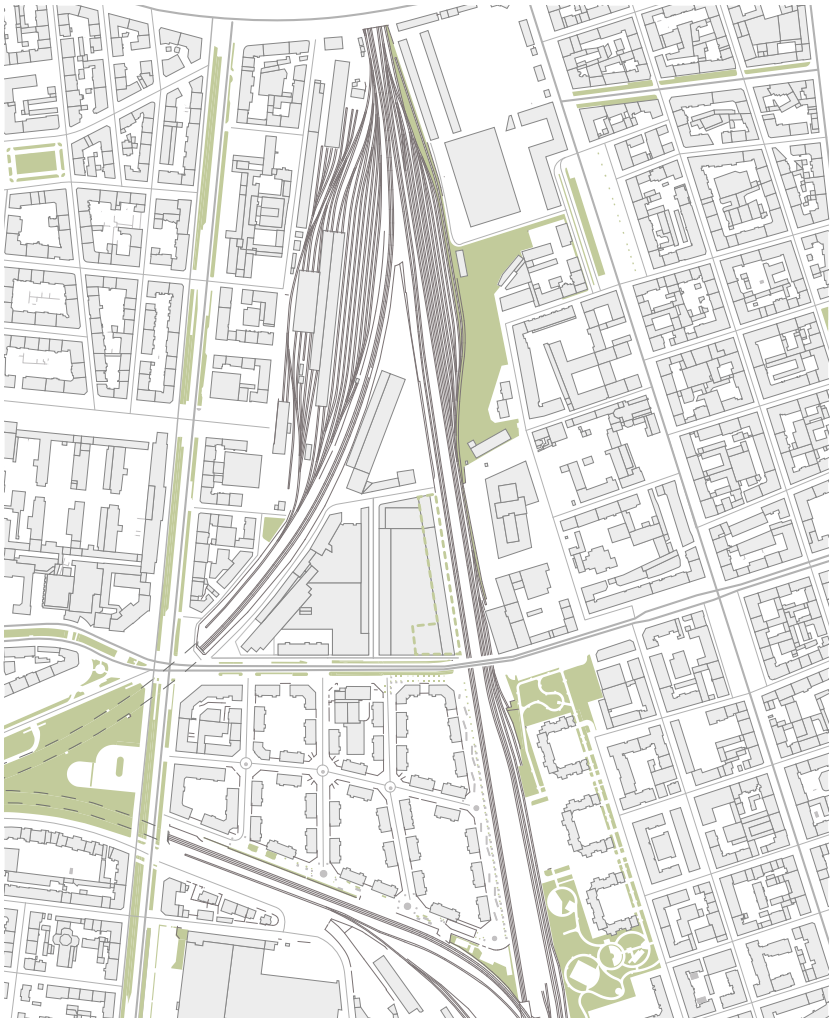
Green areas The quality of urban agglomerations is also measured in terms of the green space available for each inhabitant. Urban parks, gardens, street trees, lawns and natural spaces are essential elements in the city, elements capable of making it more sustainable and of human scale. Green areas are present in the close surrounding of the plot, giving the opportunity of having a variety of spaces which can be connecting in the major green system which is extended through all the South-east part until it arrives to the sea. Many of the green areas are Public outdoor sports areas



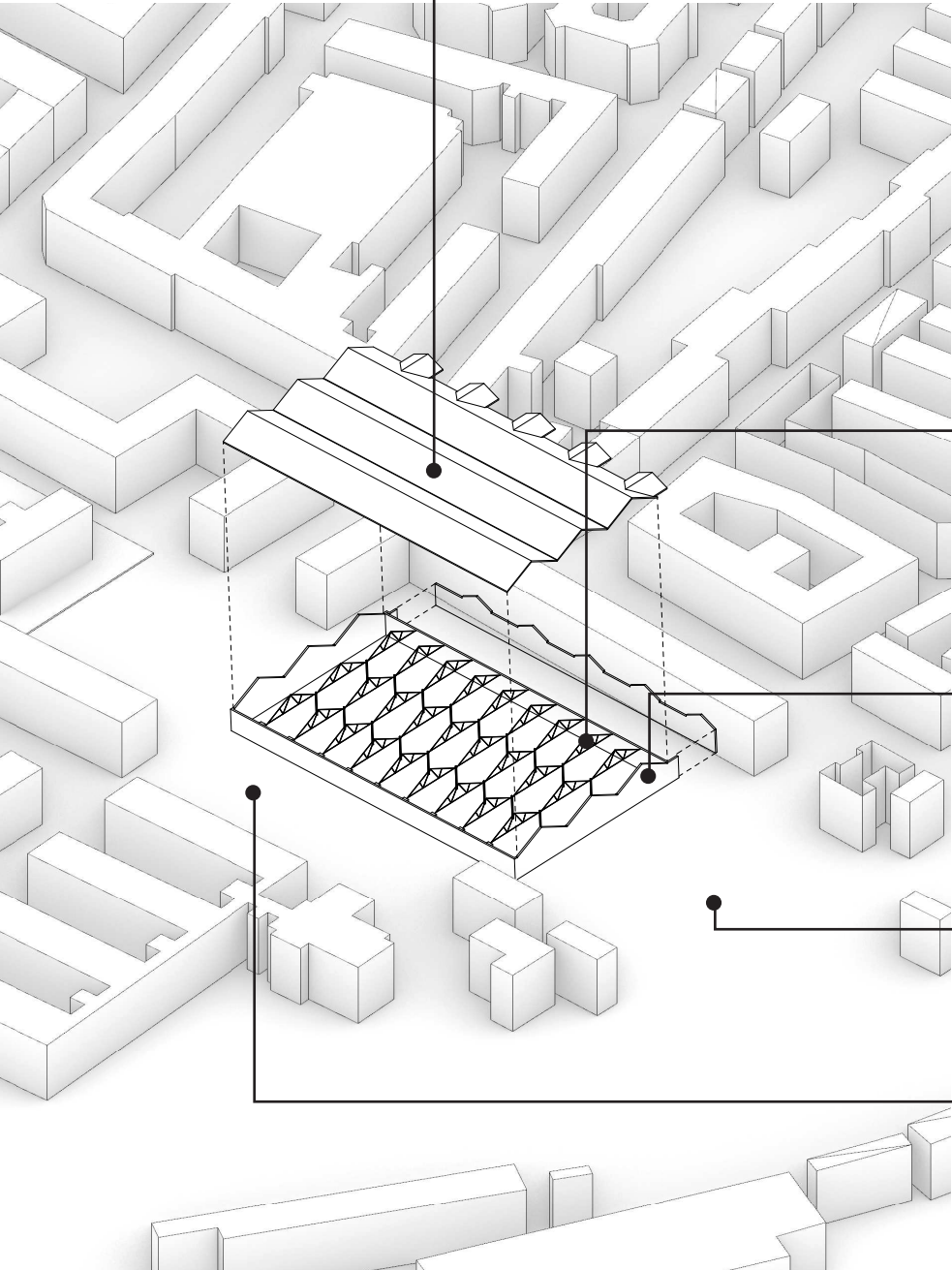
Turin/

Urban Analysis & Transformation Scenarios/

Green Areas: Two main big green areas are present in the Proximity of the plot: Park of Clessidra on south-west, and Park of Muratori, on the south-east. There are two green areas beyond the two railroads which can be integrated into the project design as the actual state of the plot does not have any green area. Some private courtyard on the other side of Ponte Dante are present but they are not visible and not accessible.



**Design drivers/
Possibilities/**



Optimized geometry- Sloping roof

Protection against Environmental Hazards

The roof design helps to direct the water away from the building and leaves little chance of waterlogging.

Sustainability

Posibility to integrate solar panels within the structure of pitched roofs.

Reuse rainwater than flat roofs. The external drainage system is easier to modify and maintain.

The natural ventilation underneath the top roof layer significantly improves the thermal efficiency of a building.

Versatility

Pitched roofs can be converted to house substantial extra living space inside. This can be invaluable should extra room is required in the



Interchangeable modularity

Central to our conception of future adaptability is a design that allows the building to be reprogrammed by plug-and-play services and structures. This allows for the building to adapt to a changing business case and tenants demands, responsively and without waste.



The Primitive Hut

The building distinctive roofs represent a modern interpretation of the typically sloped roofs of the former workshop buildings, and it give to the representative brick Facades a unique feeling of the industrial heritage.



Active-based design

Providing areas for diverse activities in the public realm creates intimate spaces for social interaction



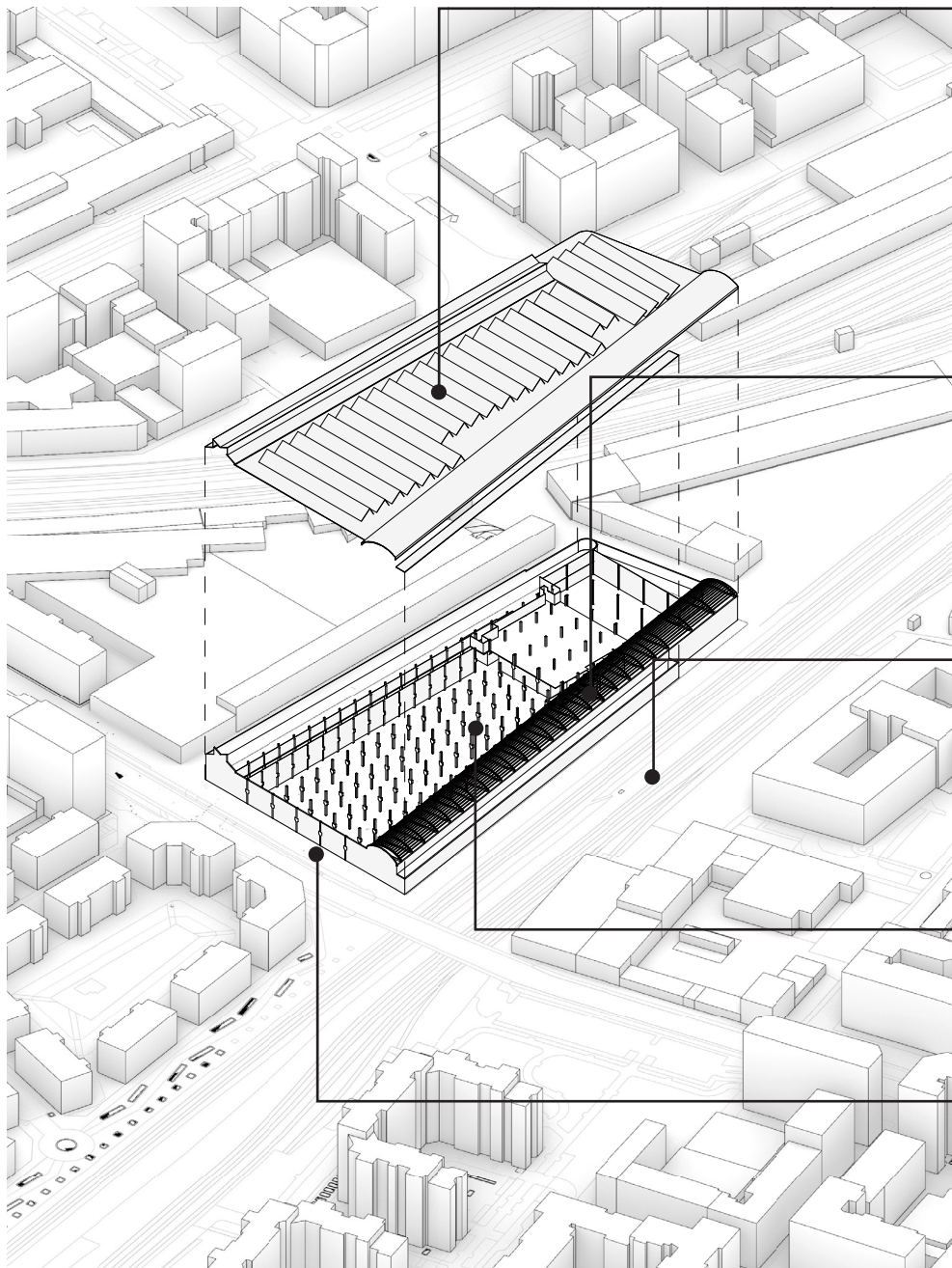
Green strategies

Organic greenery and small hills creating different pockets and a filter zone

The entire length of the path along the building east facade is brokendown with curved low greenery.



Design drivers/ Possibilities/



The roof- An unconventional opportunity

The roof design helps to bring inside natural light thanks to a series of skylight. It also help guarantee the natural ventilation of the indoor spaces.

Posibility to integrate solar panels within the structure of pitched roofs. The huge size of the roof is composed by flat parts which can be used as rooftop terrace.



The gallery

The old "reparto presse" is configurated as a long tunnel covered by a curved roof. These space has a key role in the whole complex as it is just after the railway which means noise, pollution, and dangerous areas. Parts of the gallery's roof is also fall down.



Railway limit

The railway on the east side of the building represent a barrier which not allow the inclusion of the building itself into the city. The plot is located in between railway paths and it is so almost impossible to access



Industrial indoor feeling

Providing areas for diverse activities in the public realm creates intimate spaces for social interaction



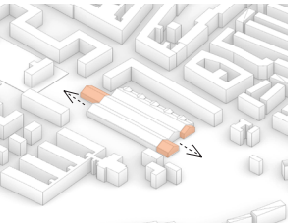
Plot Access

The building is located in a "railway island" with just one road coming inside. The side of the building facing the street is also in a different height level and it makes difficult to access into the area.

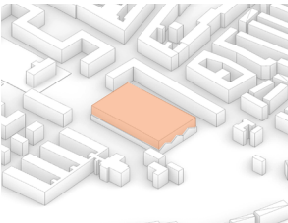


Copenhagen/ Re-Envisioning the space

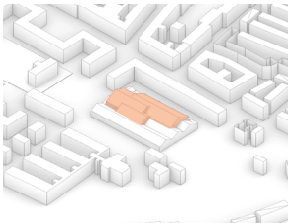
Matrix of possibilities/



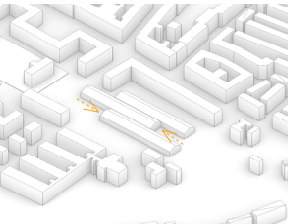
Infil



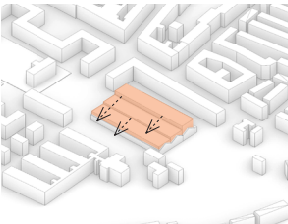
Box in the box



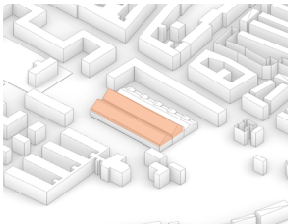
hut in the hut



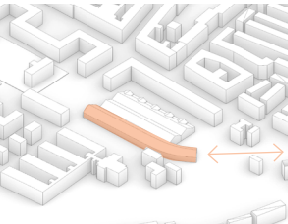
Overrun



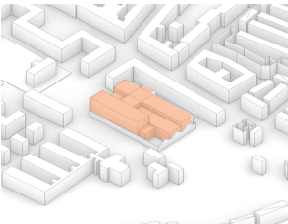
Terraces



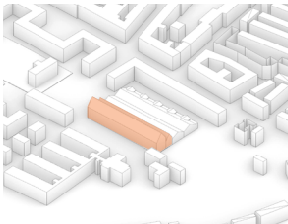
Bring up



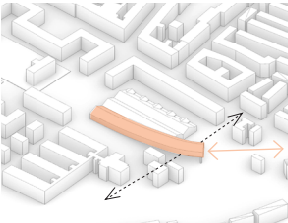
Oriented access



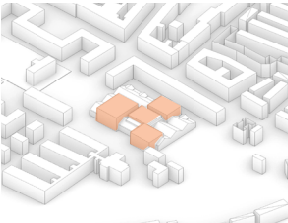
Cohesive Blocks



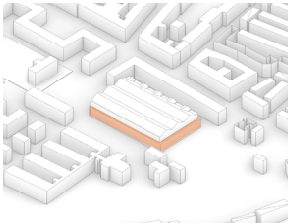
Original hut



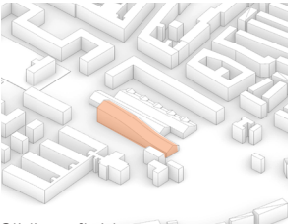
Oriented/High access



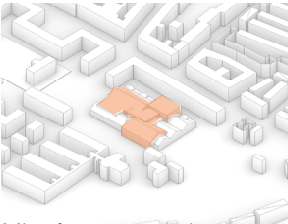
Multiple-boxes



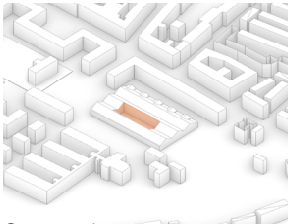
Basement



Sliding+fluid



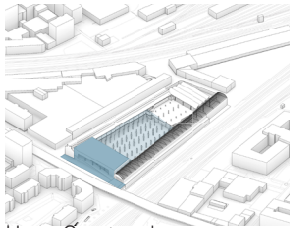
Mix of compenetration



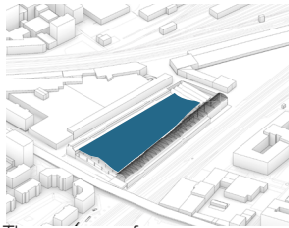
Courtyard

Turin/ Re-Envisioning the space

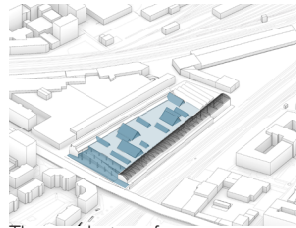
Matrix of possibilities/



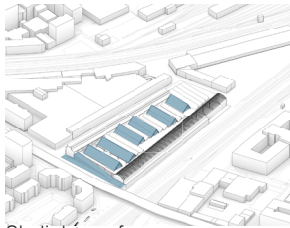
Huge Courtyard



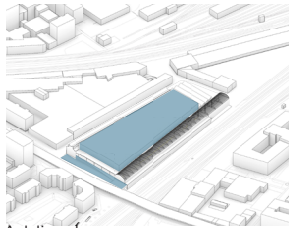
The cover roof



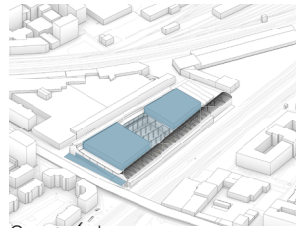
The market roof



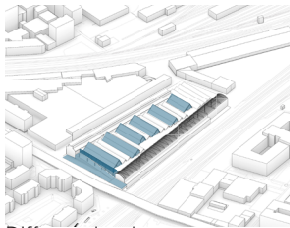
Skylight roof



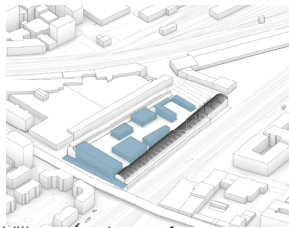
Adding box



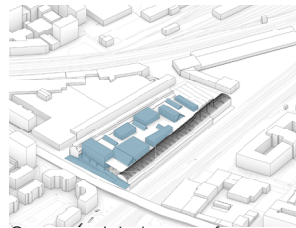
Courtyard



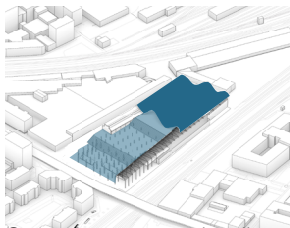
Different level access



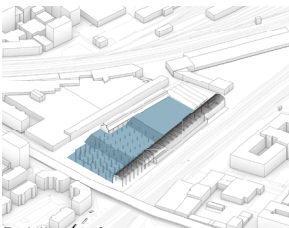
Village on the roof



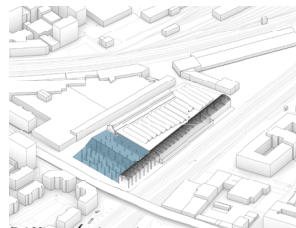
Commercial plaza roof



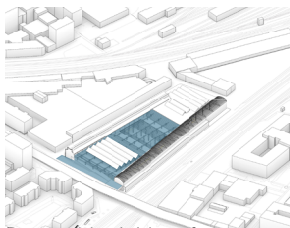
Open plaza + covered mall



Public rooftop



Different level access



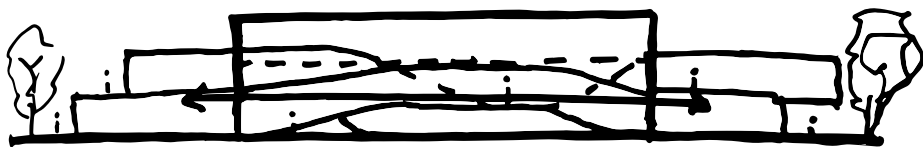
Permeable rigid roof

Vision/ Copenhagen

New public space with commercial interface

With the aim of emphasize the original function of the existing building as "crossed building," the concept envisions a mixture of volumes, voids and paths that cross the building while overlapping each other. So people go through the building from north to south and viceversa. The complex includes – in addition to the commercial spaces – areas for temporary exhibitions, outdoor spaces, offices, and places for study and leisure. The project is designed around a large void full height space

which gives access to the commercial galleries. Outside, a pedestrian walkway follows the outline of the concept of the original railways coming out from the existing building, restoring an urban link that has been destroyed over time. The fluid and sinuous shapes, the variety and interweaving spaces and the modulated use of natural light lead to a spatial and functional framework of great complexity, offering constantly changing and unexpected views from within the building and outdoor spaces.

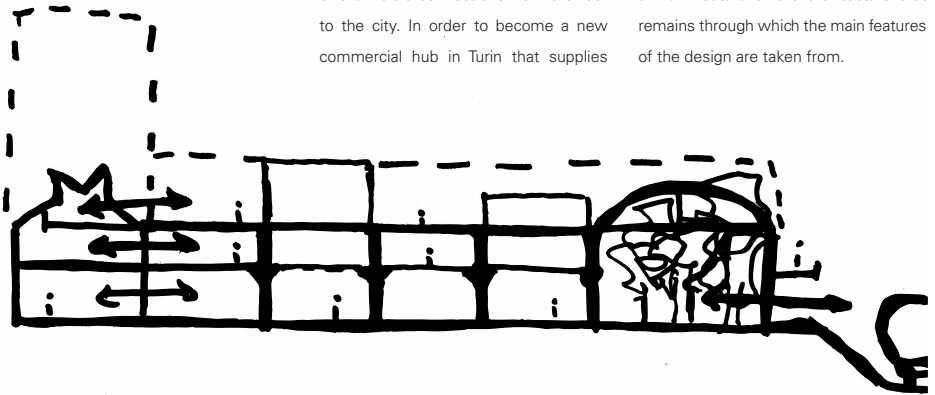


Vision/ Turin

New public space with commercial interface

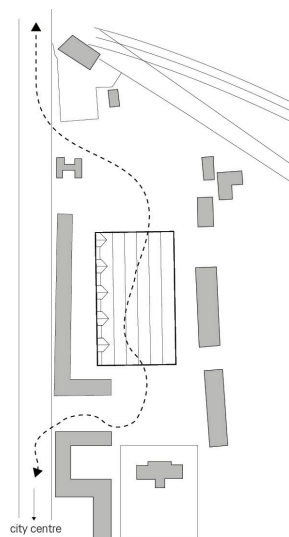
With its proximity to the city center, a well-connected system of transportation and the potential to reuse the structure characteristic of the building complex, the site is destined to become a new urban square, out of the ordinary, by transforming the roof into an active part of the project. Taking advantage as well of the visible connections from the roof to the city. In order to become a new commercial hub in Turin that supplies

services and function to one of the most complicated areas between the districts of San Salvario and Crocetta, divided from the railway. The relation towards the railway purposes a filter from this polluted context, and changed from a blind wall to an open park were the green retakes and coexist with the structure, a main feature of the architecture that remains through which the main features of the design are taken from.



Concept/ Coepnhagen

Gross Concept Diagrams/



Main Circulation inclusion

The building is hidden from the main flow of Osterbro street. A crucial point is allow the building to be part of the flows of the area

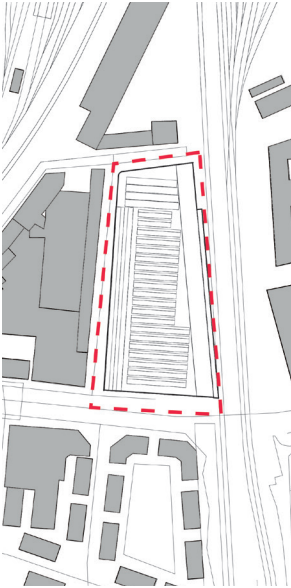


Railway

Historically there was a complex system of track overlapping / symbol of the movment, of the flows/ evocative imaginary

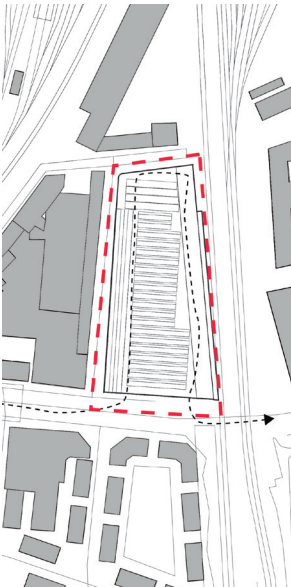
Concept/ Turin

Gross Concept Diagrams/



Railway island

The site is located in a very hard position to access as it is surrounded by a bridge with different height and a railway system

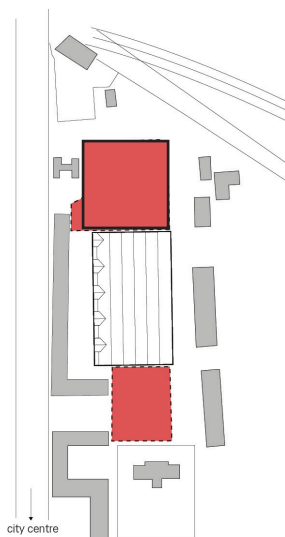
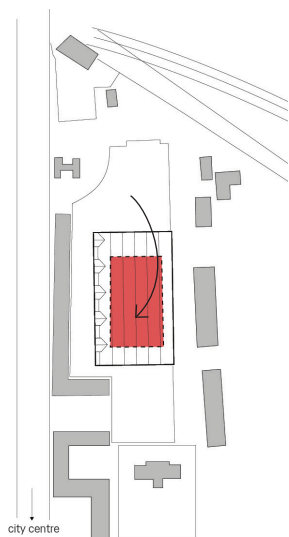


Cul-de-sac

The possible main flow to let people to pass through the building make it a cul-de-sac

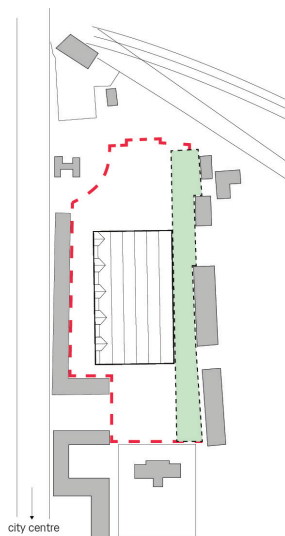
Concept/ Copenhagen

Gross Concept Diagrams/



Squares

The building has two squares in the north and in the south side. The north square is also facing a train station. The other one is more private and intimate

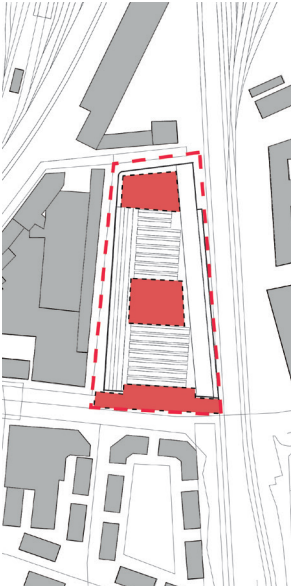


Green Filter.

On the east side there is a green area to divide the public areas from the residential. It is a place of great potentiality in order to get a filter zone and a green oasis.

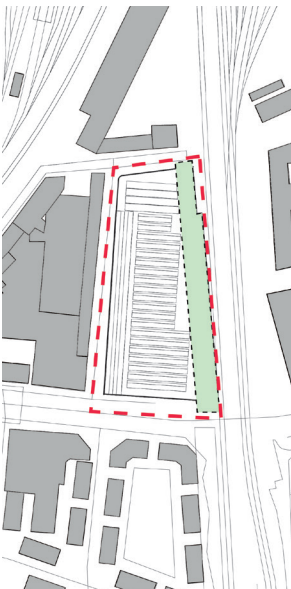
Concept/ Turin

Gross Concept Diagrams/



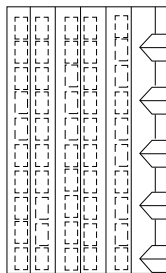
Roof potential

The huge size of the roof, the fact of having a free view all around and an easy access directly to the roof, Make this space very attractive and with opportunities



Green-filter zone

The old “reparto presse” is configurated as a long tunnel covered by a curved roof. These space has a key role in the whole complex as it is just after the railway which means noise, pollution, and dangerous areas. The north part of the gallery roof is fallen.



Existing condition

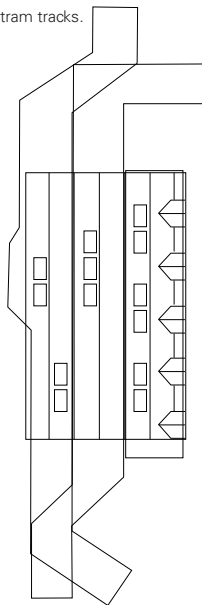
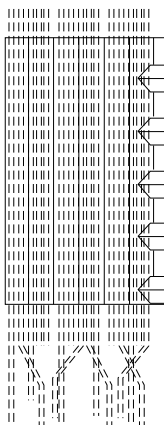
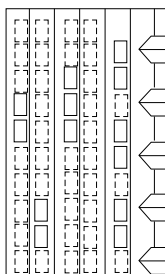
Because of the different functions it has taken in time, the current building have closed the original skylights distributed in the 3 bay building.

Copenhagen/ Concept Diagrams in place/

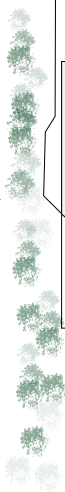
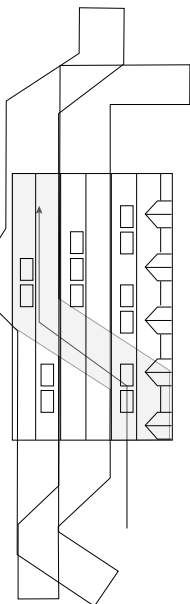
Volumes that go through the Building
as the tram tracks.

Recover some light for the new
function and spatial sensation.

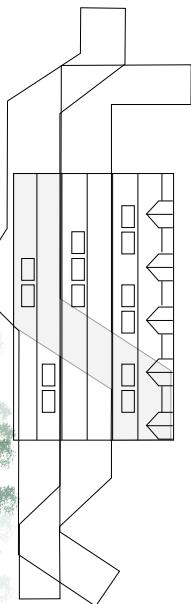
Recall of the tramway remise memory

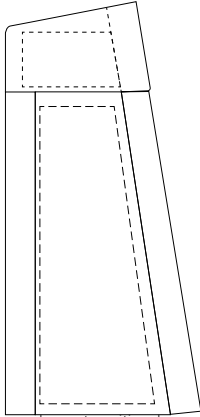


From the third bay a
void passage creates
the third crossing
through the building.
Beginning with the
atrium in the receiving
south-west corner.



A green zone, already
existing, is design to
complement the public
space, respecting is
function as a filter from the
residential and educational
buildings in the west side.





Linear park as a transitional space towards the railways.

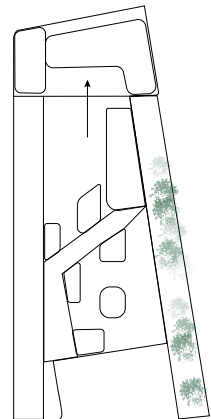
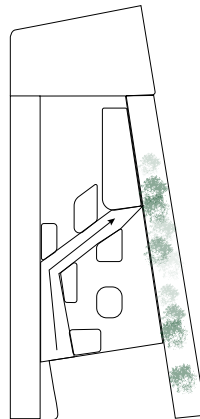
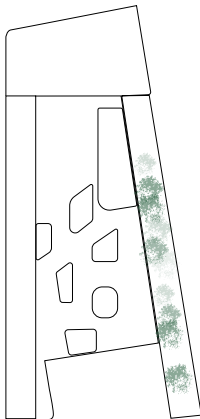
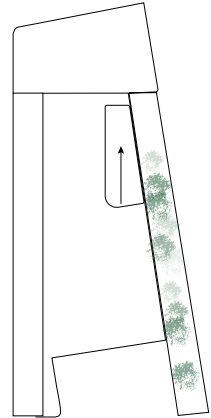
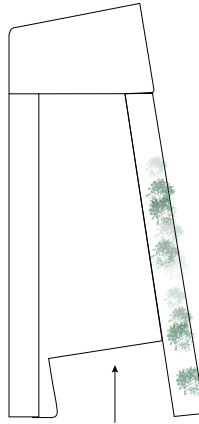
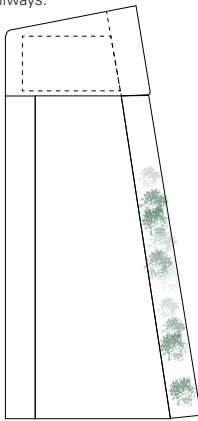
Existing condition

By the degradation overtime part of the skylight in the north section of the building have fallen with a part of the round roof structure in the same section. The objective is to take advantage of the demolished to put in the new and create a more open relation in the most critique points.

The south facade is pulled back to facilitate the building communication with the bridge and open its access.

Turin/ Concept Diagrams in place/

New multi-level connections and additional public space from the existing roof.

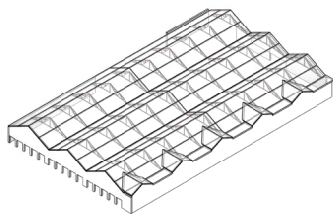


Activate the roof with activities.

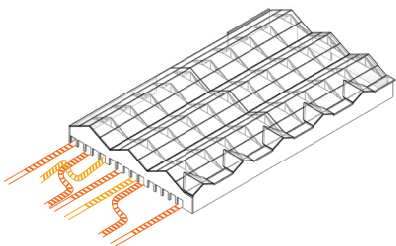
Design the main path

Enclose the new square

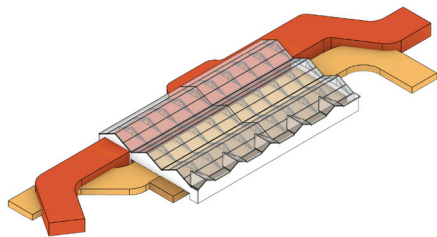
Copenhagen/
Operation Diagrams/



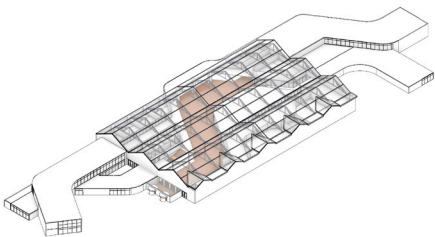
Existing Building



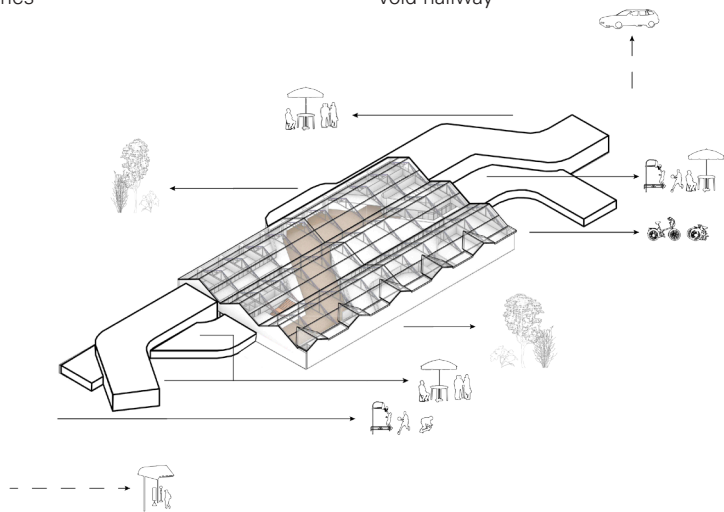
Old rails system overlapping



New Volumes

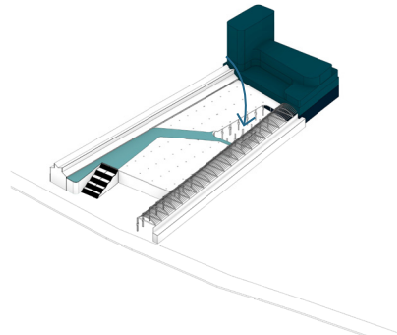
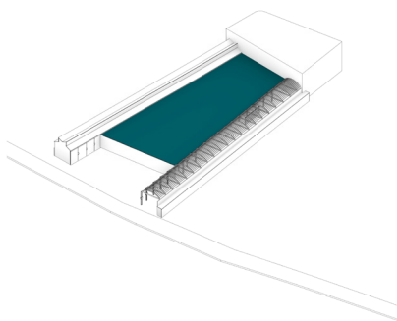


Void hallway

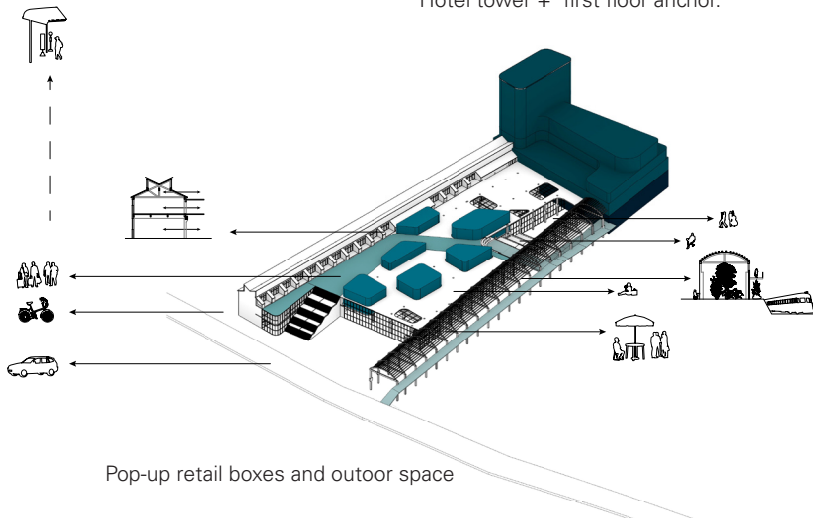


Outdoor Spaces Differentiation

Main Facade push-back - New square



Street path to public multifunctional steps;
Hotel tower + first floor anchor.

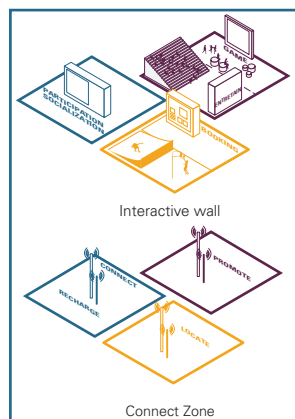


Pop-up retail boxes and outdoor space

The diagram illustrates a building complex with various zones and activities. The building is shown in a 3D perspective view, with a central courtyard and surrounding streets. The zones and activities are labeled as follows:

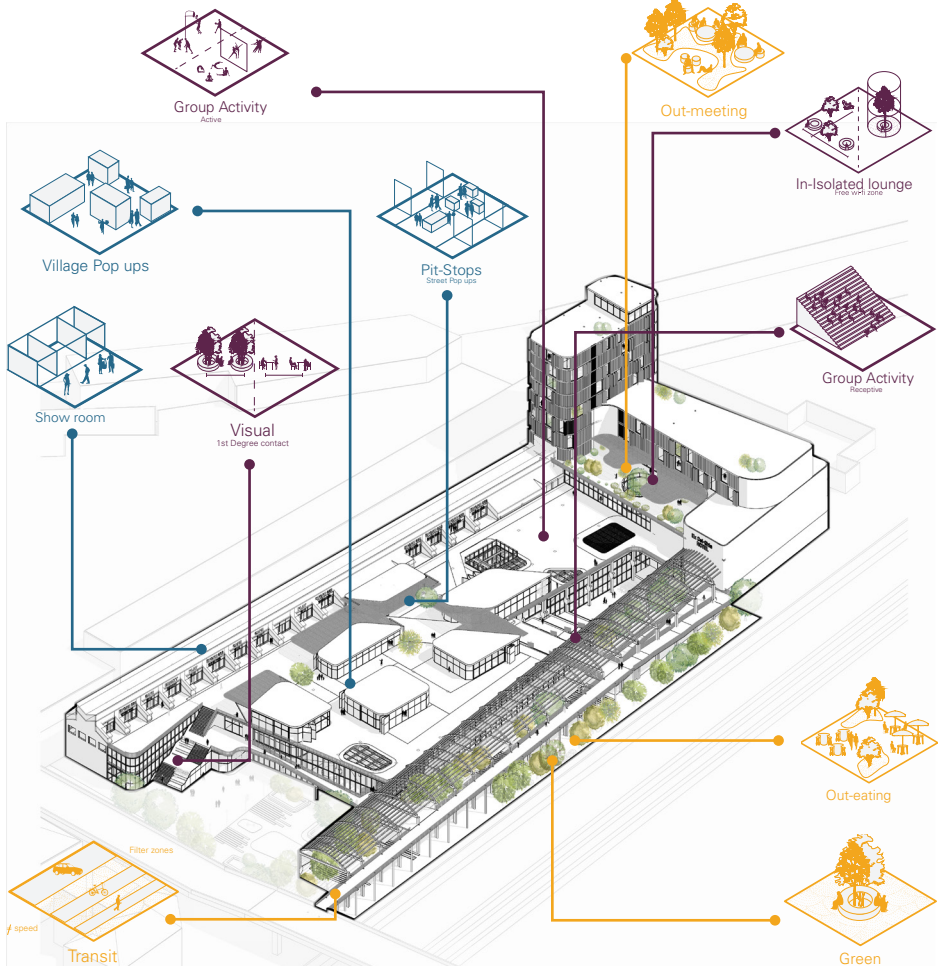
- Sport-spot**: Located near the top left, connected to a building wing.
- Out-eating**: Located near the top center, connected to a building wing.
- Water contact**: Located near the top right, connected to a building wing.
- Connect Zone**: Located near the top right, connected to a building wing.
- Out-Isolated**: Located near the top right, connected to a building wing.
- Green**: Located near the top right, connected to a building wing.
- Group Activity Receptive**: Located near the top right, connected to a building wing.
- Visual 1st Degree contact**: Located near the bottom left, connected to a building wing.
- Assisted**: Located near the bottom left, connected to a building wing.
- Transit**: Located near the bottom center, connected to a building wing.
- Group Activity Active**: Located near the bottom right, connected to a building wing.
- Pit-Stops Street Pop-ups**: Located near the bottom right, connected to a building wing.

The diagram also includes a legend for 'Visual 1st Degree contact' and 'Assisted'.



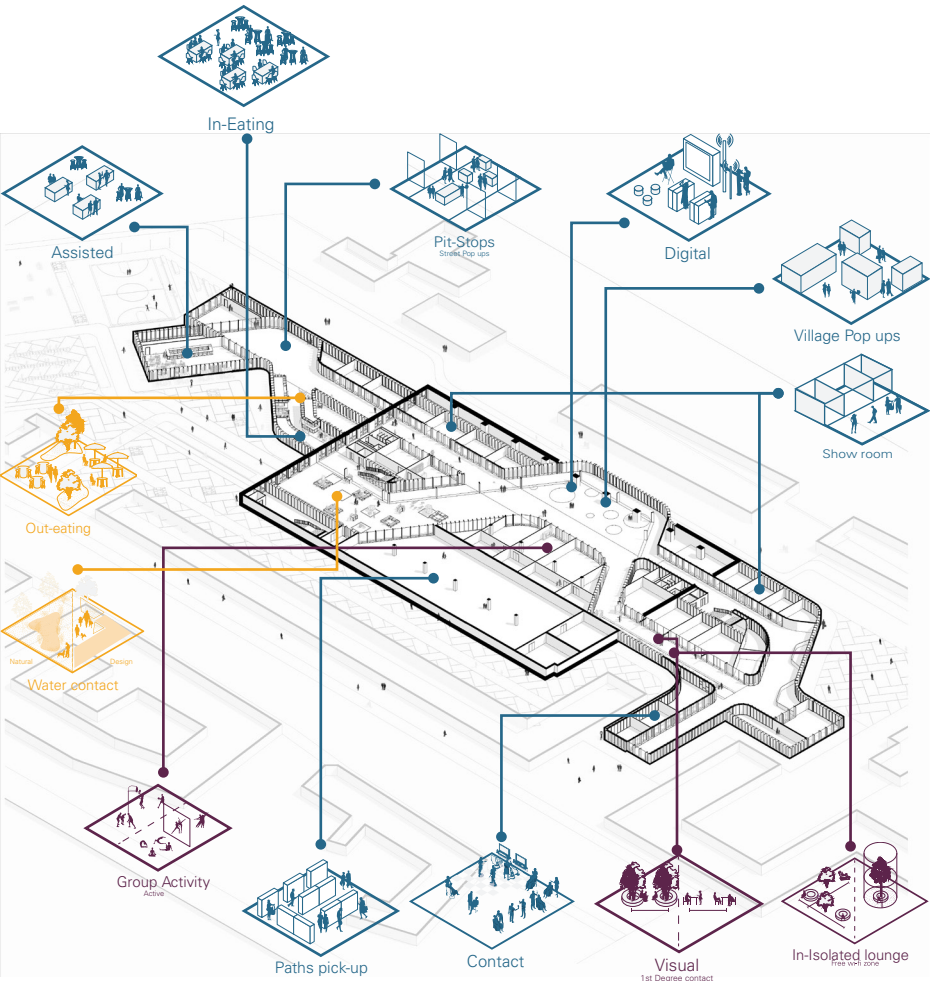
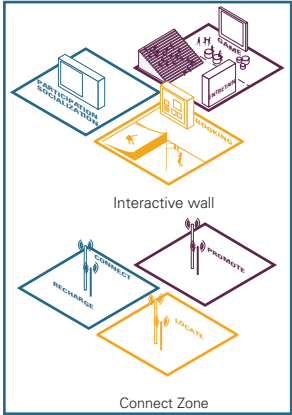
Turin/ New Commerce/ Outdoor space

The new commercial hub and cultural anchor for food, shopping, workspace and recreation is the program complemented by a green and urban commercial park, which is open to everyone and therefore involves and develops the surrounding neighbourhood. A unique element of the project is the roof, with a pedestrian street, pop-up retails and open space. This gives the public the opportunity to get up close to the building and the sellers while at the same time, creating a new connection with the industrial complex. The Floating boxes, as placed in the new open space access of the rooftop have an independent management for more adaptable rent of different uses.



Copenhagen/ New Commerce/ Ground Floor

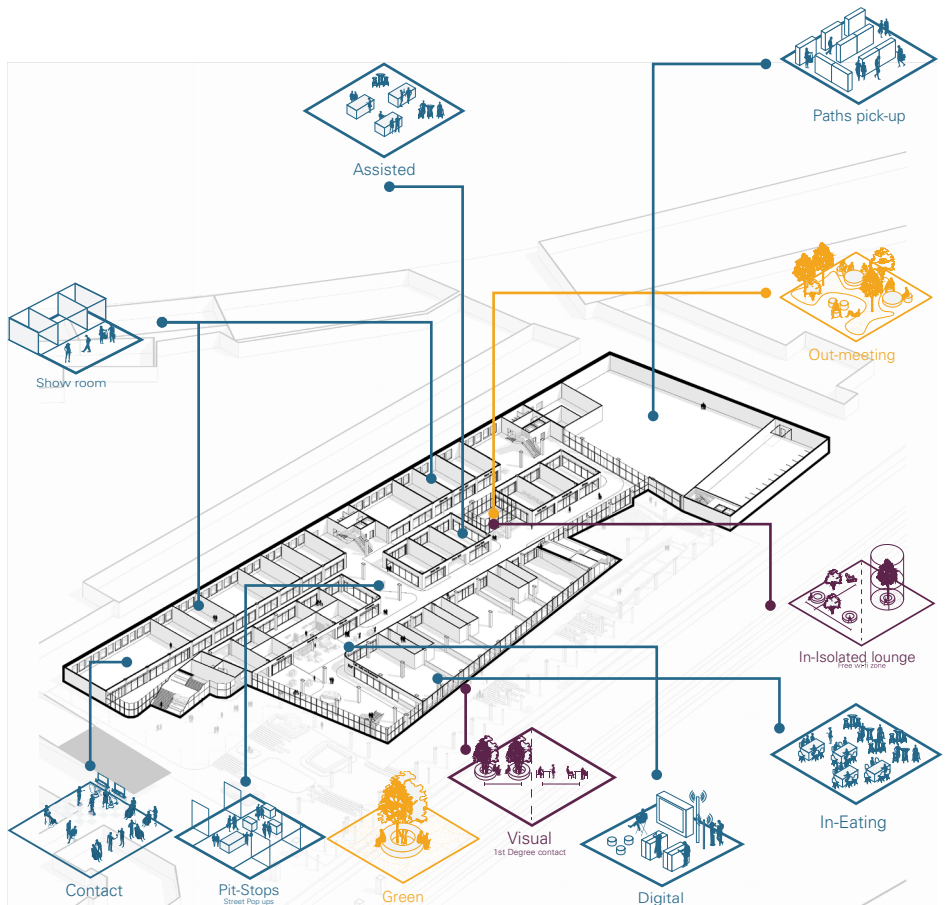
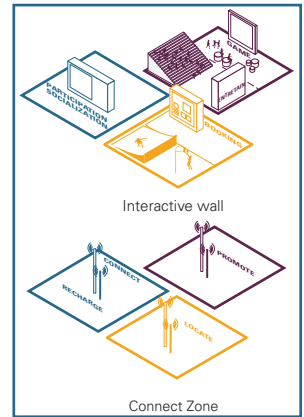
Entering the atrium, the main elements of the project are evident: structural-modulated metallic walls that curved along the path, define an open and unexpected circulation to cross the building. A new continuous spatiality of multiple perspective points and fragmented geometry is created, designed to achieve a fluid connection and get the sensation of a transitional building.



Turin/

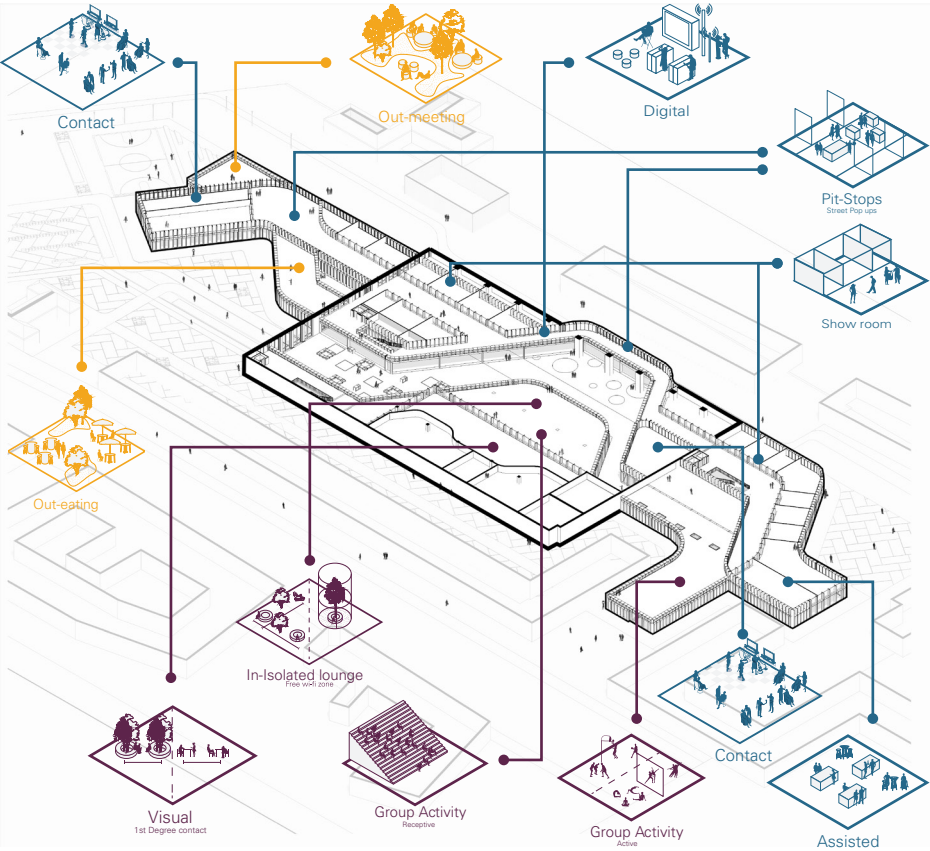
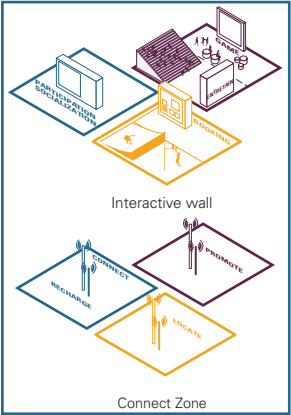
New Commerce/ Ground Floor

Following the structure opportunities to place a readable circulation by which the new retail and changeable floor treatment defines the transition spaces with the places to stay and relax. This by the integration of the public space strategies and greenery in the intersection zones, between the commerce modules.



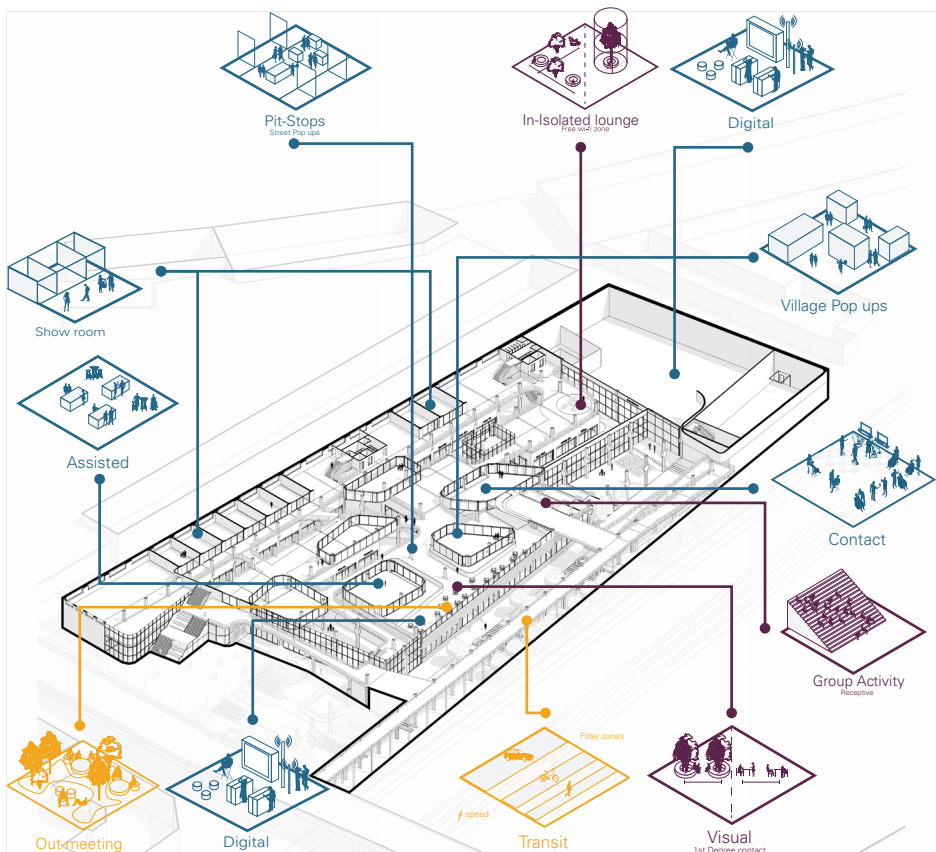
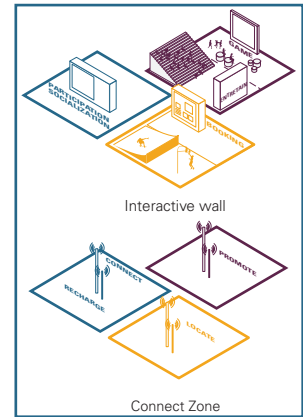
Copenhagen/ New Commerce/ First Floor

In the First Level, flows and pathways overlap and connect in another dimension to create a dynamic and interactive space. The organized and sequential open space aims to get flexibility of use. Continuity of spaces across the walkway, passing through the huge double height, makes it a suitable place for any kind of moving and temporary exhibition without wall divisions or interruptions.



Turin/ New Commerce/ First Floor

The Project is based on a scheme to maximize the commercial areas value with the design of a new mezzanine looking towards the new green gallery and a series of commercial floating boxes facing the hanging corridor. The desing entailed a thorough analysis of the existing building by looking at key customer types and their routes possibilities and variations through the building, evaluating the new commercial offer by connecting the exterior space with both, direct access to the level and passing thought the ground floor.

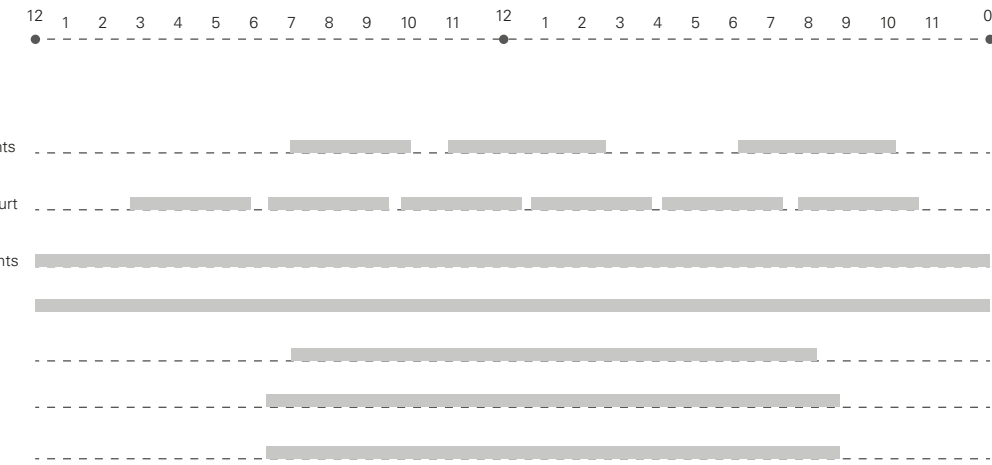


Copenhagen/

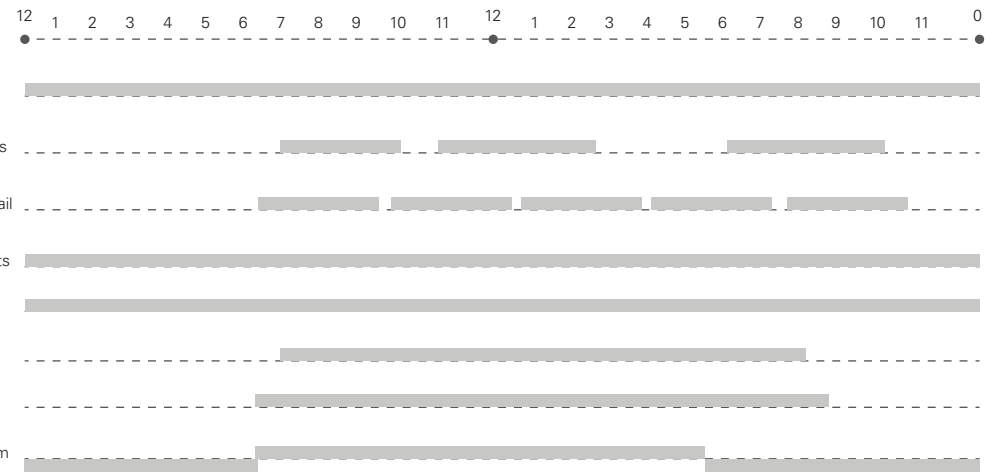
Program according to time

The choice of commercial spaces as a strategy for social interaction is reflected in space and time. The flexibility of offerings in different schedules allow a constant 24/7 use of different spaces, which not only increase the program feasibility but also dissipates the initial cuase by which this pieces of the city were abandonned in the first place: a single use, owner and purpose.

24 Hours activity schedule buffer:



Turin/



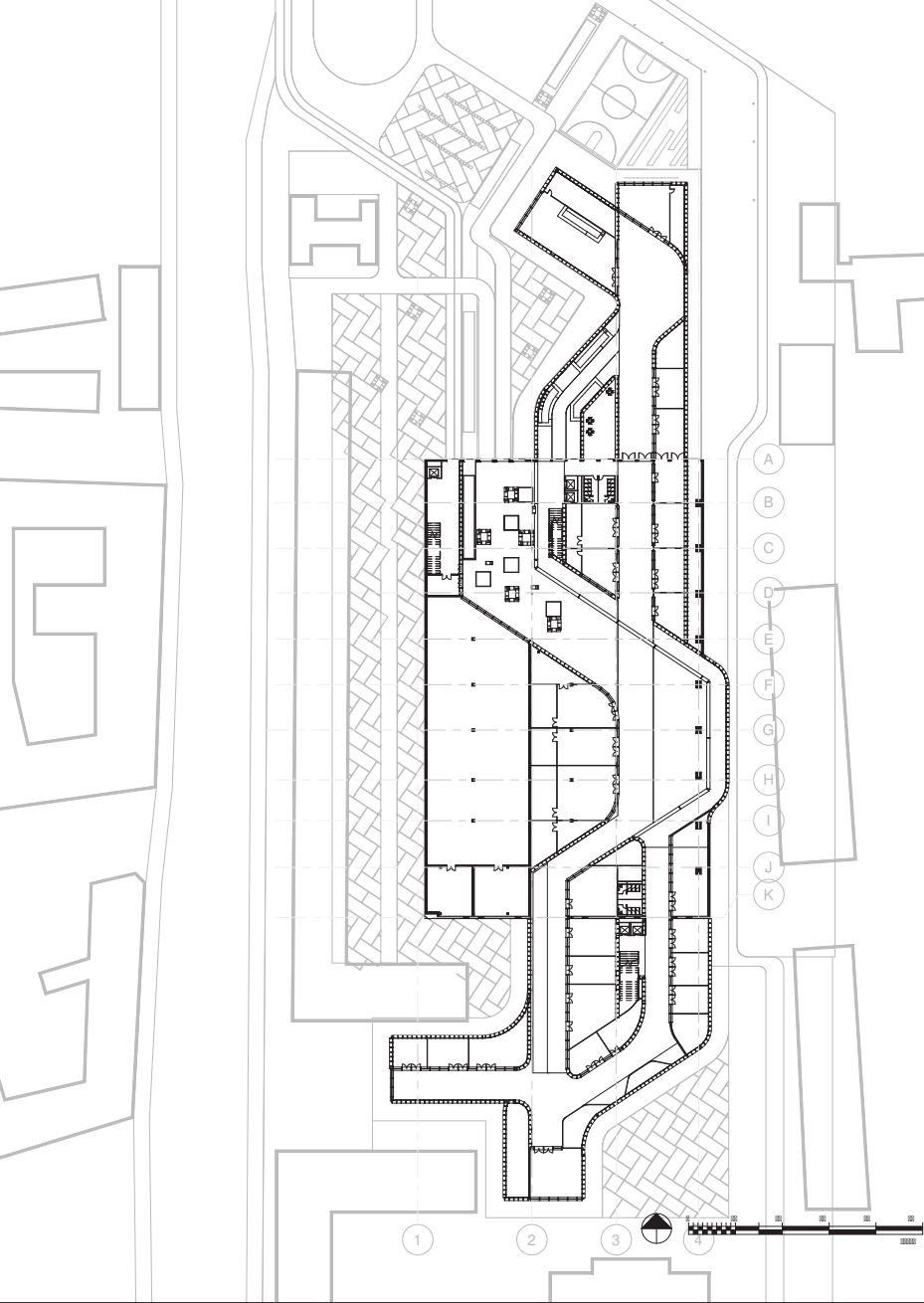
Copenhagen/
Site Plan/



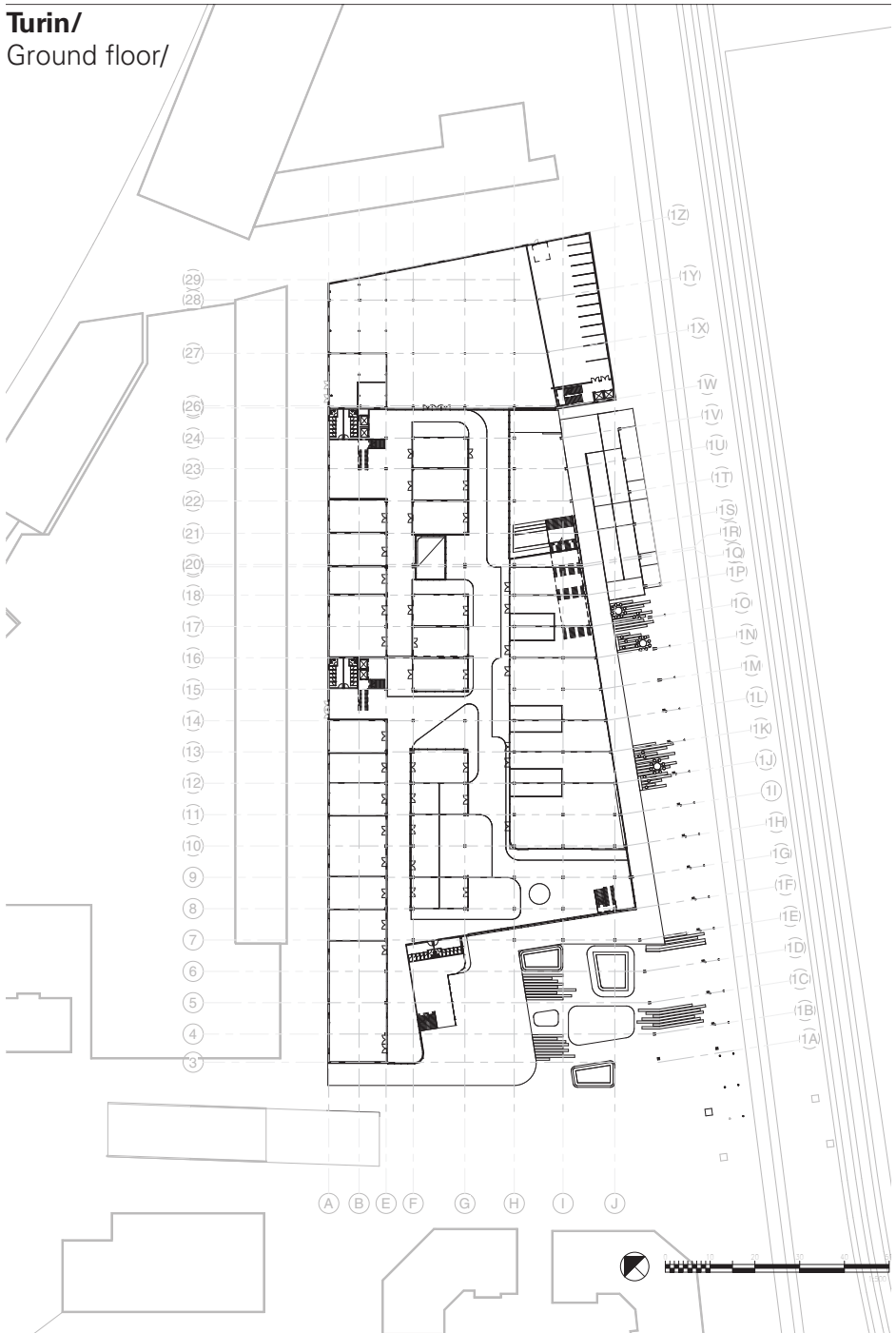
Turin/ Site Plan/



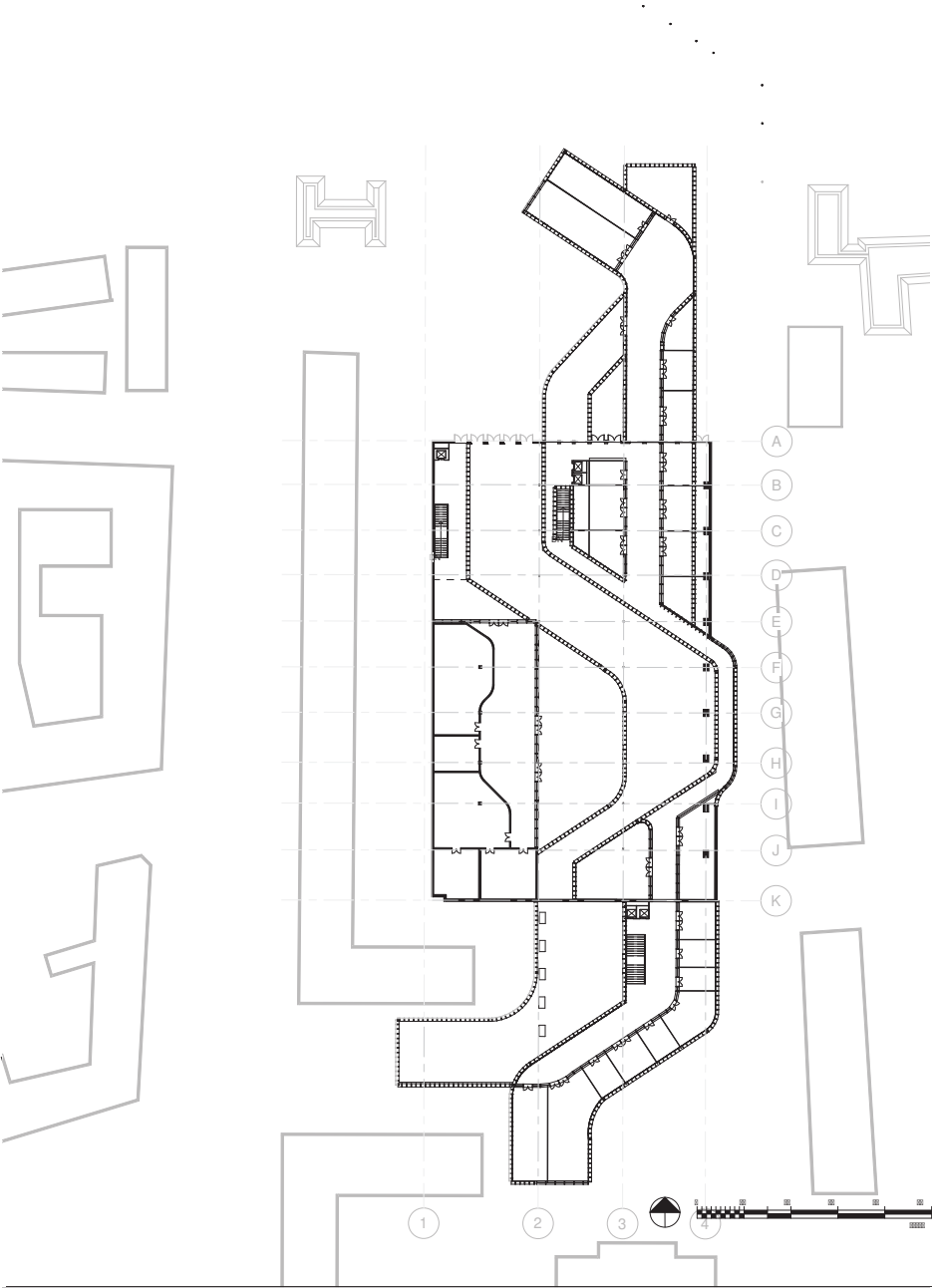
Copenhagen/
Ground floor/



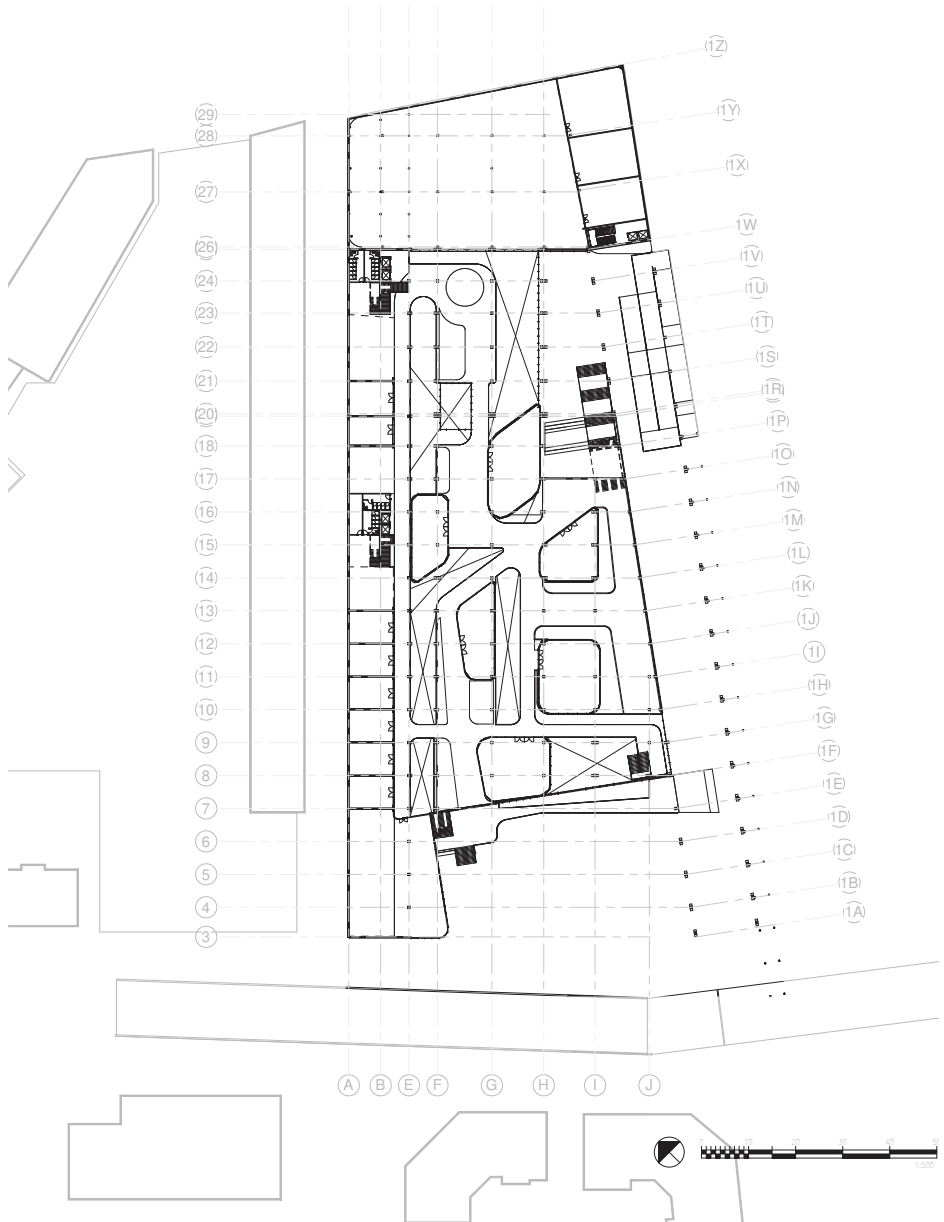
Turin/ Ground floor/

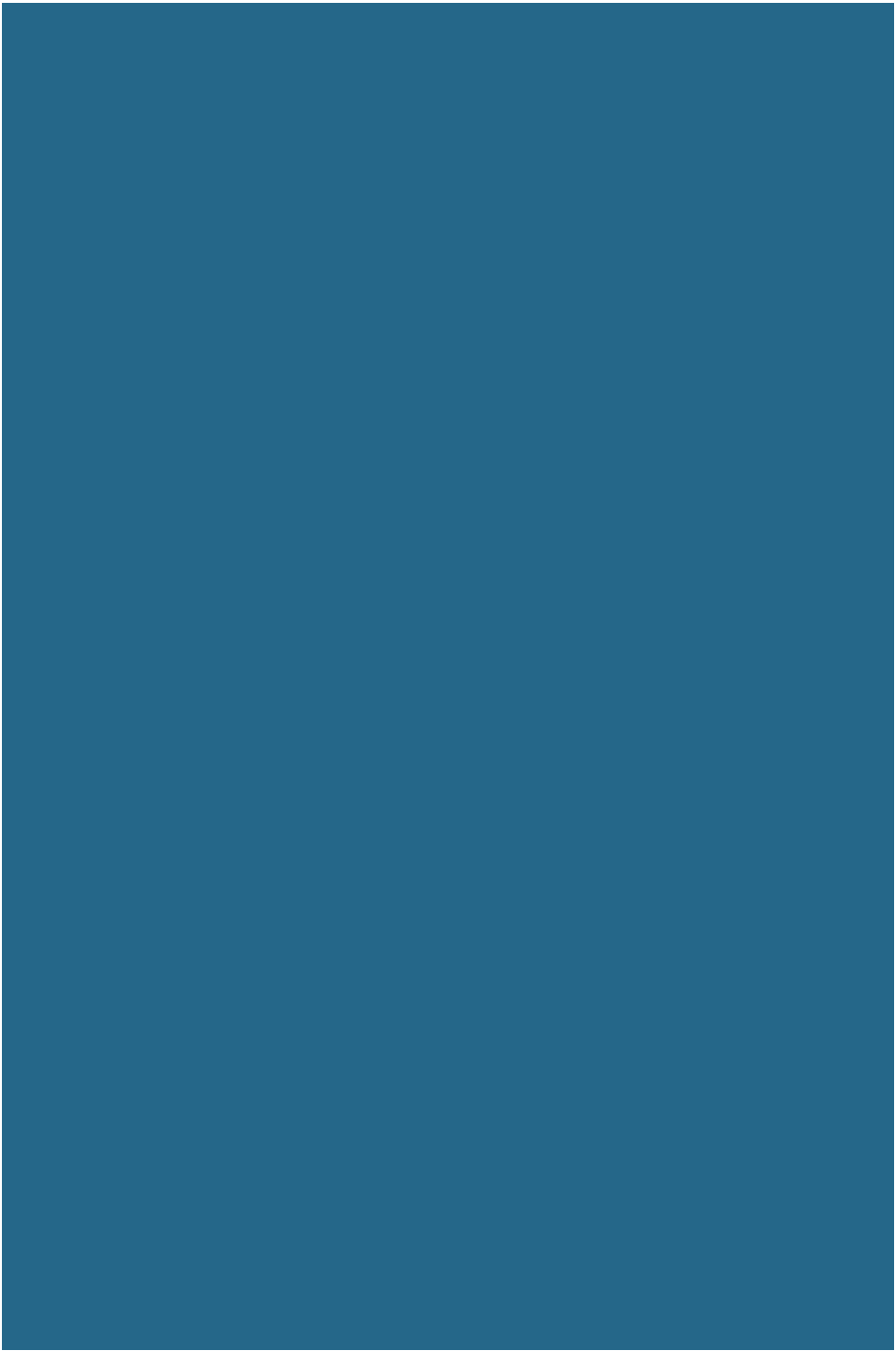


Copenhagen/
First floor/

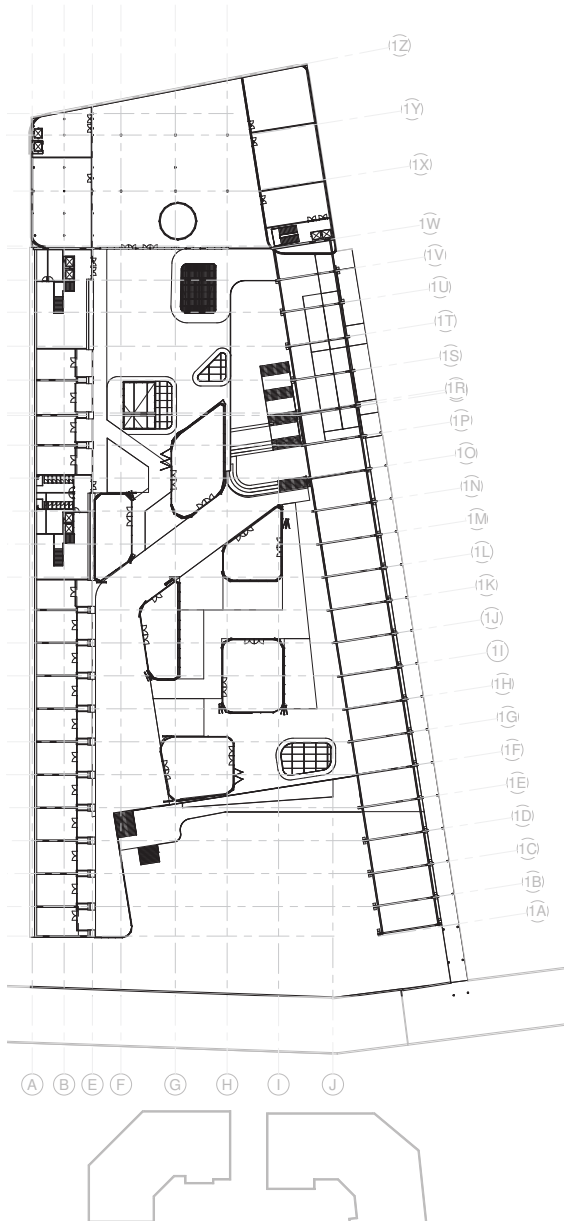


Turin/ First floor/

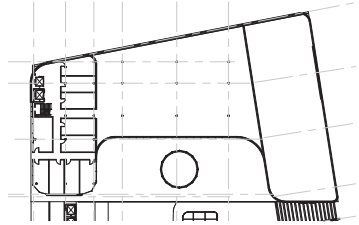




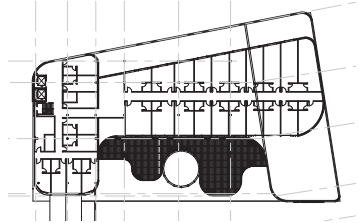
Turin/ Second floor/ hotel



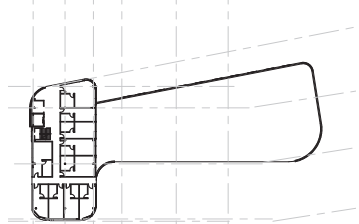
Third floor/ hotel



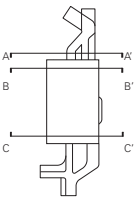
4th & 5th floor/ hotel



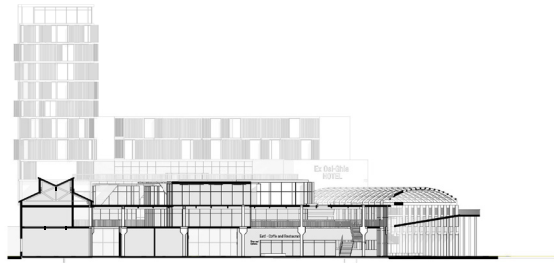
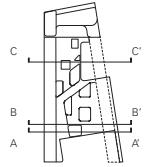
6th to 10th floor/ hotel



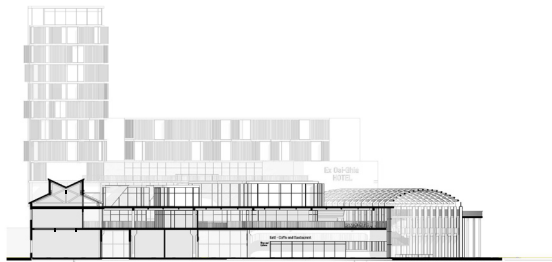
Copenhagen/
Section/



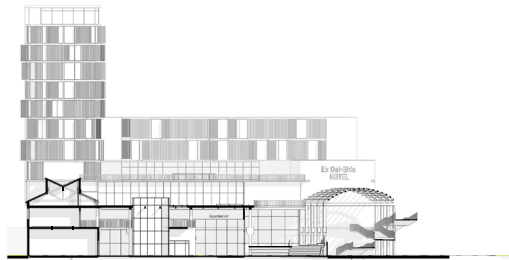
Turin/ Section/



A-A'



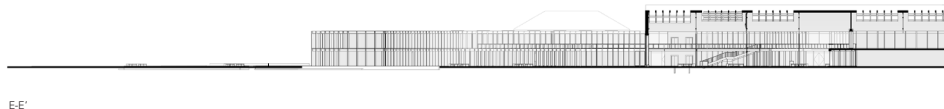
B-B'

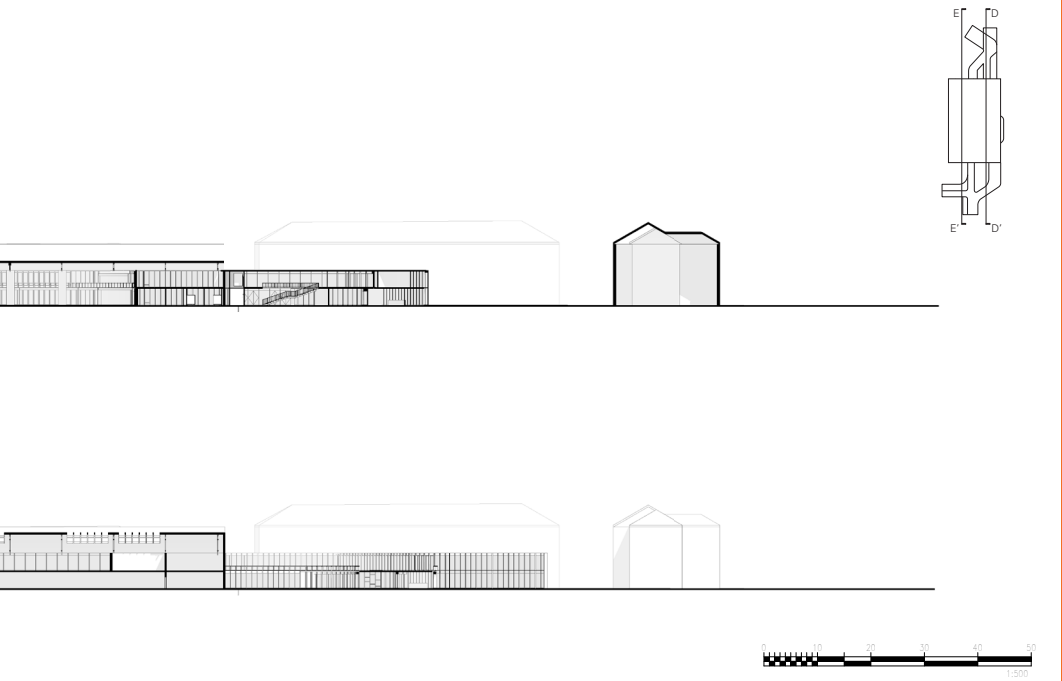


C-C'



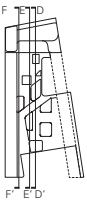
Copenhagen/ Section/



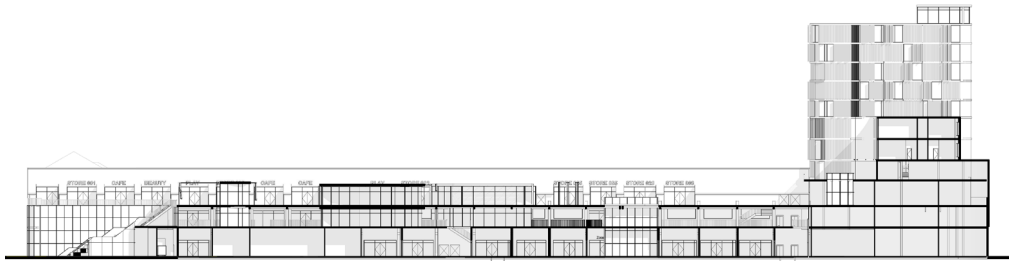




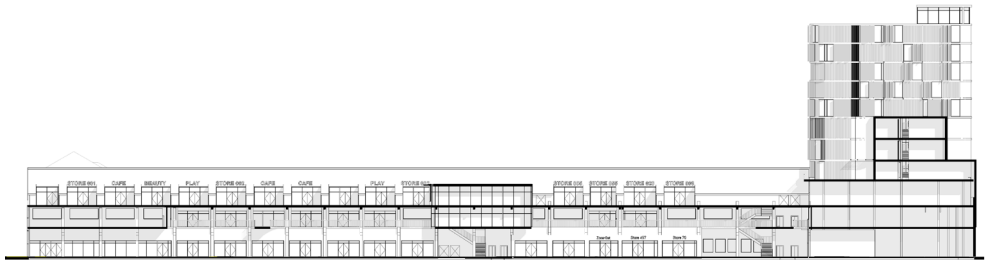
Turin/
Section/



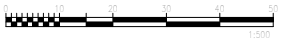
D-D'



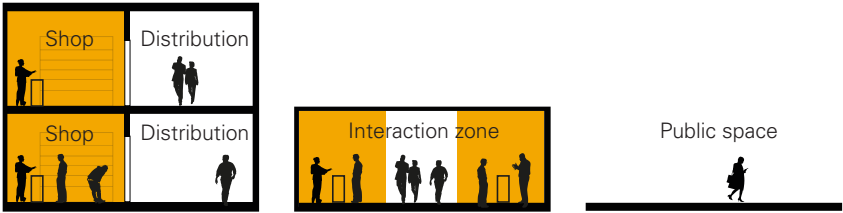
E-E'



FF



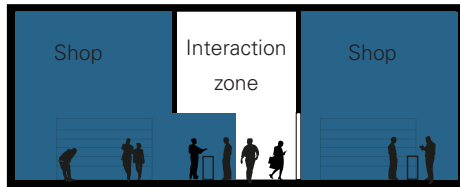
Copenhagen/
Section zoom/



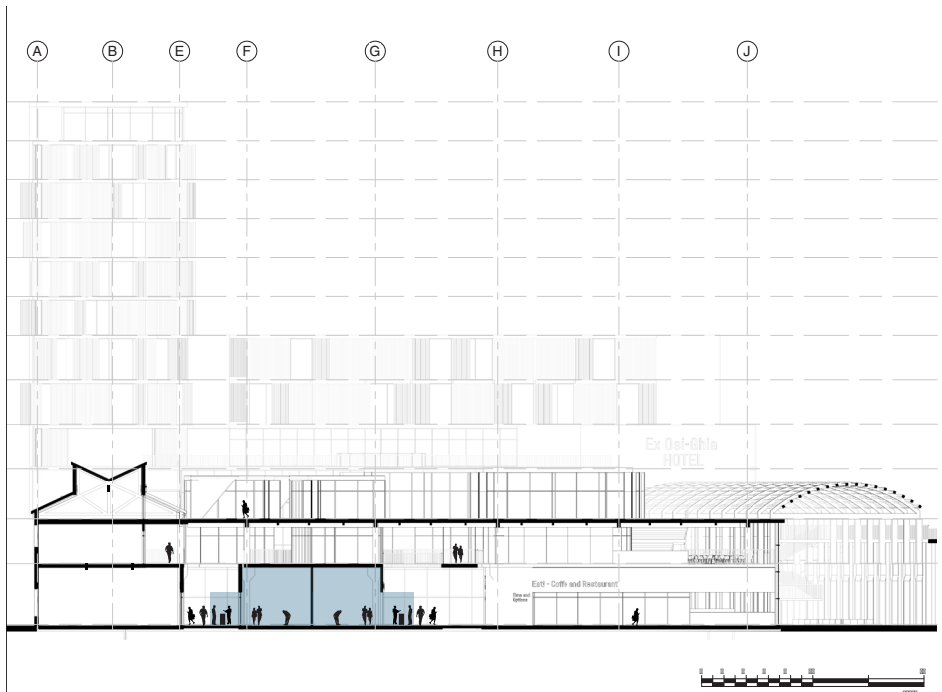
Turin/ Section zoom/



Conventional shop



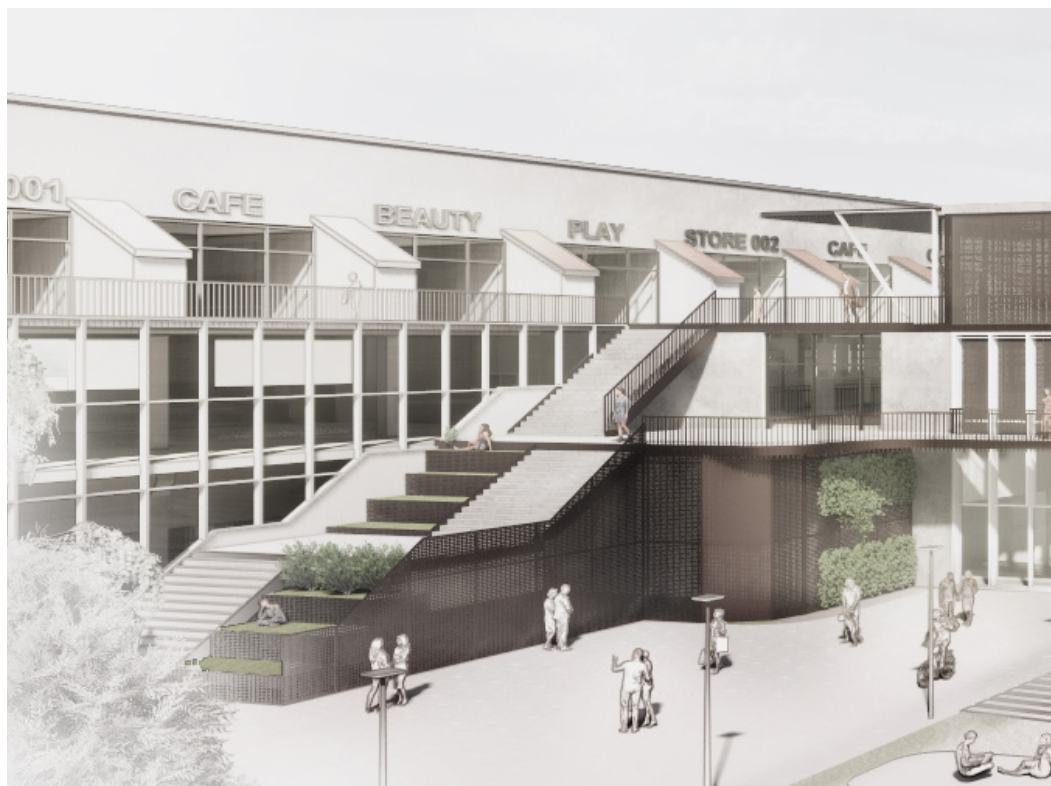
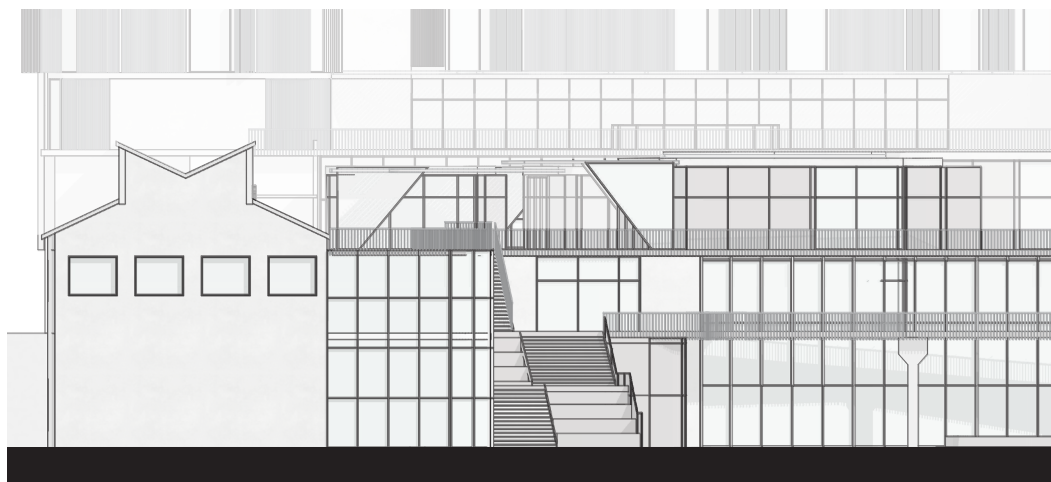
Extended shop



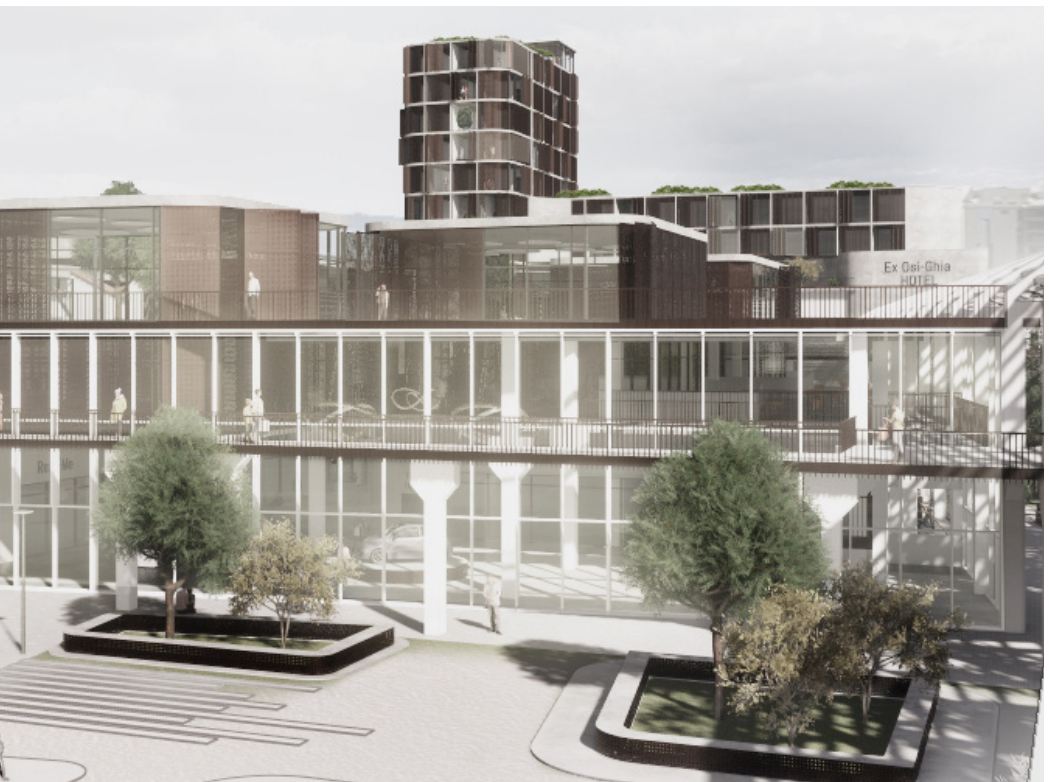
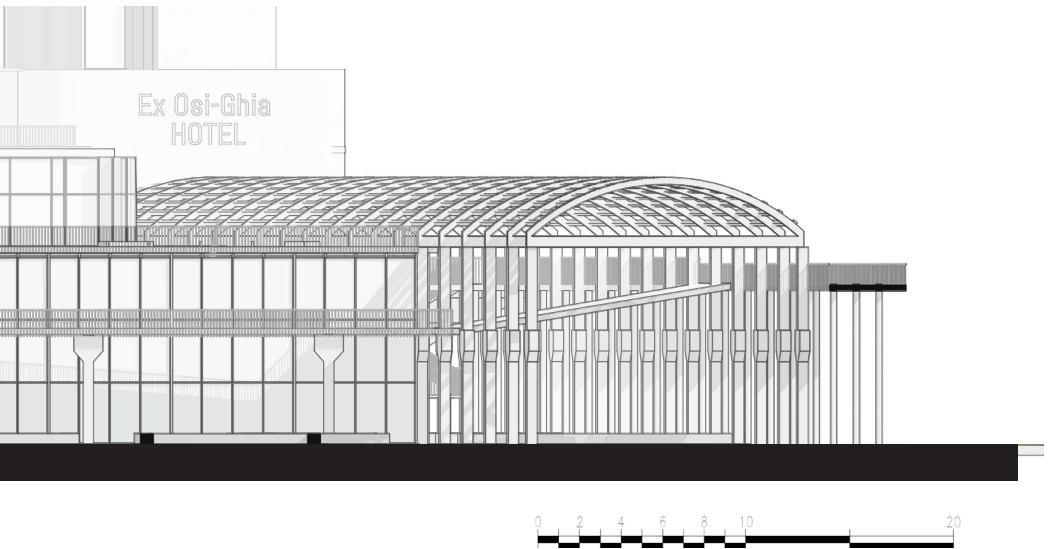
Copenhagen/ Elevation/ Entrance to the Mall/



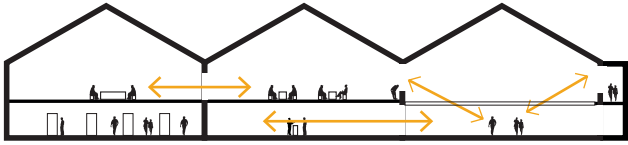




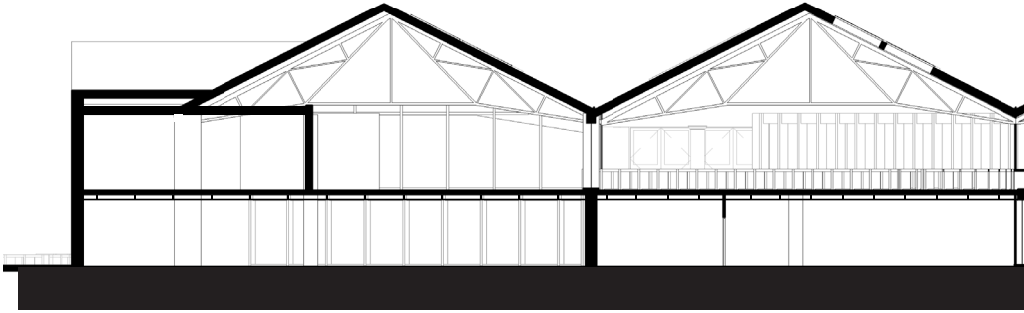
Elevation/Entrance to the Mall/



Copenhagen/
Section/ Art and events/



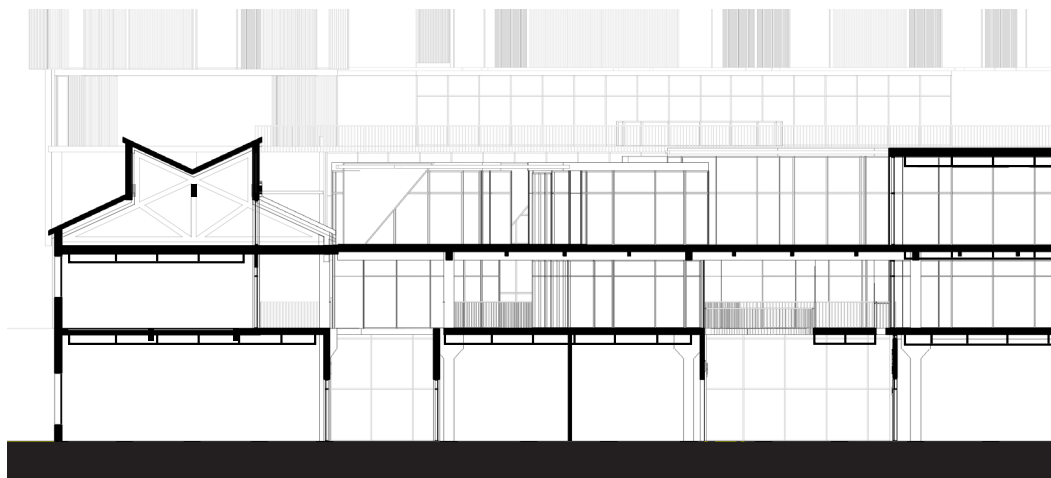
Physical and visual permeability



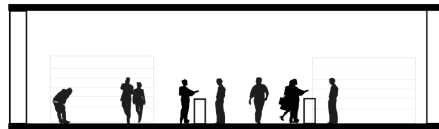
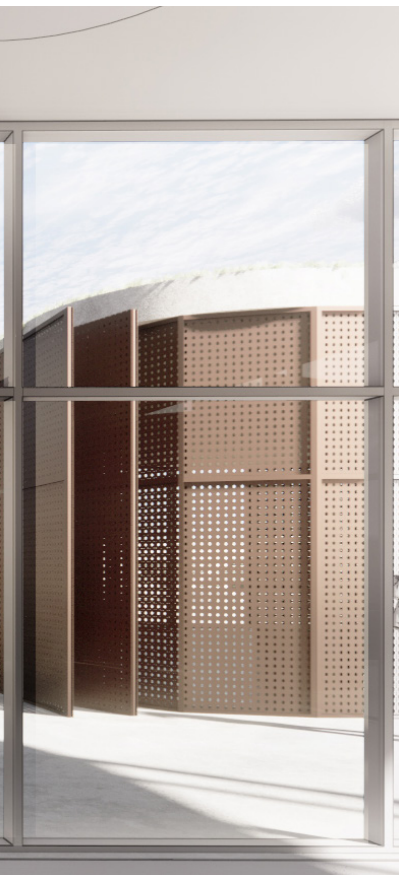
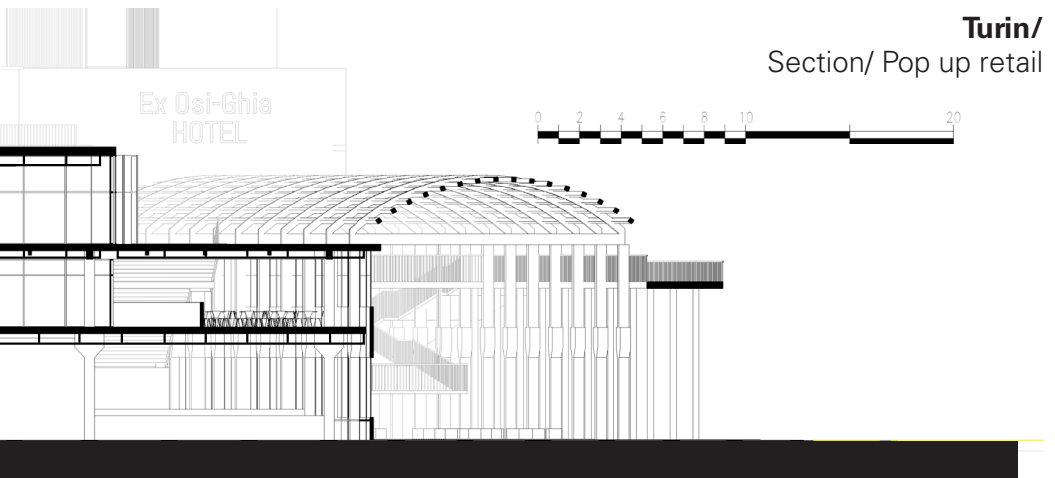


Double hight and space connection

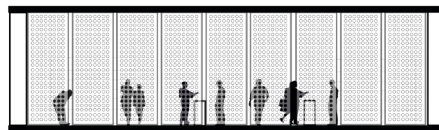




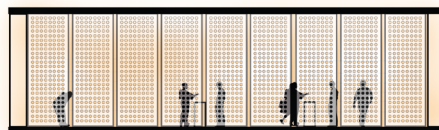
Turin/ Section/ Pop up retail



Physical permeability

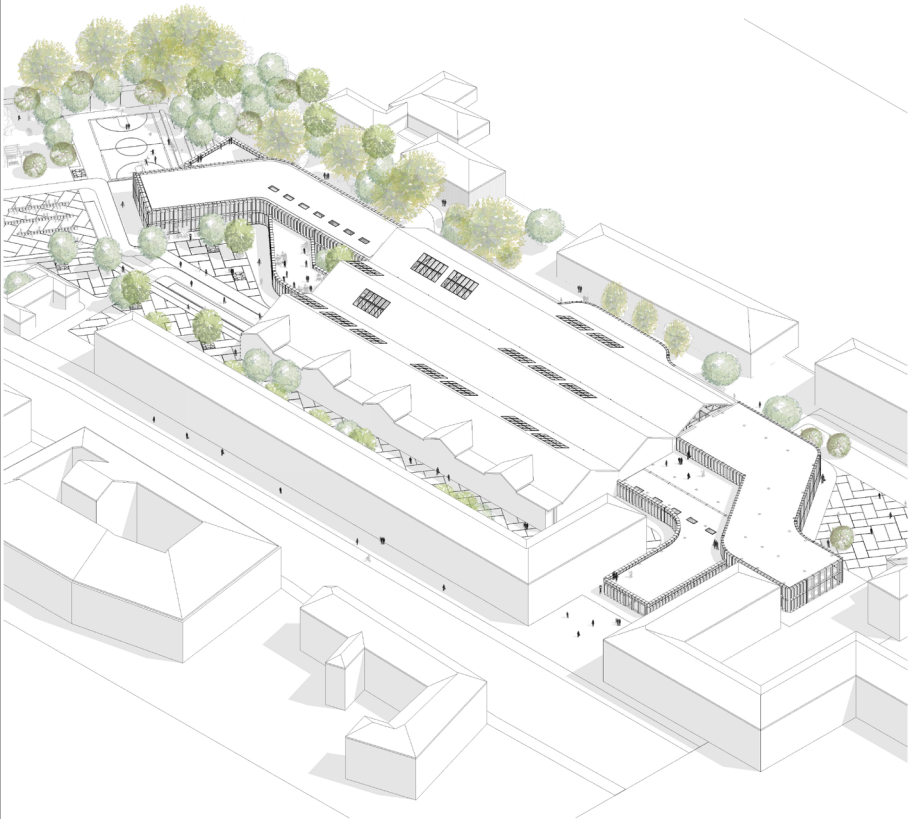


Visual permeability

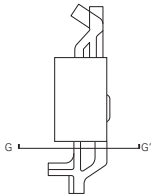


Materiality and lighting effect

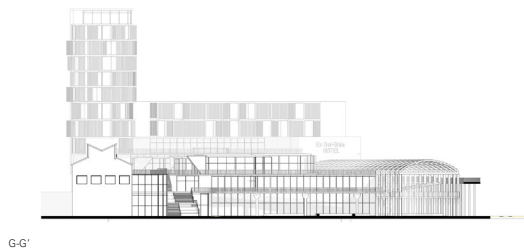
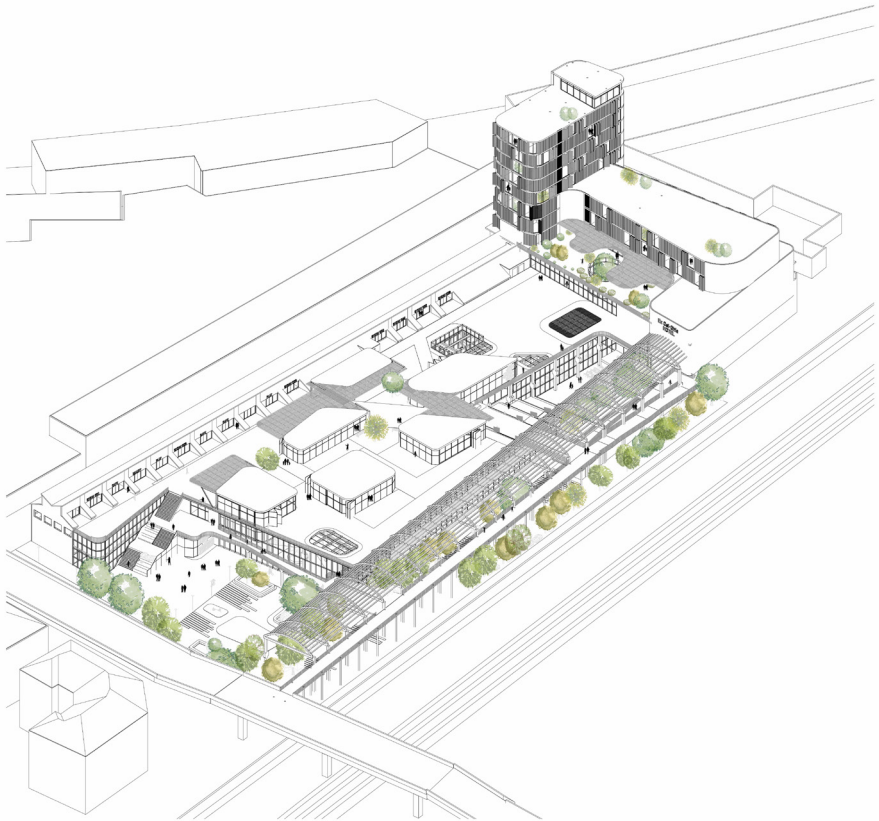
Copenhagen/
Axo view/



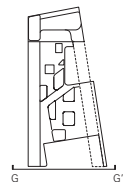
G-G'



Turin/ Axo View/

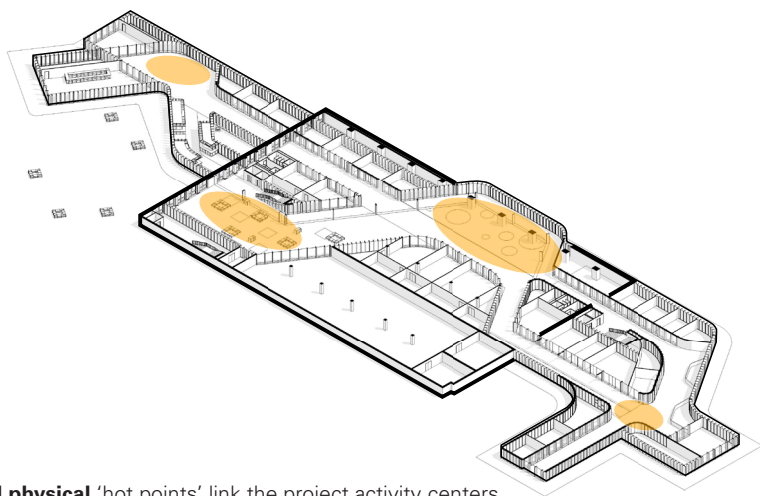
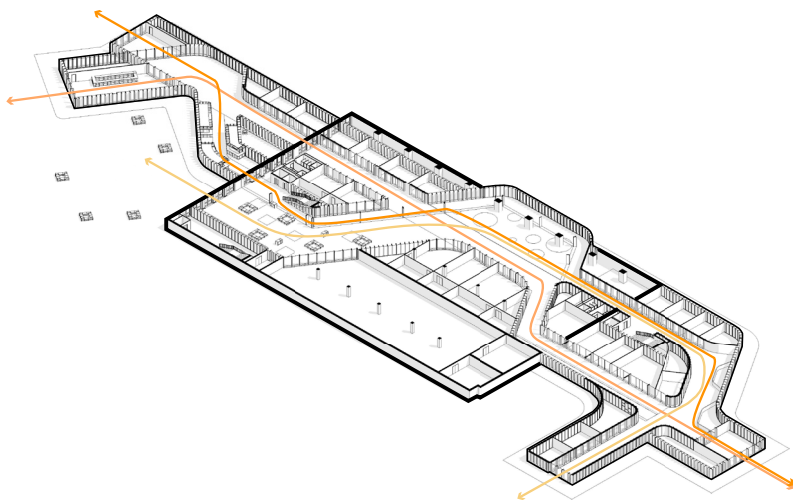


G-G'

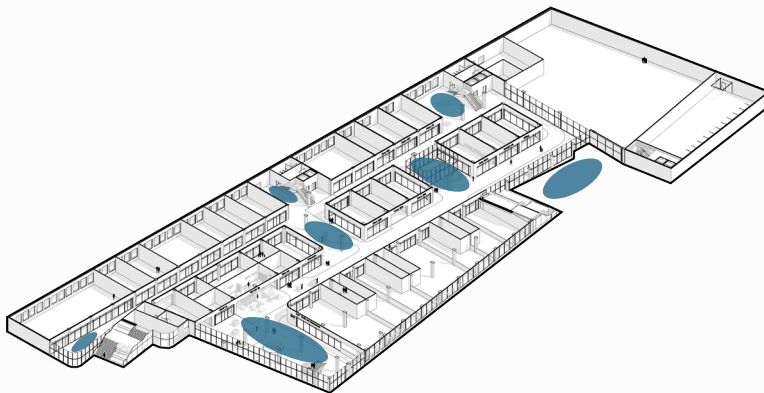
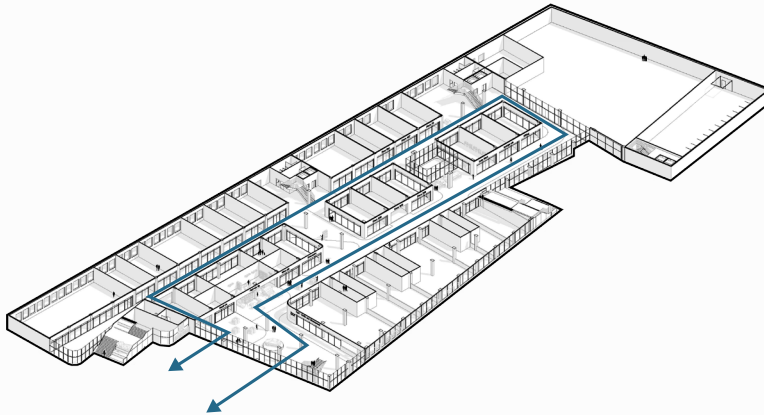


G G'

Copenhagen/ Flows and Hot spots/



Visual and physical 'hot points' link the project activity centers. Strategically placed and commercially linked nodes ensure consistency of social interaction and amenities across the building.

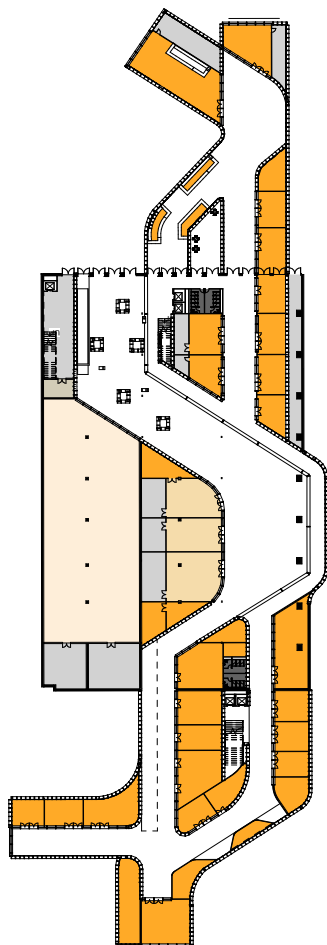
Turin/**Flows and Hot spots/**

Copenhagen/ Functionality/

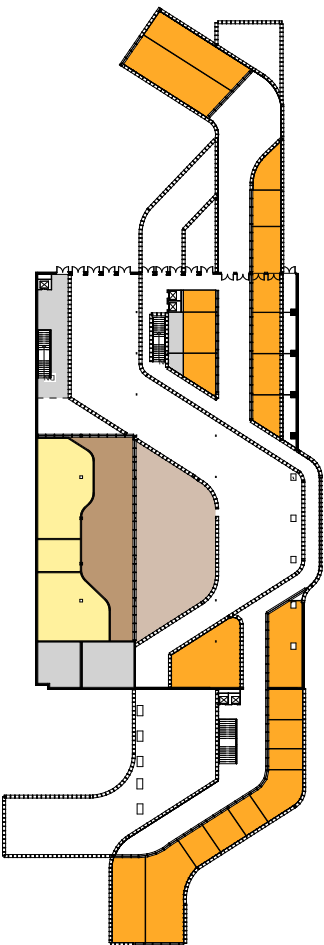
Room Legend

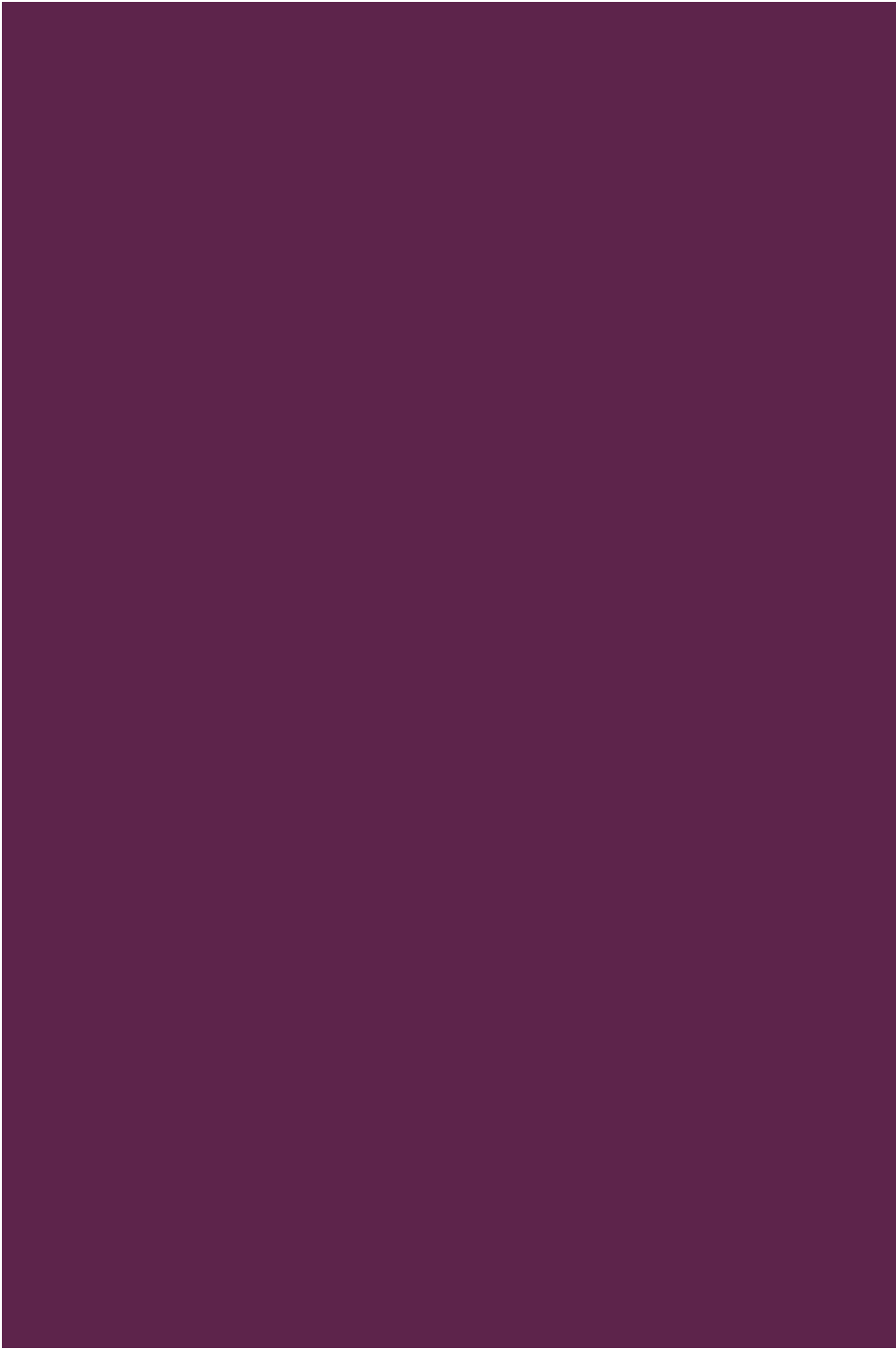
- Service
- Commercial
- Ancor
- hotel
- Study room
- Office
- Office - Flex area
- Office - common space

Ground Floor



First Floor



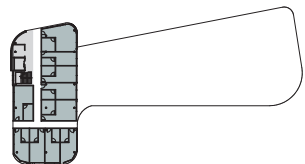
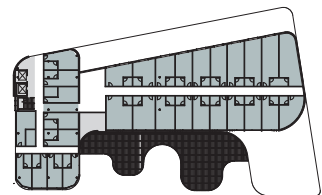
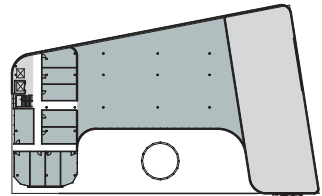
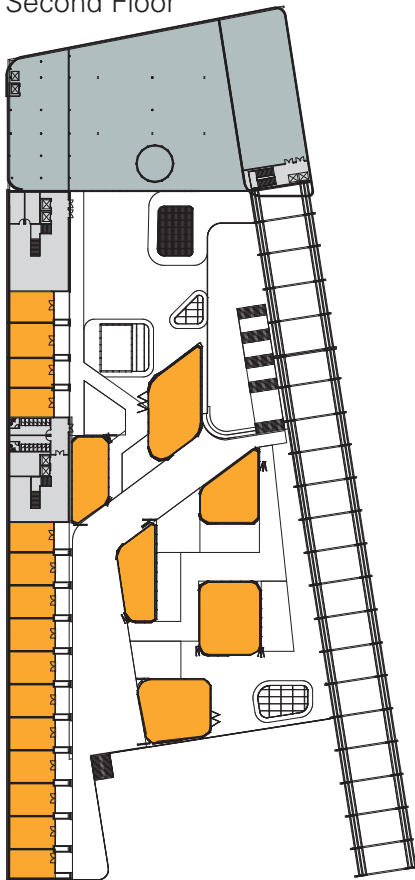


Turin/ Functionality/

Room Legend

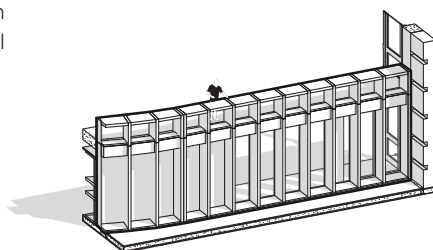
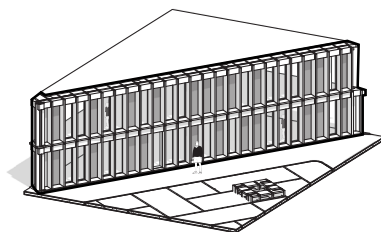
- Service
- Commercial
- Ancor
- hotel
- Study room
- Office
- Office - Flex area
- Office - common space

Second Floor

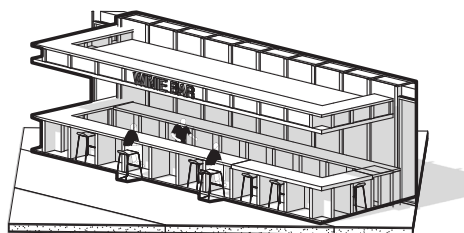


Copenhagen/ Design Detailing/

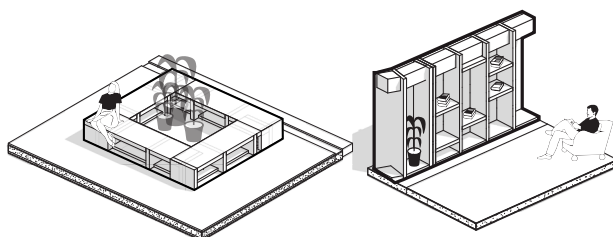
Facade and panelizing We have created a strategy for the facade that will work for the new extensions as well as for the integration with the existing building mass. Large structural lamellas in steel creates a dynamic carpet like texture that sweeps the entire building mass. Like a draping unifying the structure creating the image of one. The panel disposition and design allows it to integrate with the outdoor space, as greenery, opaque and transparent relations depending on the inside program or even the integration of interactive walls for a more technological approach.



Railing system Both railings, indoor and outdoor, are designed to be part of the structural facade. The Railing comes up as natural extension of the facade below.



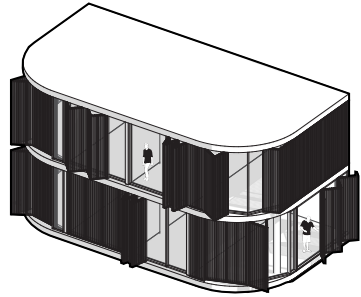
Interior design The modularity of the facade give us a big advantage in designing the interior spaces as the module is easily adaptable to become furniture integrated in the architecture



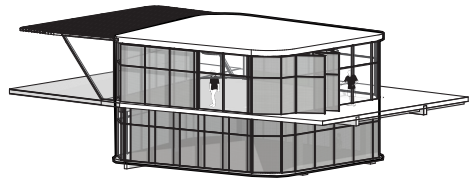
Functionality The depth facade give us an important flexibility in functionality. From shelves to seating area

Turin/ Design Detailing/

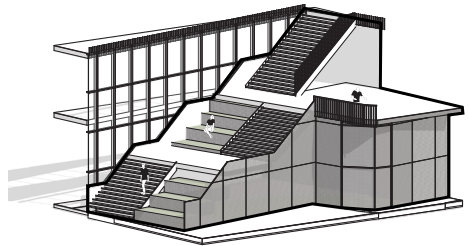
Hotel Facade 'The Hottel facade is made by a double skin; a first layer of glass and a second made of vertical steel lamella. The lamellas are designed into a folded system which allow to open and close the panels in relationship with the sun orientation. The strong materiality allows it to merge with the new architecture proposed as well for the commercial spaces.



Floating shop facade The shops facade are made by glass in order to give as much as light and visibility as possible to the shop. A second skin is added in micro-perforated steel which give a nice effect of opacity/translucency when needed, depending on the temporal renting requirements.

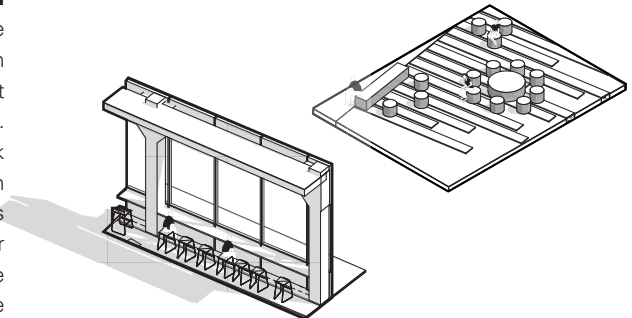


Social Stair 'Architectural elements of the project are designed with the same material as micro-perforated steel in order to give an homogeneous design which emphasize the industrial character of the building and allow a good integration of green walls when is desired.

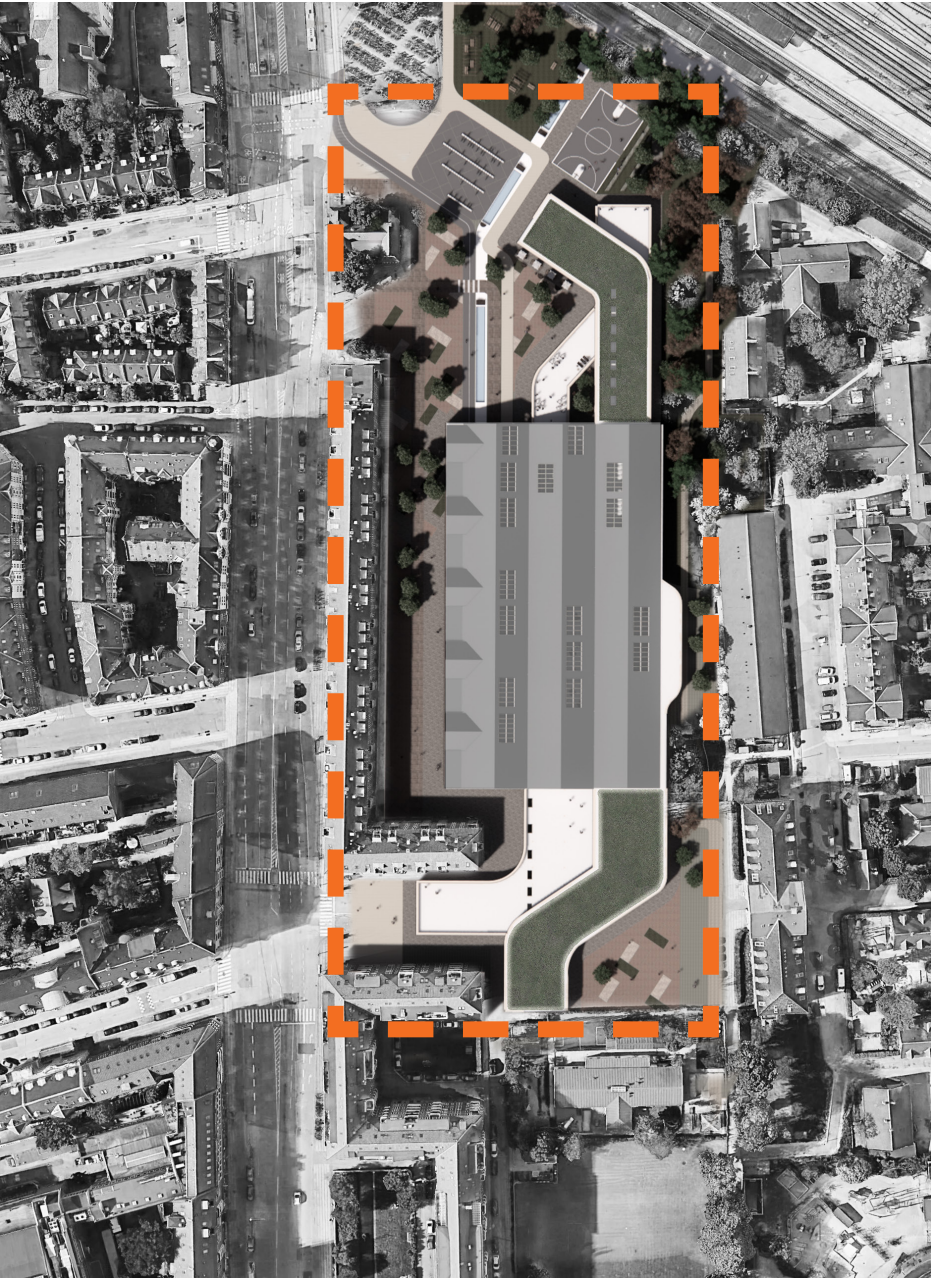


Urban design and integration

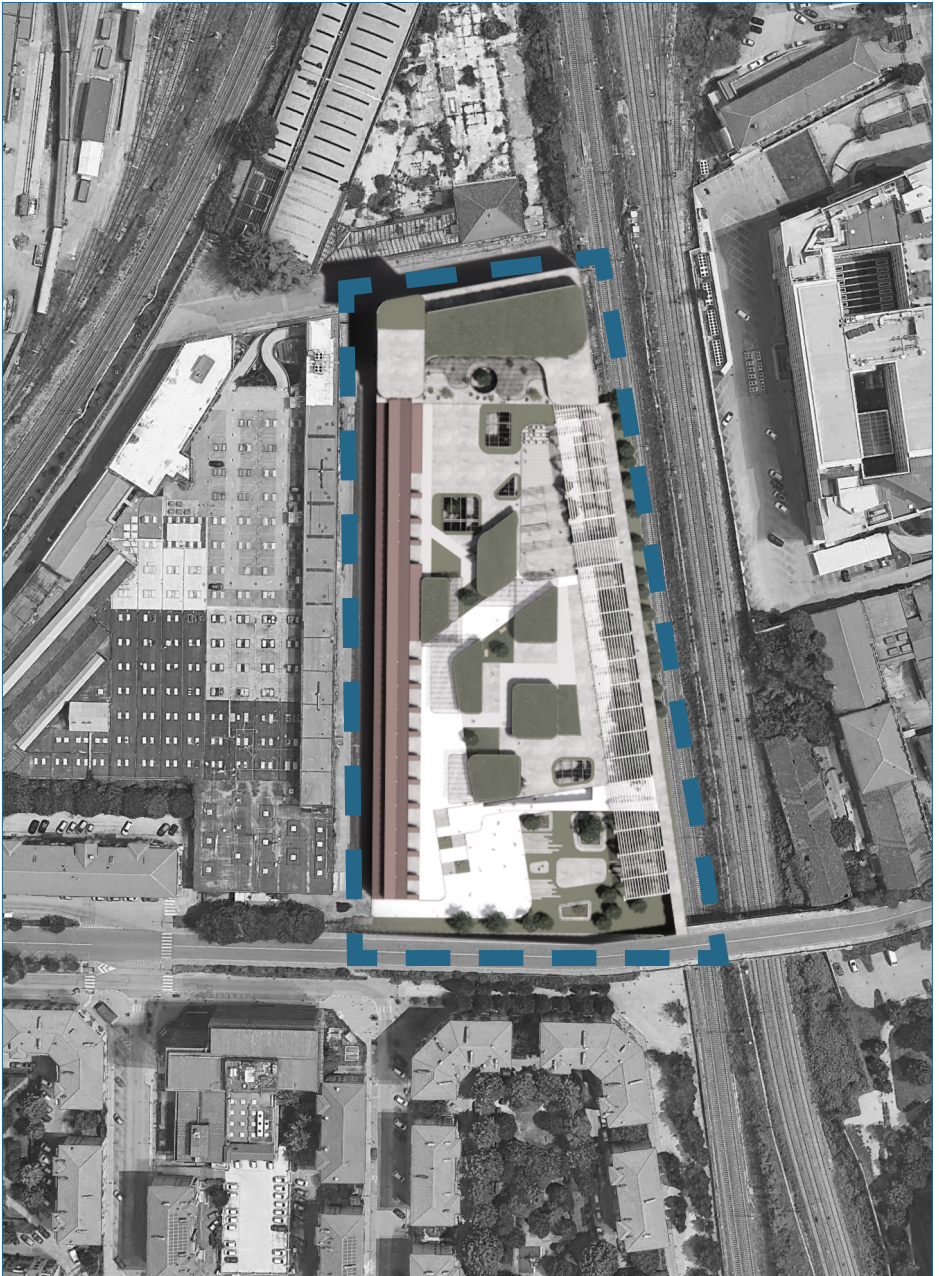
Urban design follow the same rules. The seating areas outside in the linear park are made by a light micro-perforated sheet rounded. The facade facing the park includes in its design a modulation of opaque and transparent panels that allow an interior-exterior connection integrated in the design, following the structure modules.



Copenhagen/
Site Plan/



Turin/ Site Plan/



Copenhagen/ Exterior view/



New Entrance Square



View from metro station



Extension of the North Facade.



Green Area and Sport Activities

Turin/ Exterior view/



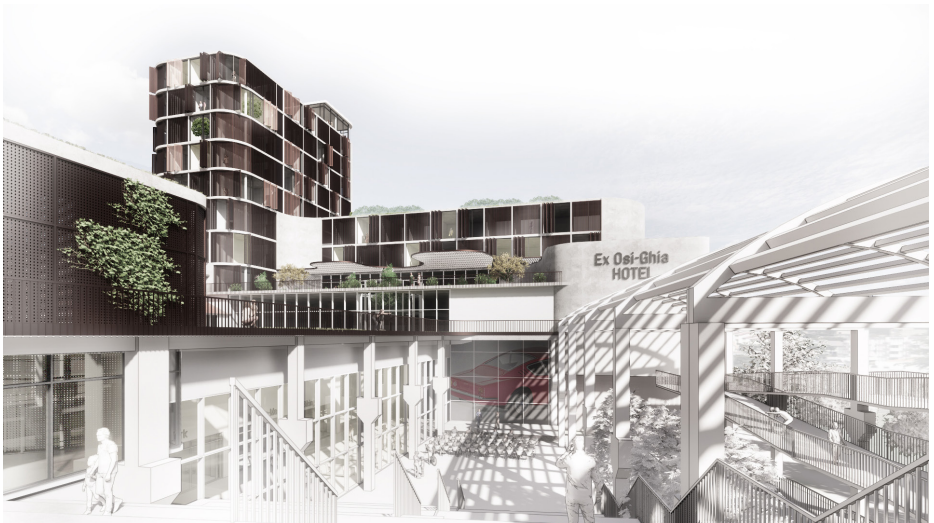
New Entrance - Front square



Floating Market / Pop-up Retail



Linear Park



Hotel and Multi-events Space

Copenhagen/ Interior view/



Atrium



Lounge and relax area



Smart-Food Court



Art Gallery

Turin/ Interior view/



Atrium



Commercial Hanging Walkway



Commercial Street



Green Lounge - Oasis

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