



THE CONTEMPORARY PROJECT
AN OBLIQUED CONTINUOUS PUBLIC SPACE FROM
MOTION

RENOVATION OF PARKING FACILITIES BASED ON THE SHARED CARS SYSTEM

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2020-2021

When we are talking about garage, we are referring to a daily item
unchanged over 100years



01 Auguste Perret, Garage Ponthieu, Paris 1905

We are turning to a community-based reuse of idle resources,
starting from the transportation system



02 Sharing cars in Milano, Italy

What can architects do in case the modern pioneers are totally eliminated by the future community



03 The garage condition



04 The mechanical garage of Volkswagen

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A NEW PUBLIC SPACE FROM MOTION

Renovation of parking facilities based on the shared cars system

The sharing economy is exploding around the world thanks to three main characteristics: community-based reuse of idle resources, the extension of sharing between acquaintances to strangers, and the transformation of production into decentralized, personalized customization. Shared cars, as a very important part of it, is creating a new open community for its users, and a space should be provided to fit both the basic need of a shared cars station and the social requirements of different citizens. Garages, as the original car stockings, can be renovated to accommodate public activities.

The presence of garages is researched firstly to guide following interventions. The space is designed for cars from the very beginning, and it has grown into a prototype with a series of spaces been designed to fit the different condition of the road network and functions above. No matter how impressive the inside systems are, garages, which are decorated by their facade, have sieged the motion, a new character of the 21 century.

The conflict should not be the reason for hiding it. With the help of shared cars system, we can make a new public interface between man and cars. These public spaces can make diverse activities happen while providing an experience of the motion. It can generate a series of urban renovations on garages.

To get started, this new public space system should be discussed in detail. Three elements are considered vital: the entrance, the machine providing the shared cars service, and the platform for connecting. Three cases are studied as possible reference: the placa de Sants, the Ford Line and the Hamburg Station.

The oblique surface is a great option for the public space underground. First presented by Claude Parent and Paul Virilio, the continues surface merge the boundary between horizontal layers, making the gravity as a new clue for the organization of different activities on a single platform. Towards a total habitable space, it can be easily connected to the original structure and multiple the public value. It stimulates motion and accepts the new urban texture, which is the reason why it is different from the vertical and horizontal ones.

After a field research on the public garages inside the center of Barcelona, two types of garages (a classification based on the function above): the garages besides the apartments and the ones under public squares are considered most valuable in the diversity of the crowd and the service capacity of the shared cars stations. Specific public functions are organized on a series of ramps which are interconnected like the organization of the original garages. Service line are placed besides these spaces so people can experience the beauty of motion everywhere. Oblique surfaces can create a multiple of spaces and activities and that can make these spaces totally different from the old ones.

KEY WORDS

oblique, motion, public space, renovation, garage



01

SHARED CARS PROVIDE POSSIBILITIES FOR A NEW MODE OF PUBLICITY

- 1.1 new community brought up by time domination
- 1.2 shared cars system: a way to deploy transportation resources
- 1.3 time has come for a physical carrier of the new community

1.1 NEW COMMUNITY BROUGHT UP BY TIME DOMINATION OF COMMODITY

The sharing economy is a way in which consumers can share and use services not owned by a single user but by private individuals. This can either be for free, for a fee, or through bartering and exchanging goods. Companies that would come under this classification are Airbnb, Uber, eBay and many more. These services have become increasingly popular in recent years with the rise of smartphones and apps through which these companies can offer consumers an easily accessible platform. The predicted number of users in the United States is going to be 86.5 million in 2021, compared to 44.8 million people in 2016, which points out a clear trend that a new community has been formed.

What is different from other new consumer behaviors is that the sharing economy requires a renovation in our spaces cause the convenience and individualism make it impossible to organize in a few spaces inside the city. But some places with a high density of users cannot provide a suitable place for this activity, or at least the involvement of these services seem to damage the original quality. To make this totally changed, the character of this kind of new community should be observed and evaluated.

The new community has three characters as follows:

01 diversity:

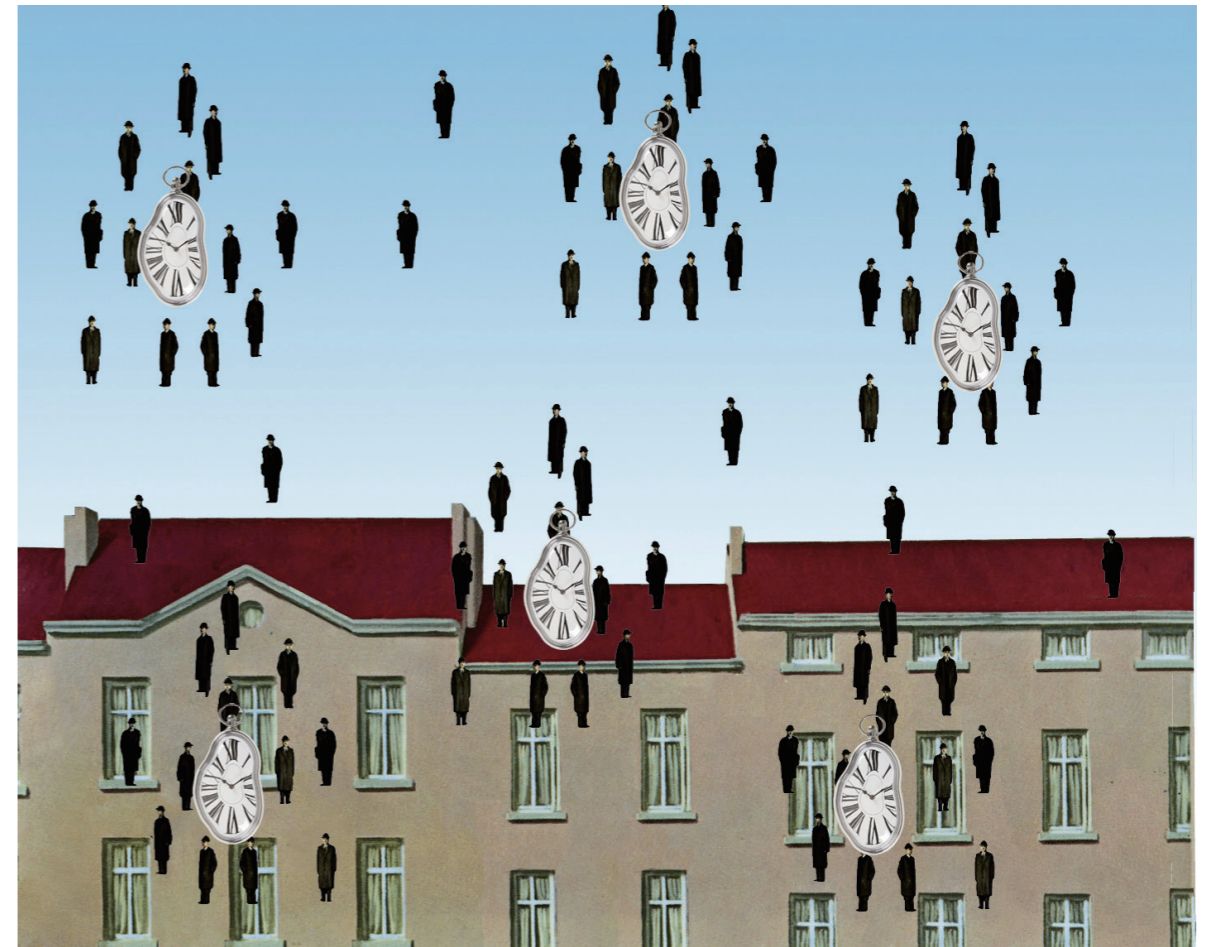
The popularity of the smartphone has pushed this kind of service to everyone, no matter of their sex, nationality, religion and age. So the place should consider the needs of different groups or focus on a few characters in this area through a comprehensive investigation.

02 24 hour:

The convenience means that the commodity can be used or at least booked every time an individual needs it. So the place is totally different from the parks or market in this sense. It could be more like the station for trains or buses. It should run full time and provide need for anybody at every time.

03 interpersonal social:

Different from other consumer behavior which tries to classify our needs, the shared economy tries to satisfy everyone, so the people are always separated in individuals or small groups, so this evokes a great amount of communication both through app and reality. People need to communicate more to find the ideal one to order or contact. Despite much of it can be done through a program, the communication when you are exchanging or sharing the same product still requires more personalized communication.



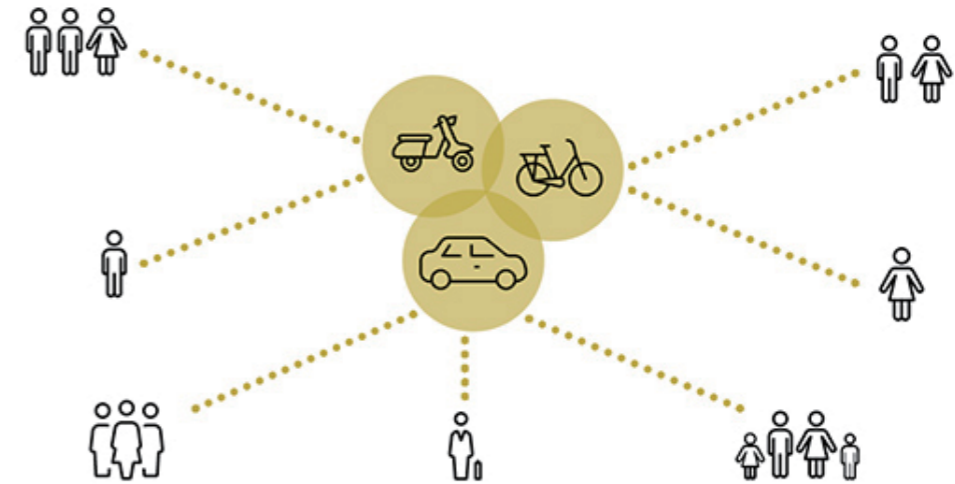
06 a new community based on time ownership (self collage)

1.2 SHARED CARS SYSTEM: A WAY TO DEPLOY TRANSPORTATION RESOURCES

We can find out that the shared economy is gradually coming into our daily lives, we are sharing not only because of the status of global economy, but the efficiency and selectivity we have through the share of usage rather than ownership. Sharing transportation is an important type of shared economy cause the model can be limited to a single type and the transportation and distribution can be realized through the traditional transport system. Cause we can choose various ways nowadays to go to a specific space, the ownership of a vehicle or bike seems not that necessary or valuable. So people use more shared bikes, shared scooter and shared cars. That is the reason why we can find lots of shared vehicles and they have become part of the city landscape.

At present, a large number of for-profit companies promote the "sharing economy" not for the use of idle resources, but for the production of those dedicated to "sharing" of goods, essentially in the "rental economy". In order to occupy the market, a large number of "shared" goods completely stucked our pysical environment, resulting in a large number of waste and various problem. It is contrary to its original claim to "make more efficient use of resources".

The shared cars are different from the shared bikes cause the former needs a specific site for temporary stock and for people to collect and return the items. That is the limitation but also the chance to create a series of service stations in order to make a network without disturbing the street too much. The cars have already owned their station: the parking garages. So it can be realized through a more realistic basis. According to the Harvard Economy review:"The sharing economy is exploding around the world thanks to three main characteristics: community-based reuse of idle resources, the extension of sharing between acquaintances to strangers, and the transformation of production into decentralized, personalized customization." In this sense, the shared economy can be given more importance through reconsidering the space for users as a communication space rather than a simple waiting zone for the shared products. Based on the references above, the machanical garage is a good strategy to seperate the service system into two parts: the infrastructure and the public gathering space, but they are not isolated, the former can be viewed as a window of motion, which is really appealing to us cause the motion has always been apart from the normal life which cannot even be fully experienced when you are even driving within the car flow.



07 the sharing transportation for different groups of people



08 select a car from the ones moving on the streets with an app

1.3 TIME HAS COME FOR A PHYSICAL CARRIER OF THE NEW COMMUNITY

Just as the ancients drew their inspiration from natural elements, we - materially and spiritually artificial - must find our inspiration in the new mechanical world we have created, and our architecture must be its most beautiful expression, its most complete synthesis, its most effective integration.

-----Antonio Sant'Ella

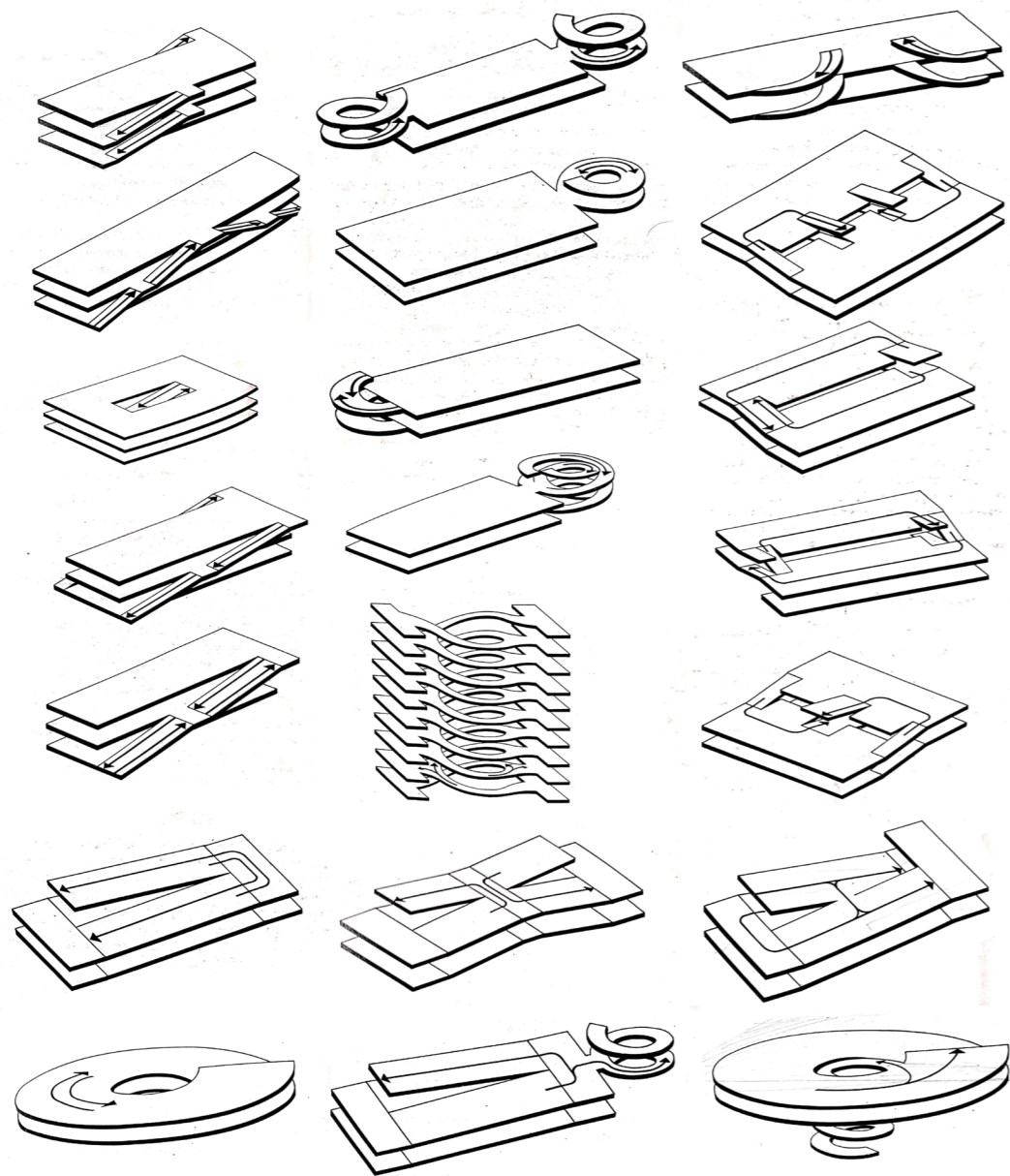
Cars have always been an inspiration of the city, as a gift from the mechanical world, it has been a speaker of the motion inside metropolitans. From the Italian Futurism to the regional plan for New York in 1929, pedestrian and car traffic have been considered as two systems and the solution is an attitude between the two solars. Alison and Peter Smithson in their poposal for the Hauptstadt Berlin competition in 1957 points out a possibility that the garage can be an entrance to the other functions like the mall or offices, so it has a social value beyond the original functional value.

Despite garages have been emphasized a bit in some proposals, most of these experiments put efforts in the organization of cars and pedestrains, not realizing the value garages can give in the whole system. Like the fantasy with the seperation of car and people for New York in 1925 and the pad way in london during 1960s. Right now, the two evolutions about garages have given the traditional infrastructure a brand new chance to play a vital part in the development of the shared cars system. We have marched into a new shared age. Car, as a resource, can be shared through a closed circulation and stations for conducting such activties as returing and getting a vehicle, or even turing the place into a new kind of public space like the train station. Based on the original network of garages, a new kind of public space network can be formed just beneath the place we are working and living. In this sence, the garages is a bridge between the two contrast world, partly taken for the deck of the urban circulation of shared vehicles while part given for the various activties related to the shared cars' behavior.

Lets rent a car instead of owning the only one, lets giving more public space instead of making it into monotonous stockings, lets make motion part of our lives instead of sperating from our urban lives.



09 shared cars with the city network (self collage)



10 The category of parking garages

02

AN EXPEDIENT UNFIT CLOTH FOR CARS

- 2.1 cars: a mixture of time and space through motion
- 2.2 garages: a beloved and hated prototype
- 2.3 the siege of motion: a dramatic side-effect in Car park for 1000 Vehicles

2.1 CARS: A MIXTURE OF TIME AND SPACE THROUGH MOTION

the motivation for new interventions would no longer be the clearing of space for some bright, new, functionally efficient utopia that architecture might help install, but rather the affirmation of the preexisting context in all its messy heterogeneity and informational flux

----- Simon Henley

If high-style architects are not producing what people want or need, who is, and what can we learn from them?

----- Denise Scott Brown

J.B Jackson, in his description of the evolution of the domestic garage , identifies the car's role at the beginning of the twentieth century as that of "a *pleasure vehicle and a toy, costly, exciting, and of extraordinary elegance.*" In fact, the car goes far from a fragile exhibit, it turns to be the best example of Einstein's Special Theory of Relativity: "*Time and space were no longer, at least algebraically, heterogeneous; the continuous 4-dimensional manifold could no longer be separated into a three-dimensional section evolving in one-dimensional time.*"

That is the reason why Filippo Tommaso Marinetti is "*praising danger, movement, crowds and, above all, speed as a new form of beauty, an eulogy to mechanism and abstract energy of all kinds including war and automobilism.*" But he finally could not abolish his so called "space and time" once for all, because he did not figure out the relationship between space, motion and time.

Umberto Boccioni in his writings on Plastic Dynamism points out clearly that: "*Relative motion is a dynamic law based on the object's movement....Here it is a matter of conceiving the objects in movement quite apart from the motion which they contain within themselves. That is to say we must try to find a form which will express the new absolute—speed, which any true modern spirit cannot ignore. (SPF, pp. 82–83)*" The object we have here is space, if we need to put motion out of space, we need to use time for filter. These can be easily done with a car, you can capture a single piece of space when you are in motion, or you can enjoy the mobility with the passing of space through time. These two extremes always coexists with each other in a single scene like the capture of the scene in a rearview mirror and the blur of motion in its sequential surroundings.

Tom Schumacher describes this phenomenon as the new landscape for the contemporary cities which he named as the city-in-the-park, which is totally different from traditional city landscape which is "*primarily an experience of space defined by continuous walls of building*", while the city-in-the-park model consists of collections of isolated buildings set in a landscape.



11 the co-existence of the time and space with the help of motion



12 the landscape in the park

2.2 GARAGES: A BELOVED AND HATED PROTOTYPE

Despite our dependency on the car, its physical by products, in particular roads and multi-storey parking garages, have become increasingly unpopular....Then in the mid-1990s, it re-emerged as a practical solution to the congested city, particularly in continental Europe.

----- Simon Henley

As the car became more affordable after the war, particularly in the 1950s, the wider population took up motoring and the era of the car park began. Architects started to realize that the parking space is different from others cause it is purely designed for the movement of cars. The garage has evolved into a prototype, including a series of structure designed to suit different conditions with the amount of cars and the city context, like floors connected by straight slopes on both sides, on one side, and innerside; floors connected by strings on both sides and on one side; string slopes, sloped floors, floors with slope inside and spiral parking, etc. The classification of parking space is a series trying to accommodate the unstoppable movement. Frank Lloyd Wright's Guggenheim Museum and NAP architects' Ribbon Church are perfect examples using the slope as a container of human flow instead of cars. The hovering up slopes shape the interior and exterior at the same time. People can get the feeling they once experienced inside their cars, the freedom to extract pleasure from the mixture of time and space, just like the people in the early 1900s felt inside the Eiffel tower.

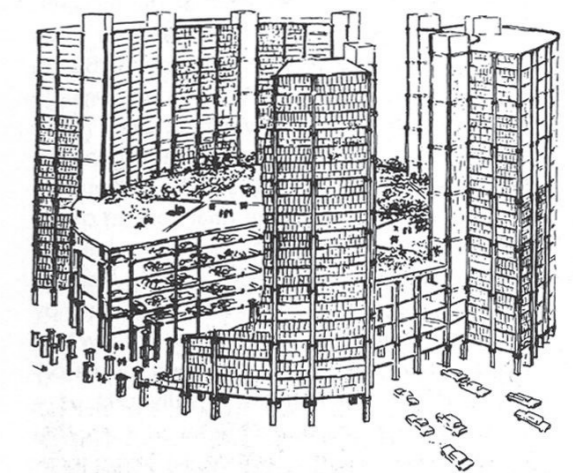
From the late 1940s to the early 1970s, the parking structure proliferated throughout the United States and Europe. Garages have been adopted as a clue to reimagine the city with cars and pedestrians without any priority. The most famous among them is Louis Kahn's unbuilt proposal for downtown Philadelphia. Drawing parallels with a fortress, Kahn envisions a city with a pedestrian centre protected from the car by walls and a collar of cylindrical parking towers. Car parks are typically drawn as cylinders or spirals, and are shown forming the 'dark' core of mixed-use buildings, wrapped in an outer layer of shops, flats, or offices.

Despite prophetic as such, Kahn's car parks divorced this abstract building type from the public realm, reflecting the condition of garages within the urban environment. Auguste Perret designed the Garage de la Societe Ponthieu Automobiles in Paris with a huge 'rose' window at the center of the facade, reflecting the contradiction between the facade, the negotiation with the surroundings and the interior, a provoking system resembles the progress of the times.

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NAP Architects
 OMA
 Le Corbusier
 Michael Webb
 Gignol/Guyot Architekten
 kengo kuma
 Micheal Targe, Jean-Michel Wilmotte and Daniel Buren
 MVRDV
 ingenhoven overdiek Architekten
 zaha hadid
 Bertrand Goldberg
 Roche Dinkeloo & Associates
 NL Architects
 Von Gerkan, Marg&Partner
 UN Studio
 the Owen Luder Partnership
 Frank Lloyd Wright
 BIG

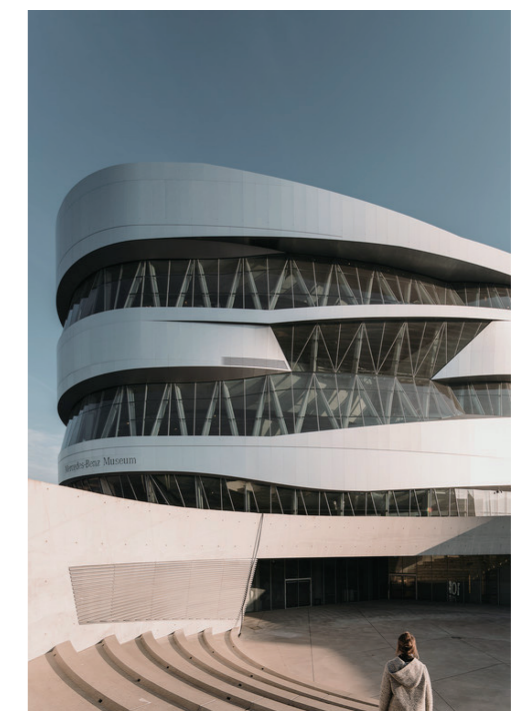
13 The name list of architects inspired by the garage



14 Proposal for downtown Philadelphia, Louis Kahn



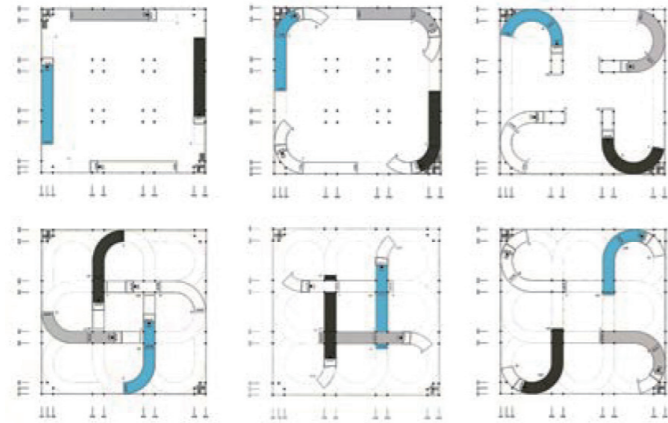
15 the Ribbon Church, NAP Architects



16 UNStudio Mercedes Benz museum

2.3 THE SEIGE OF MOTION: A DRAMATICAL SIDE-EFFECT IN CAR PARK FOR 1000 VEHICLES

Melnikov was asked by local government officials to design a car park for 1000 cars in Paris after winning the Soviet pavillion for the 1925 Exposition. He developed two designs, variously known as the 'first' and 'second variants'. The first design expressed the oblique in its skeletal apperance over the bridges on the Seine in paris(the maximal verson), and the second, a orthogonal option set on a plot of land with a surface area of 50m by 50m(the minimal verson).



17 Plans for the minimal verson, car park for 1000 vehicles



18 The minimal verson, car park for 1000 vehicles

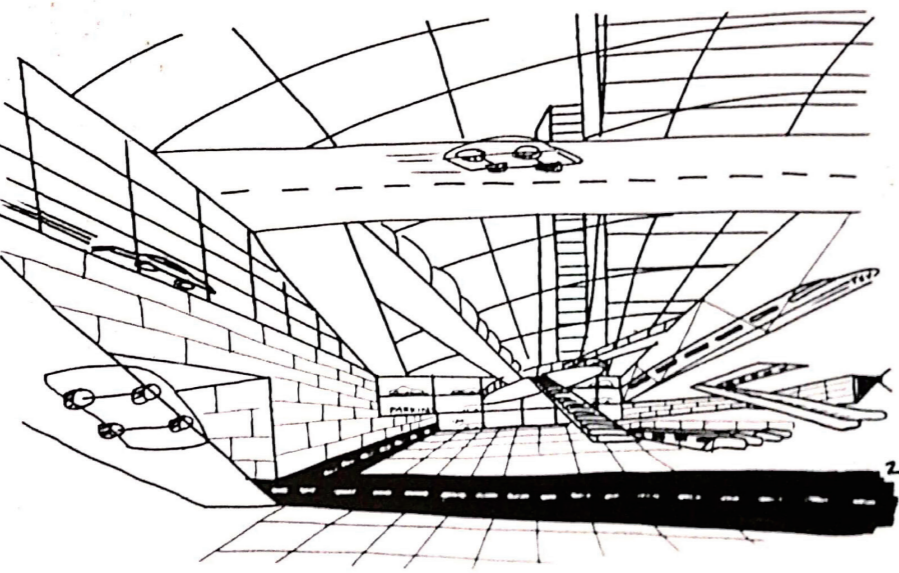
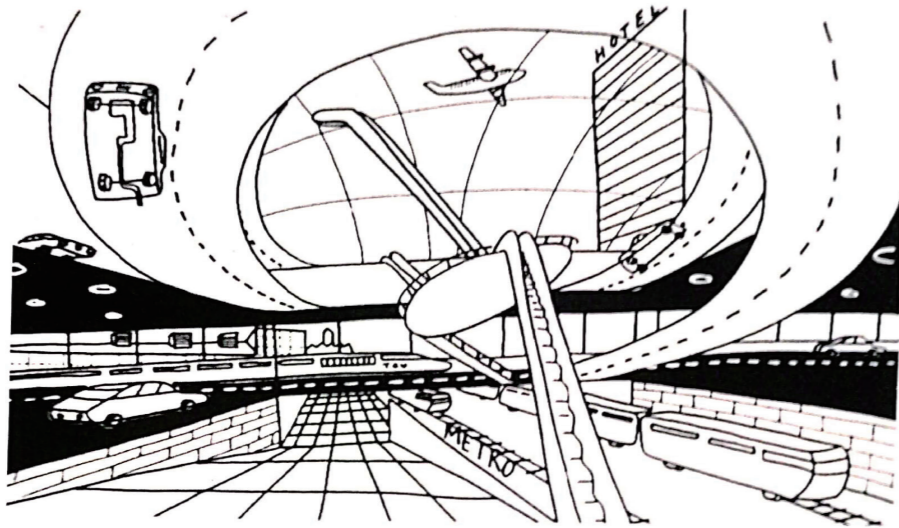
The latter one is a masterpiece for expiloting the motion into an endless moving structure, making users totally absorbed by the ride. But there are two points which reveals the actual captivity of motion behind its vivid drawings.

The first is the deliberately pure volume, both square and symmetrical, totally representing the order given by the illution of a "new builing" in mordern architecture theory. The second is the dominic supporting system, diving the area into a nine-square grid which serves as boundaries for the winding up slopes.

The work, as a result, creates the motion and then jailed it into the unintentional envelope.



19 the seige of motion (self collage)



20 Zeebrugge Sea Terminal inner view

03

A PUBLIC INTERFACE BETWEEN MAN AND CARS

- 3.1 the mechanical garage: mobility is a new commodity
- 3.2 parking garage: from an end to an urban generator
- 3.3 a comprehensive public space for users and citizens

3.1 THE MECHANICAL GARAGE : MOBILITY IS A NEW COMMODITY

The mechanical garage is totally not a new thing, it first come out as an exhibit of technique in England in 1960 called the zid park. Londoners enthusiastically watched the TV show as the prince stand at the entrance, wathcing the car be placed into the upper floors with only an operator on ground floor, cars can make place for new arrivals through the conveyer.

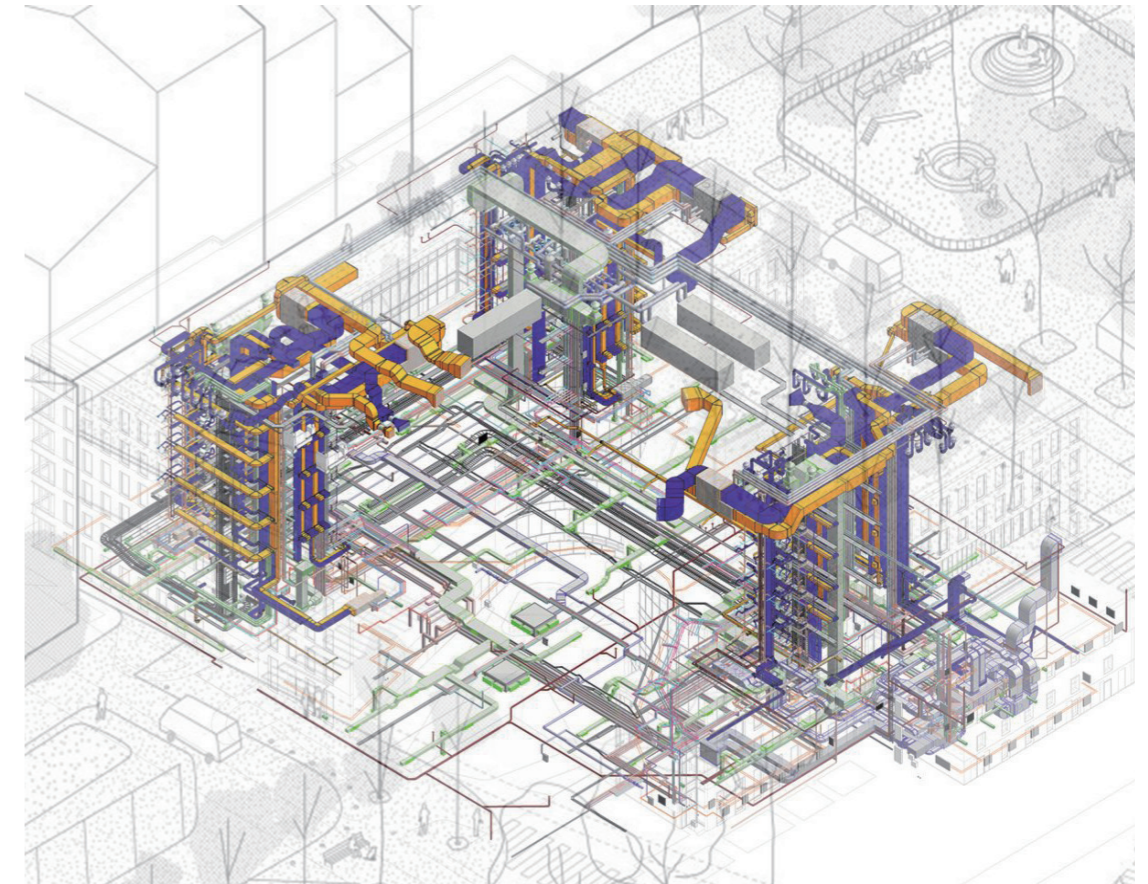
Though it has to be closed after few months because of some techniquial problems. The scene clearly marks the first evolution we have on the deign of garages, which is fully mechanized. Thus men do not need to come inside the garage, all he needs to do is standing at the waiting zone for his car to be placed inside or taken out. Based on this idea, the garages are now a truly mechanical issue with no need to consider the human need inside.

The story for mechanical garage is just getting started, then comes the Rota park, Car towers for Autostadt, Speed park in New York etc, all trying to free individuals from parking platforms, making the garage totally automatic funtion item.

The invention of mechanical garage can be viewed as the first evolution in the history of garage cause it pushes the critical ideas much forward in two directions: Firstlry, it makes us to rethink our relationship with the cars within a static place, if we are going to store them, why we need to take part in the space which restrict and waste the efficiency of the garage, all we have to do is to make clear division between man and cars, to create a place special for cars and create a place for the transverse between the two characters, with can be given more meaning through architectual operation.

Secondly, the image we used to have with certain garage coexists with the urban framework shall be changed, all the endeavours we have made to suit the garage with the city have been proved in vain cause they are highly in contrast, especially in southern Eroupean countries where the city is a paradise for pedestrains. No matter how much ideas have been created on the facade or ventilation on the garage, it cannont avoid the fact that cars are actually an anti- pedestrain thing that the convenience or coherence of walking experience is faded with the interuption of the motion across the walkway, running deep inside a certain building with a mordern facade, a mask to pretend the original identity of a stranger.

The evolution changed us totally, both in technique and mind.



21 a machine within a urban envelope

Car towers for Autostadt is a good example to show how a mechanical framework can be an illusion of a new age, standing as the tallest building in the neighbourhood. Cars are stacked in either tower until their new owner picks them up. They are purely an immensely attraction from both the outside and inside, you can watch the cars being quickly positioned through two auto lifts within one and a half minutes, and you can also deeply experience the car itself with a temporary experience of the cars you picked and then your option about the color and model will be a feedback for the manufacturers can make your own ideal car.

Through highlighting the mechanical character of garages, the space is reduced to a servant of the whole mechanical requirements, but this motion based space has its own unique status of taking part in the daily activities of a single person. Through motion, architecture can be changed into pieces of basic requirements which can be more easy to put focus on the interface, just like the designer of a toaster, it is no need to put much emphasize on the inner heating part, all we have to do basically is to create a fascinating envelope and some buttons, like public spaces within a city scale, where people and machine encountered. The users just waiting for the car, a freshly baked bread to come out. That is the new commercial thinking.



22 car towers for Autostadt, night view



23 pick up a car come out of a toaster (self collage)

3.2 PARKING GARAGE: FROM AN END TO AN URBAN GENERATOR

Some middle ground is needed. To retreat to a hopelessly artificial past is unrealistic, but to allow a brutalizing system to dominate and destroy traditional urbanism is irresponsible.

----- Tom Schumache

Architects are going to be the fashion designers of the future, dressing events to come and holding up a mirror to the world. The re-thinking of public imagination, public space and public forces transforms architects into public scientists.

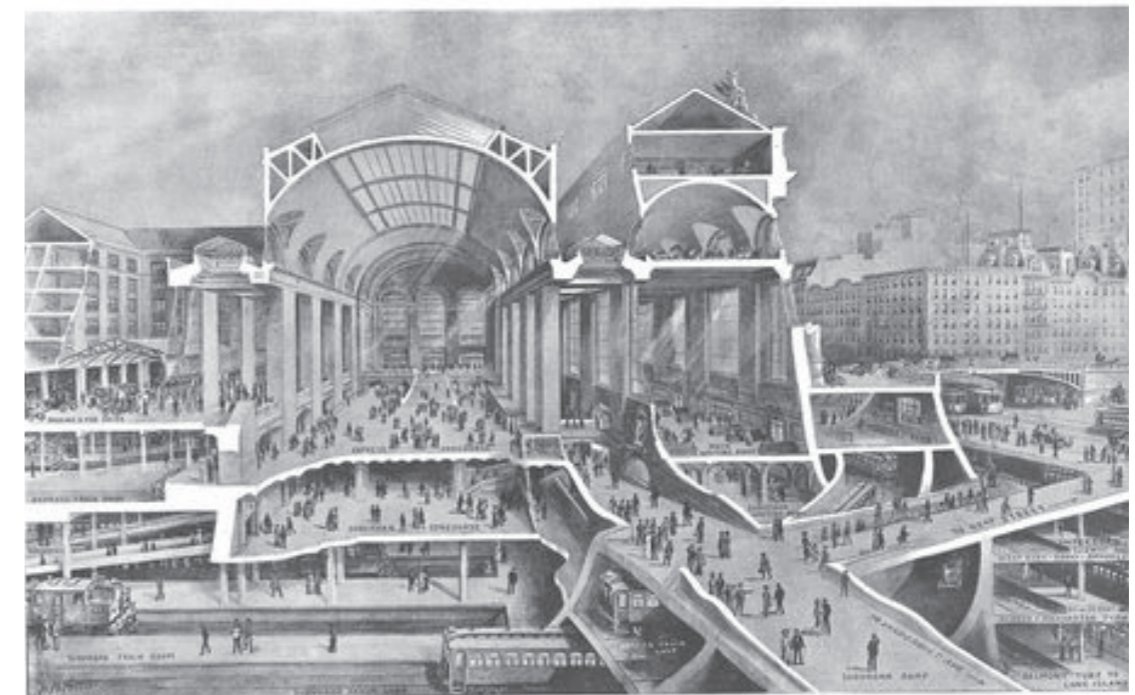
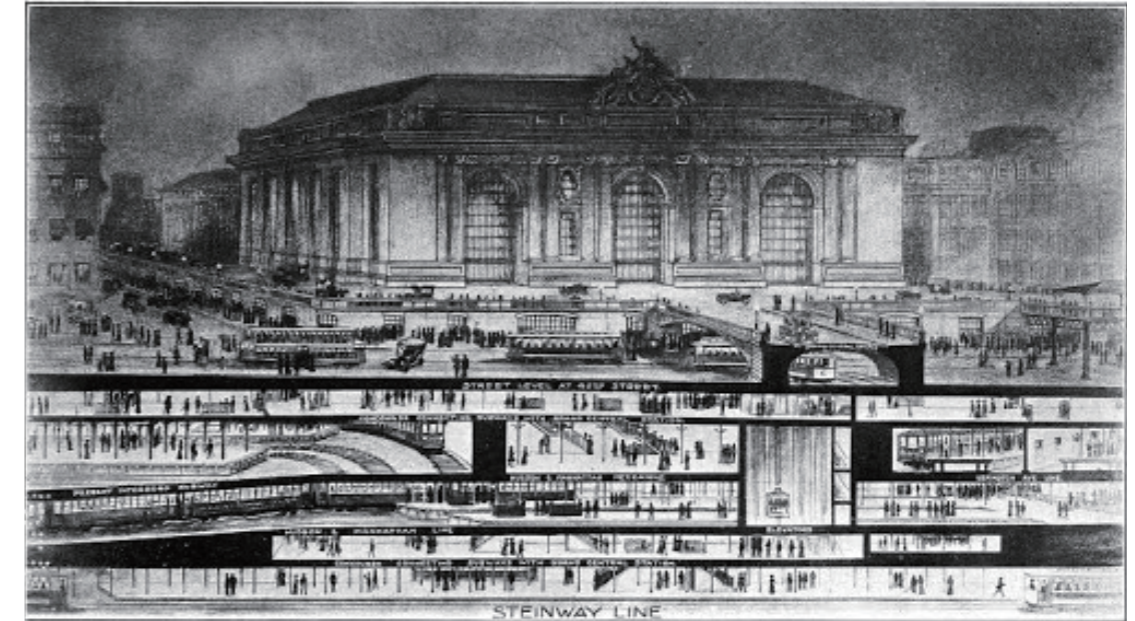
----- UN Studio

The twentieth first century town is physically a combination of two simple concepts: the traditional city of corridor streets, grids, squares, etc., and the city-in-the-park. The traditional city is primarily an experience of spaces defined by continuous walls of building which are arranged in a way that emphasizes the spaces and de-emphasizes the building volumes. It is an experience which can be thought of as resulting from a subtractive process in which spaces have been carved out of solid masses. By contrast, the city-in-the-park (a phenomenon most clearly articulated by Le Corbusier as the "Ville Radieuse"), is compositionally the reverse of the traditional city. Composed of isolated buildings set in a parklike landscape, the city-in-the-park presents an experience which emphasizes the building volumes and not the spaces which the buildings define or imply.

Due to the flexibility of the capitalist city. Economic pressures and design preferences, for example, have led to the typification of housing as packages which can be assembled only as the city-in-the-park, endlessly repetitious and based on profit rather than need. The criterion of economic obsolescence overrides all others. If a building doesn't pay for itself, it goes.

The production of the house packages is just a side effect of the city-in-the-park, which is a self-entertained system cut off from the traditional cities. We have to spend some time to discover the whole motion system: it lives right besides us like the roads within the urban center, while it stretches most parts into the suburb, the tunnels, the highway and even the mountains. The distance is calculated through time and a series of memories of spaces instead of the numbers of the spacing alone.

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24-25 Binary opposition of the two concepts in the contemporary metropolitan

When we observe it closely, we can find out the character that the motion never turns its way back which means that the vehicles are moving like a vector which is unstoppable and one-way originated. So it always tends to reach a closed route to make sure the motion could not be interrupted in its physical boundaries and that is why our classical city context cannot be combined with the city-in-the-park cause we are based on a relatively static condition to carry out our daily activities, we need to spend time on a single thing and a single space, which is impossible for the motion cause it is deeply tied with the time.

Garages is a unique presence within the two concepts, it is the last barrier of the intention of creating a closed motion system. The delay is caused because the garage is a place for the vehicles and man. People need some type of static within the system to realise the exchange of the two situation. That is the reason why the garage is matched with the prototype of storage, which is considered according to the need from the classical city structure.

The garage, in this way, can be a new opportunity to create a new urban generator through a total consideration of both needs. The conflict is a new urban pressure and the garage is a dynamic converter instead of a static container. If the pressure is combined or contained within an effective idealization through programmatic requirement, we can arrive at a logically balanced "contextual" building. A beautiful example of this flexibility is Gunnar Asplund's 1922 competition for the Royal Chancellery in Stockholm. Produced at the same time that Le Corbusier was creating his "Ville Contemporaine", Asplund's project presented an opposite point of view. To Asplund, the specific symbolic impact of the building type was subordinate to the relationship of the building and site. The resulting parti ties the building inextricably to the context in a manner that tends to disguise the limits of the actual building lot. The figure-ground abstractions show how accident, important buildings, and major spaces tend to section the city into a series of phenomenally transparent fields, which goes in the same way with the cubist painting. Copper asserts that pictorial space has been "shattered into an endless collage of overlapping elements rarely complete in themselves, which find their organization via reference to larger elements often superimposed over them." So it is with the consistent experience we owned through motion, the meaning can only be given through a series, a feeling examined through time. This coexistence is the guarantee of vitality.



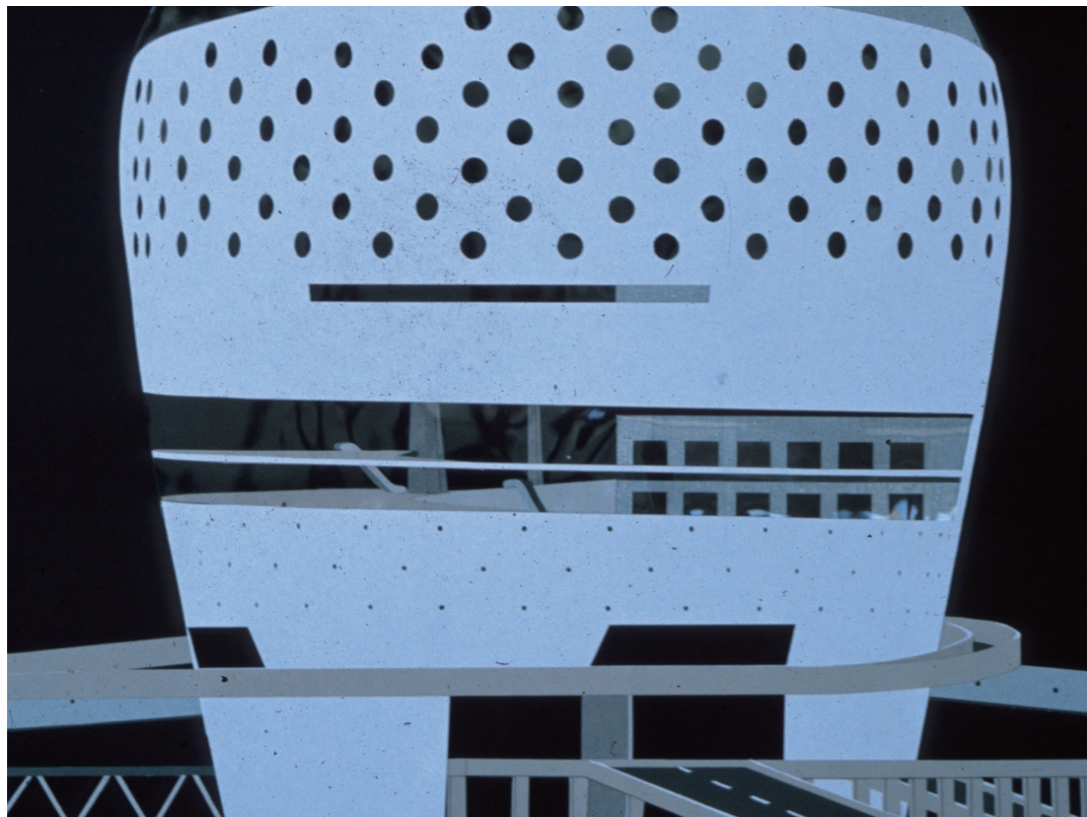
26 Garage: a new urban gate (self collage)

3.2 PARKING GARAGE: FROM AN END TO AN URBAN GENERATOR

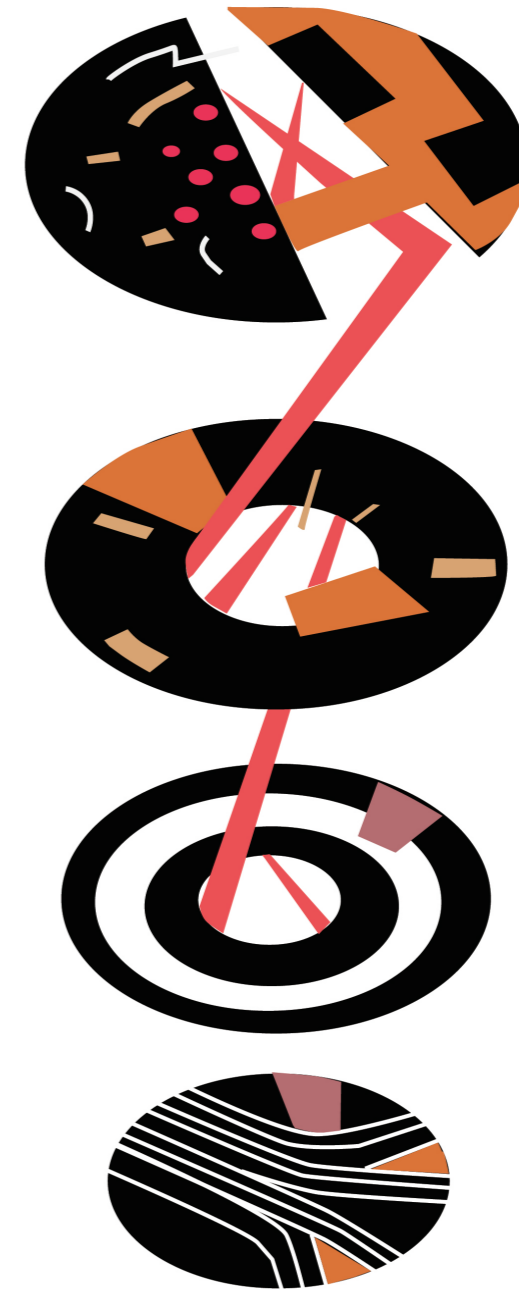
Not only would the boats turn into floating entertainment worlds, but their destinations – the terminals – would shed their utilitarian character and become attractions.

----- OMA

How to create an urban generator? The characters emphasized in the Zeebrugge Sea Terminal (also called working babel) can be a good reference for us, OMA uses the term "sign" and "theme" to create a complex of shapes and functions within a total framework. This idea comes from the contextualism which aims at providing motion and activities through a compress of differences and the publicity is achieved through the complexity which is totally different from the buildings in the classical city texture. The second focus is the "site" and "building" which classify the vertical order of the functions, the transportation is placed on the level ground with direct connection to the water and roads. The functions are deployed on upper floors where the scenery and sunlight can be satisfied



27 Working babel, view from the ground



28 Create density of shapes and functions within a massive volume (self collage)

3.3 A COMPREHENSIVE PUBLIC SPACE FOR USERS AND CITIZENS

The house . . . must rise from the brink of a tumultuous abyss; the street itself will no longer lie like a doormat at the level of the thresholds, but will plunge storeys deep into the earth, gathering up the traffic of the metropolis connected for necessary transfers to metal catwalks and high-speed conveyor belts.

-----Messaggio

Not only would the boats turn into floating entertainment worlds, but their destinations – the terminals – would shed their utilitarian character and become attractions.

-----OMA

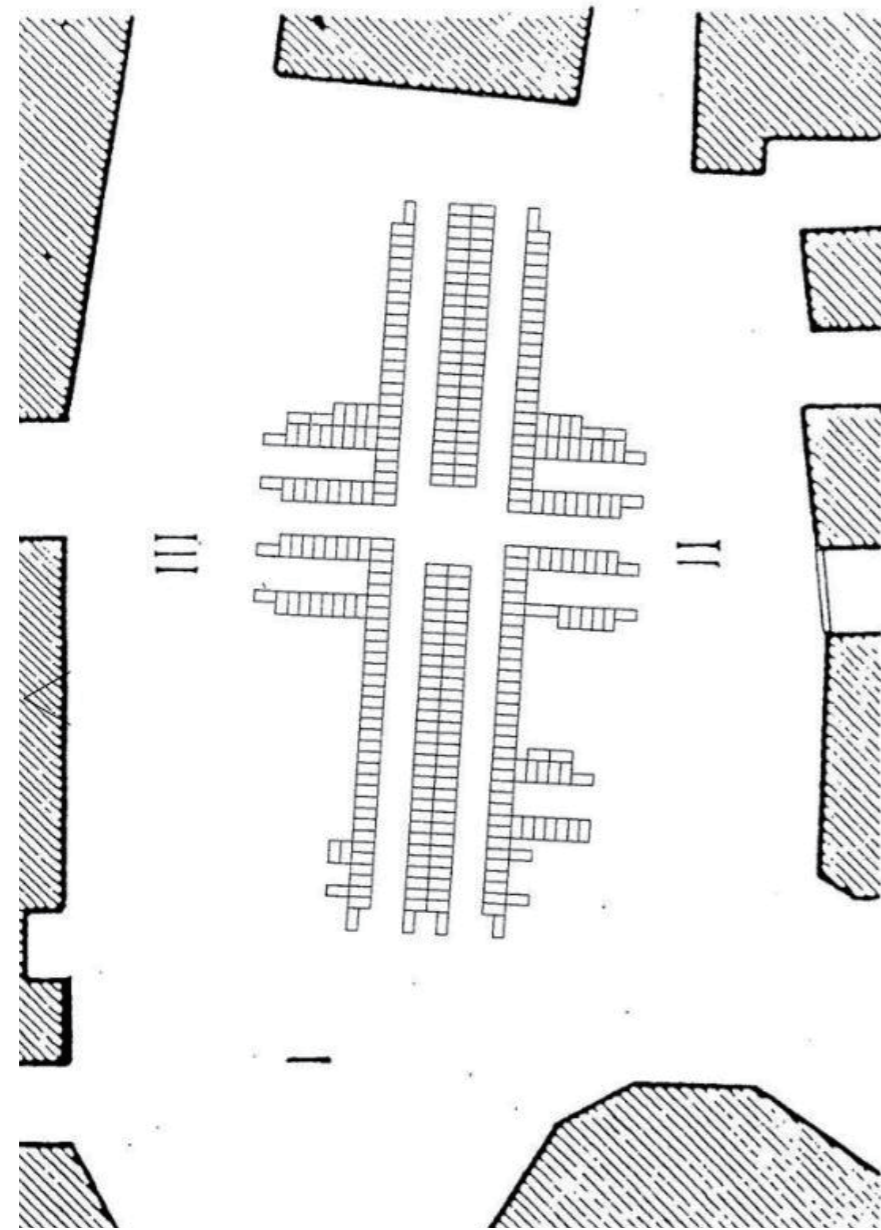
The potential of the garages as a new platform for the shared cars, further more generating the urban renovation is worth considering based on the analysis above. A perfect public space should either act as a blank page which provide a place for nearly all kinds of activities you can think of, or contain a bunch of functions that have public value, just as the amusement park.

Despite the differences in their space qualities, we can call both of them a "comprehensive" public space based on the figure that they enjoy the ability to multiply people with different interests and functions of different. These crowded features are just the ones Koolhaas discovered in Manhattan, the feature can be realized through piling, mixing, or dividing. So it can be realized in different volumes, all that matters is the size, it has to be big enough to accommodate all of these functions so that it doesn't need to concern about its surroundings, or owning a lively district where the commercial or cultural background are active enough. The former one is the "city complex" (or malls) we have, a relatively self-promoted system, while the latter one reflects to the traditional plaza, or park which is developed through a long history and most of them have a close relationship with its surroundings, both in the context and the history.

The quality of our new public space is no doubt the former one, cause it is a relatively isolated place in the underground, with no surrounding interests, so it has to evolve into a complex itself, providing a place for both the shared cars users and citizens to find a supplementary to the public space around, or shaping a core of the public activities in a area lack of dominant public spaces.



29 Comprehensive public space stockings



30 A new church made from car parking lots

04

ILLUTION OF A NEW PUBLIC SPACE SYSTEM

- 4.1 an entrance like Plaza de Sants: aesthetics of disappearance for a station square
- 4.2 a machine like the Ford line: an unstoppable expansion on time in service
- 4.3 a platform like Hamburg Station: observe the distribution of movement in space

NL ARCHITECTS: PARK AT YOUR DESK OR A DESK WITHOUT A NICE VIEW

Parkhouse turns your journey into a pleasant ride over an inclined surface offering spectacular views across the historic city.

-----NL architects

The NL architects is among the first generation of architects rethinking the cars within a urban framework. House NT and Parkhouse are two projects figuring out two issues about the intergration of parking, despite they are all trying to give a new paradigm shift of the garage.

The house NT focus on the symbiosis of living and parking, make the experiences with the vehicle a fundamental element of our daily routine. The idea is to remove several inertval layers of the wheelwright parking sysytem to add dwellings, offices and shops, making it a comlex of living where you can park your vehicles on your own rooftop.

The parkhouse put itself in the downtown of Amsterdam, which faces more challenge than the

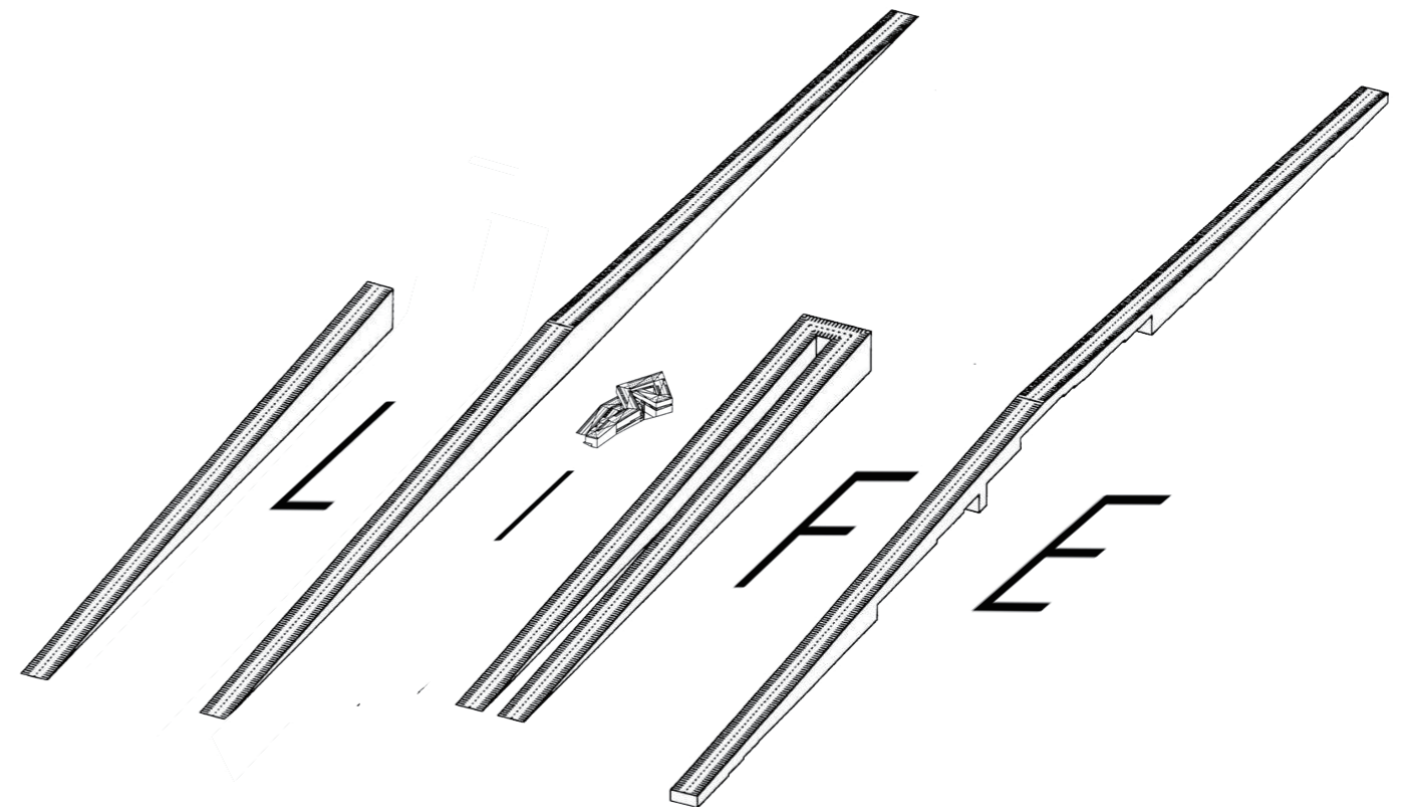


31 Park house, birdeye view from the south

formal one in the suburb. So the main focus here is to test how the huge infrastructure can be packed with the urban life. The architects creates a 500 meters long 'parking-wedge' connected with the public road within the height limitation.

It is exciting that the direct relationship between parking space and the program becomes possible and it may truly reduce the parking along the street. But we make clear of the of a confusing slogans given by the architects. Is "park at your desk" actually a staregy to make your desk the one without a comfortable room. A house is by nature for living and activities, if the cars takes the main figure in the perspectives and plan, how can the actual daily activities be placed along side the surface burdened with ha=eavy traffic. Does the new combination works? If not, what is the way to intergrate the parking within the city and providing public space at the same time.

The method could be a renovation based project, adding factors with great caution.



32 Seperation of life through infrastructuew (self collage)

4.1 AN ENTRANCE LIKE PLAZA DE SANTS: AESTHETICS OF DISAPPEARANCE FOR A STATION SQUARE

Things contain when they are empty enough

-----Lao Zi

After gaining some important commissions inside Barcelona, Albert Viaplana finished his most famous work on the plaza de sants. It lacks all the basic qualities for a public space: trees, benches and facilities. The disappearance gives on reference to the surroundings directly. But it does describe the traces of motion, like a solidation result of the liquid leaking from the large oil tanker: the sants station.

The unfit scale reveals somehow the same relationship of a man inside a train station which goes out of the exact sensation of a human body, but it clearly points out the mobility and unity of space. Through this less defined space, motions are free from the over-enthusiastic regulations given by the architect. But the plaza is engraved with hills and gullies and the flow just get their way within this



33 View under the roof, plaza de snats

landscape. One square roof, raising highly above the ground, make the place it projected more static, while the curved linear roof, creeping towards the destination, makes it a better choice for crossing this anonymous land.

The materials chosen for this place needs to be neutral and simple, creating less noise and standing still. Structures are made through repetition. Making the motion standing out of the canvas as the most colorful strokes.

All we have on the plaza is a destination, a standing point in the horizon; and a series of traces which have to be clear enough but as weak as possible. Price has to be taken cause it is quite an isolated area inside the context, so it actually can not hold much static activities. But this kind of disappearance, a inaction model for action, makes it a real space for public: you can do whatever you like.

This methodology can be employed into a more function backed up space to further realize its value.



34 Weak qualification and strong public sence



ENTRANCE : A ROOF RESHAPING THE LANDSCAPE

The roof above the entrance is inspired by the Plaza de Sants, with its ambition to reshaping the landscape and acting as a symbol to mark the exact location of the underground public spaces.

The cover needs to satisfy the following requirements to fit within the landscape:

01 big enough:

the floating surface resembles the presence of the new public space underneath. It acts as a new gate combining the outlines of the buildings. The presence of the space can be realized in far away.

Beyond that, it adds a new order for the orientation of the Plaza Nova, the addition floating on one end of the plaza strengthens the perspective view of the plaza, thus the longitude direction is emphasized.

4.2 A MACHINE LIKE THE FORD LINE: AN UNSTOPPABLE EXPANSION ON TIME IN SERVICE

Our machines are placed very close together - every foot of floor space in the factory carries, of course, the same overhead charge. . . . We measure on every job the exact amount of room that a man needs; he must not be cramped - that would be waste. But if he and his machine occupy more space than is required, that also is waste.

-----Henry Ford

Beyond the public space for the new garage, the service system inside should also be considered. What is essential for the shared cars system is, as mentioned above, the efficiency of service. Ford line is a great example for this in two key characters below.

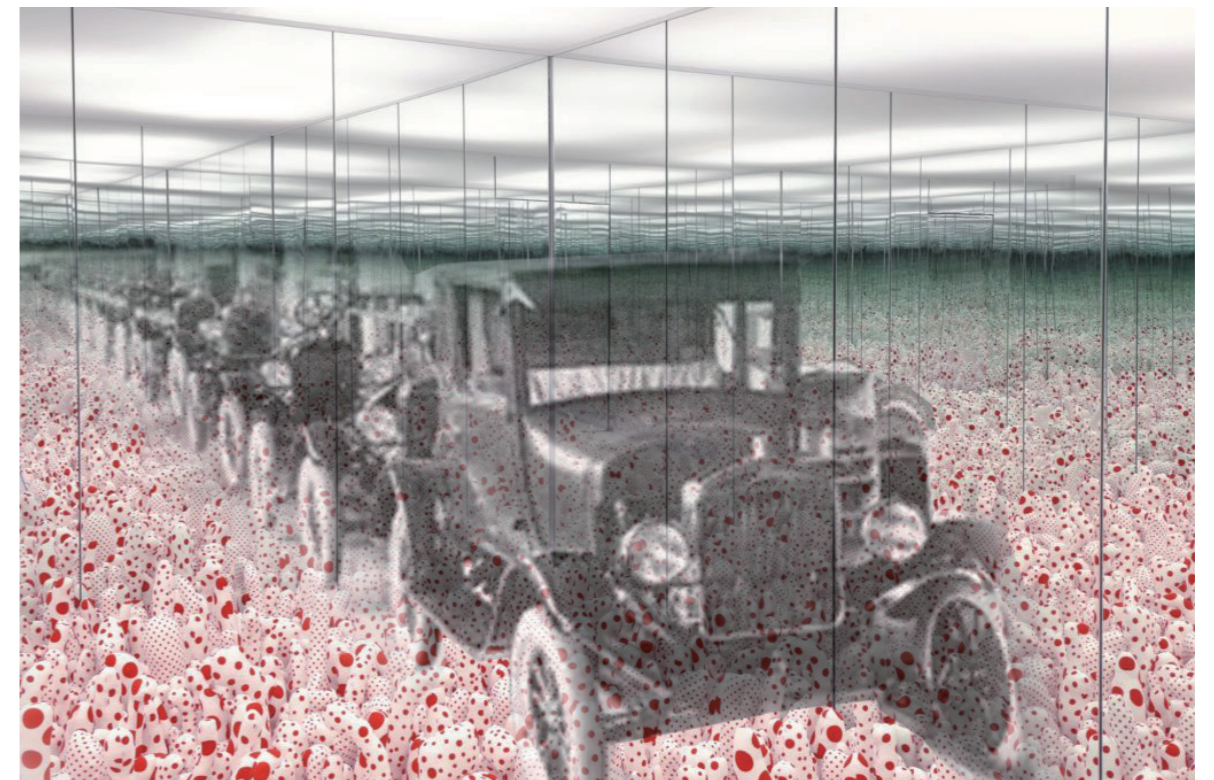
Firstly, the service is clearly a machine issue from the very first time served to take the most advantage of the space and time. Ford revolutionized automobile production by gradually introducing the moving assembly line first in the Highland Park plant during 1913-14. Besides breaking down the manufacturing and assembly operations into simple tasks, he mechanized production with specialized, single-purpose machine. Ford arranged the machinery according to the sequence of



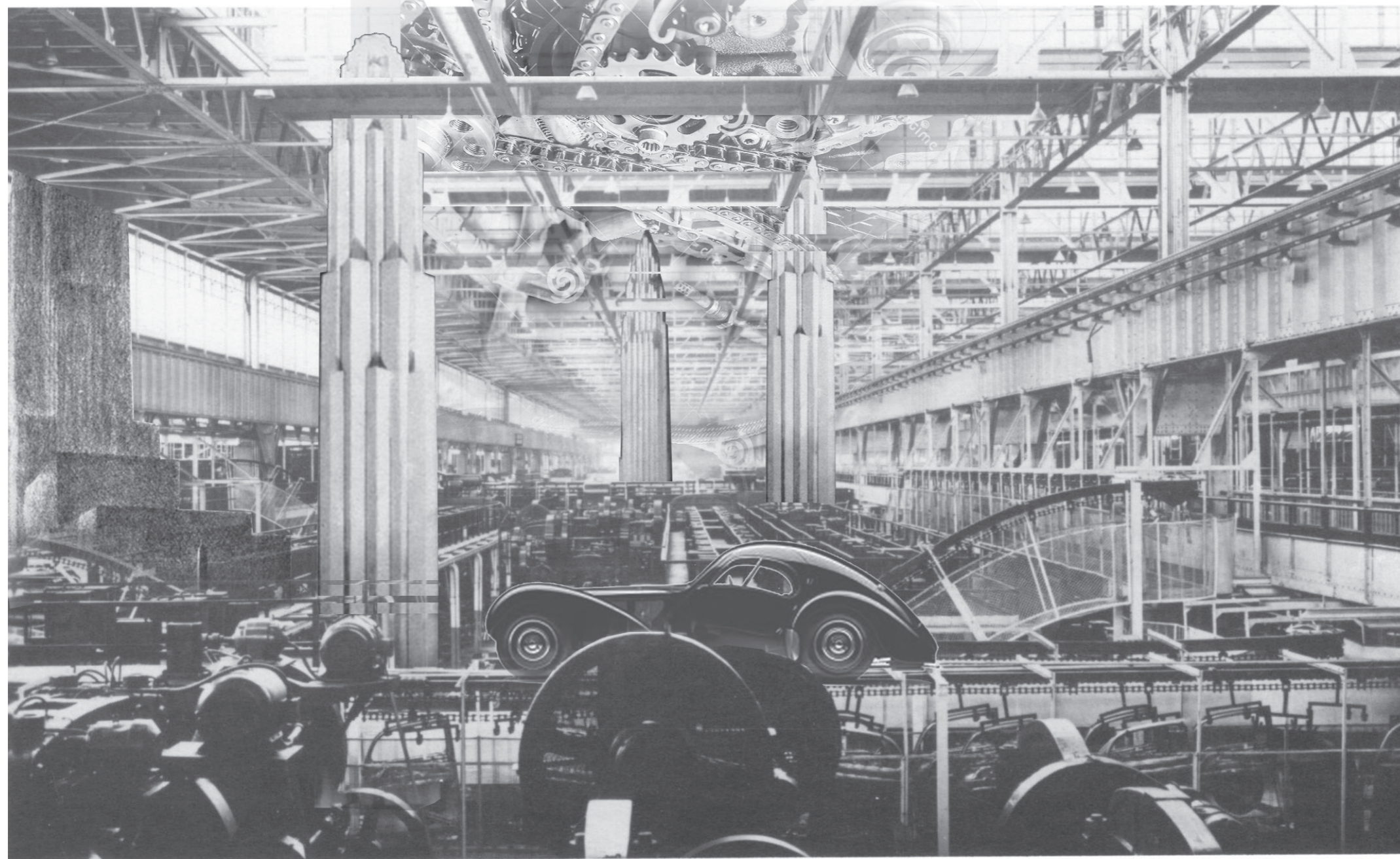
36 Ford Motor Company, Press Shop, 1938, Dearborn, Michigan

production and placed the machines and the workers close together, greatly reducing wasted motion. He used conveyor systems to bring the work to the worker. It acts perfectly with the idea to make the cars go for the users rather than the original opposite condition.

Secondly, the space for the Ford service line is required to be bright and large, expanding through a rather huge platform which can be easily achieved inside the first lobby of the parking and other lobbies as expansion to this system. The Highland Park plant is a huge system which employed 13,000 workers and 15,000 machines. The single-story, steel-framed design permits wider spaces between columns and, therefore, greater flexibility in arranging production. Ford also clearly understood the contribution of factory design to his revolutionary production methods. He observed, one point that is absolutely essential to high capacity, as well as humane production, is a clean, well-lighted and well-ventilated factory. It is the character needed for a public space as well.



37 Unstoppable movement in the time of dots(self collage)



SERVICE LINE : A CIRCULATION FOR MOTION

The service line in the new public space serves as a transfer system for the shared cars. Inspired from the taxi stop in train stations and terminals, an open circulation is connected to the main road and empty cars can be directed here, waiting for the reservation or just leave the space for other central stations. The perspective view here derives from the factory of Ford, showing the power in the assembly line in the sense of a space. Cars are moving through the given line, which is in accordance with the roads in city grids, the Ford line, in this sense, resembles the automatic street view of a new city. The traffic is a functional matter under the rules of motion.

4.3 A PLATFORM LIKE HAMBURG STATION: OBSERVE THE DISTRIBUTION OF MOVEMENT IN SPACE

Restricted, austere, simple in its premises, plentiful, expansive, extreme in its expressions, and fundamentally unbound by any dependence on reason, the Generic Sublime employs rationality as the ultimate means for the propagation of its canon: brutal indifference.

-----Ciro Najle

Ultimate expressions of a future anterior, these upcoming archaic configurations escalate ordinary versions of the present to extraordinary versions of the future, here among us.

-----Iñaki Abalos

Public transport stations, especially train stations, are new space modes designed for the public transfer system in huge amount. The spacial value lies in the idea of increasing the efficiency by seperating a time consumable work flow into space cosumable.

Take the Hamburg Station as an example, the lanes and platform are placed in the center of the station, with stores for food and other necessities sorrounding the place on ground floor, leaving the lanes on the first lobby.

The space successfully reorganized a public space where people can sit in the surroundings waiting for their train to come, or getting the in time information of what to do when they get off the train. Together they form a new public space during the trafic transport, where activities merge into a whole, while leaving the main place for motion.

The organization of the shared cars station, at least the core interior space can be made according to the the train station like Hamburg. The platform and lane should be placed in the center of the structure while public spaces are placed around it, making the enclousure of activites accompanied by the motion. The atomosphere totally originiates from the 21st century, it resembles the character of time and a space which needs to be experienced from the very beginning. Stations like this provide a paltform for both the unstopable movement flow and cars , you choose your point to be served.



39 Hamburg hpf interior view (commercial activites around the train platform)



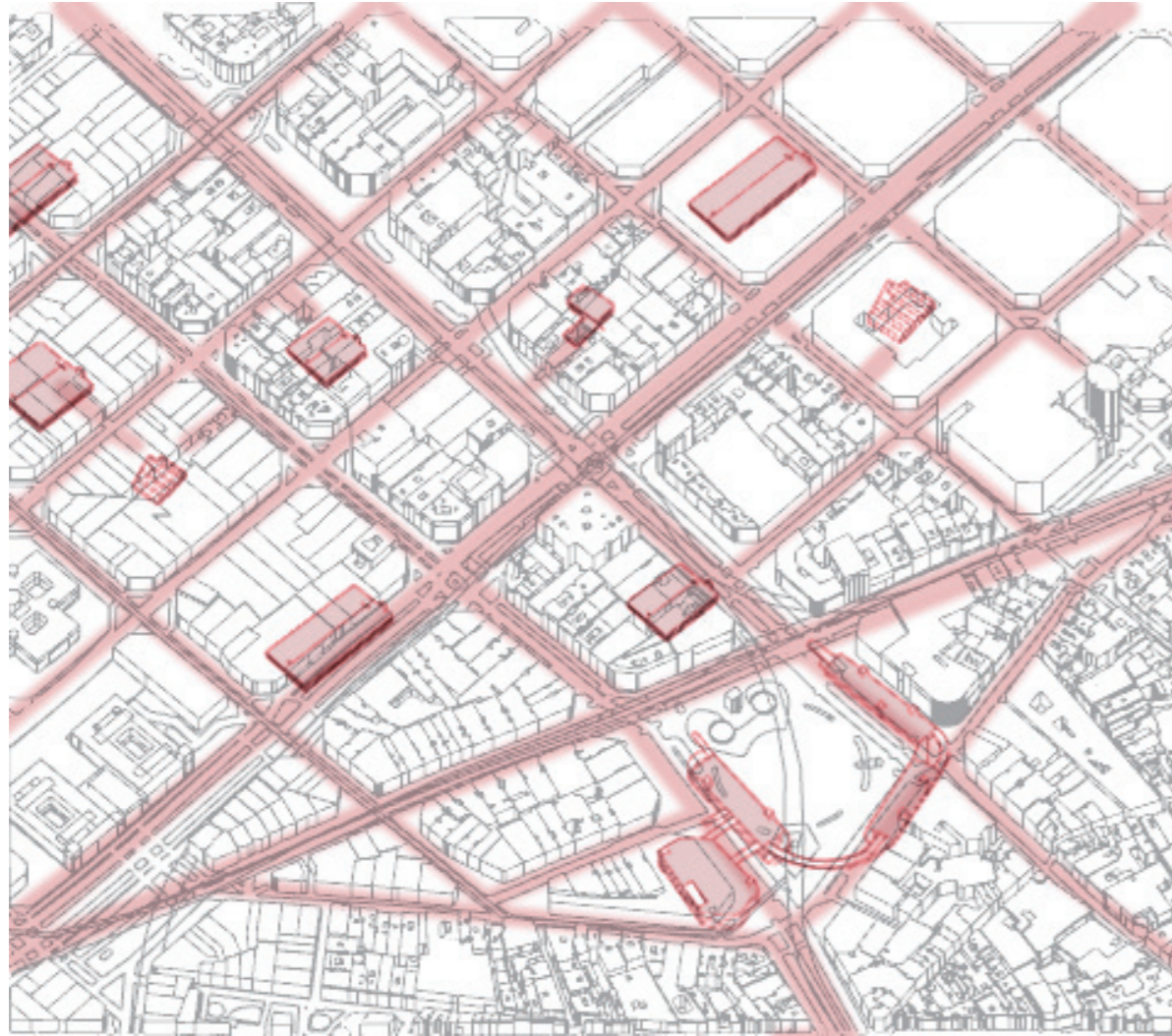
40 The motion brought by transformation of train flow and human flow



PLATFORM : CENTRALIZED PUBLIC STATION

The distribution of the functions around is inspired from the arrangement of the train station where the platforms for the train is located in the central while other functions like shops or other facilities are laid around on upper floor. This centralized space emphasized the importance of the shared cars system in the arrangement of the total space, people can move around with the platforms carrying the cars up and down in the center, recalling people of the original motion we have created through the movement of people and vehicles. The difference in height ensures that people's own activities will not be disturbed by the distribution of shared cars, which is just a central scenery like the waterfall in Changi Airport in Singapore, a celebration of the new age in technology and motion.

41 A centralized public space around the station



42 The condition of garage near Catalan Square

05

UNDERGROUND PUBLIC SPACE: A NEW STORY FOR BARCELONA

- 5.1 parking condition in Barcelona
- 5.2 the function of oblique
- 5.3 "the maximal version" in Placa Nova: a new central station beneath
- 5.4 "the minimal version" in Cerda Block: a realm of activities for the neighborhood

5.1 PARKING CONDITION IN BARCELONA

Learning from the existing landscape is a way of being revolutionary for an architect
 ----- Robert Venturi

Parking is a huge iceberg hidden inside the texture of our city, no matter we like it or not. The survey studies 158 public garages, both underground and upper ground, inside the city center of Barcelona. (not including the ground parking and the street parking) The range goes from Carrer de Sants to the eastern border of 22@ District, reaching the Ronda in the north and west. The study mainly focus on the function above the garage, the opening time, entry and exit, the relationship with the function above, the type of motors allowed and the maximum height. It also takes the location and services included for additional reference. From the site plan and some basic chart analysis, we can find some important facts about the condition of parking:

01. The parking area is totally 763,034.2 m² (the ground projection area), which is 37.8 times of the Plaça de Catalunya, nearly 61.7 Cerda Blocks. When takes full advantage, it can create a new 23% old town of Barcelona.

02. Most of public parkings are located inside the Example area, the largest ones are the parkings located right down some important public spaces like the Plaça de Catalunya, the Sants Station and the Hospital Clinic, etc, which takes up 14.5% of the total amount.



43 The distribution of public parking in central Barcelona



Data sample

number	garage name	function above	opening time	entry and exit	Maximum height	Motos	City car	Sedan car	Utility car	services	location
37	TAMARIT Public Car Park(upperground and below)	resident	24h 7d	1	2.1m	no	yes	yes	no	LIFT WC	Carrer de Tamarit, 159, 08015 Barcelona
38	N N BORRELL Public Car Park	resident	08.00to00.00 Mon to Sat	2	1.9m	no	yes	yes	no		Carrer del Comte Borrell, 28, 08015 Barcelona
39	PROMOPARC POETA CABANYES Public Car Park	resident	24h 7d	1	2.2m	yes	yes	yes	yes	GUARD CAR WASH BIKE	Carrer del Poeta Cabanyes, 4, 08004 Barcelona
40	SABA BAMSÀ PARAL·LEL Public Car Park	hotel	24h 7d	2	2m	no	yes	yes	yes	CAR WASH BIKE	Carrer de l'Abat Safont, 2, 08001 Barcelona
41	PROMOPARC VILA I VILA Public Car Park	sports center	24h 7d	2	2.1m	yes	yes	yes	yes		Carrer de Vila i Vila, 50, 08004 Barcelona
42	GRUMS Hotel Car Park	hotel	24h 7d	2	2.1m	no	yes	yes	no		Carrer de Palaudàries, 26, 08004 Barcelona
43	EDEN Public Car Park	hotel	24h 7d	1	2.1m	no	yes	yes	yes	GUARD	Carrer Nou de la Rambla, 12, 08001 Barcelona
44	SABA BAMSÀ ILLA RAVAL Public Car Park	government	24h 7d	2	2m	no	yes	yes	yes		Carrer de Sant Rafael, 15, 08001 Barcelona
45	ABBA RAMBLA Hotel Car Park	hotel	24h 7d	1	1.9m	no	yes	no	no	WC	Rambla del Raval, 40, 08001 Barcelona
46	SABA BAMSÀ PLACA CATALUNYA Public Car Park	square	24h 7d	2	2m	no	yes	yes	yes		Plaça de Catalunya, 08002 Barcelona
47	EL NOU RAVAL Public Car Park	resident	24h 7d	1	1.9m	no	yes	yes	yes	WC GUARD LIFT	Carrer de l'Hospital, 141, 08001 Barcelona
48	RIERA ALTA Public Car Park	resident	07.00to23.00 Mon to Sat	1	1.9m	no	yes	yes	no	GUARD	Carrer de la Riera Alta 23, 08001 Barcelona
49	SABA BAMSÀ URGELL Public Car Park	resident	24h 7d	2	2m	no	yes	yes	yes		Carrer del Comte d'Urgell 12, 08011 Barcelona
50	URGELL Public Car Park(upperground and below)	resident	24h 7d	2	2m	yes	yes	yes	no	GUARD WC	Carrer Floridablanca, 121, 08011 Barcelona
51	VILLUR Public Car Park(upperground and below)	resident	24h 7d	2	2.1m	no	yes	yes	no		Carrer de Villarroel, 43, 08011 Barcelona
52	ROMARA Public Car Park(upperground and below)	resident	24h 7d	1	1.9m	no	yes	yes	no	GUARD WC	Carrer d'Arriau, 9, 08011 Barcelona
53	MESON CASTILLA ATIRAM Hotel Car Park	hotel	24h 7d	2	2.9m	no	yes	yes	no		Calle Valldonzella 5, 08002 Barcelona
54	COLISEUM Public Car Park	resident	06.00to24.00 Mon to Sun	1	2.2m	yes	yes	yes	no		Gran Via de les Corts Catalanes, 620, 08007 Barcelona
55	SABA PLACA URQUINAONA Public Car Park	resident	24h 7d	2	2.1m	no	yes	yes	yes		Plaça d'Urquinaona, 08010 Barcelona
56	PARKING PALAU NOU DE LA RAMBLA Public Car Park	shop	09.00to21.00 Mon to Sat	1	1.5m	no	yes	no	no		La Rambla, 88, 08002 Barcelona
57	SABA CATEDRAL Public Car Park	square	24h 7d	2	1.95m	no	yes	yes	no		Av. de la Catedral, 08002 Barcelona
58	SABA BAMSÀ FRANCESC CAMBÓ Public Car Park	square	24h 7d	2	2m	no	yes	yes	yes		Av. de Francesc Cambó, 10, 08003 Barcelona
59	LAIETANA PRINCESA Public Car Park	office	24h 7d	2	3m	no	yes	yes	no		Carrer de la Princesa 4, 08003 Barcelona
60	K-H HOTEL PICASSO Hotel Car Park	hotel	06.00to22.00	2	2.2m	yes	yes	yes	no	GUARD LIFT WC	Calle Fursina, 6, 08003 Barcelona
61	SABA LLUS COMPANYS - BARCELONA Public Car Park	square	24h 7d	2	1.95m	no	yes	yes	no		Passeig de Lluís Companys, 08003 Barcelona
62	SABA BAMSÀ BARCELONETA Public Car Park	square	24h 7d	2	2m	no	yes	yes	yes		Carrer del Baluard 27, 08003 Barcelona
63	APKO DI A TA TPEI M&R Duplex Car Park	apartment	24h 7d	2	3m	no	yes	yes	yes	GUARD LIFT	Passeig Joan de Borbó, 78, 08003 Barcelona

44 Data sample

03. The old town and El Poblenou is in shortage of the parking garages, only five public garages are located inside the Poblenou District, which is less than 3% of its regional area.

04. Most of the garages are built mainly for the apartment users above, which takes up about 53%, the hotel and square are also good places for the garage, which occupy 19% and 10% of the ones analyzed.

05. The relationship with the upper floor is often cut off for the conflict between the public usage of the garage and the privacy above. 47% of the garages are connected with the upper floors through stairs with lockers. 5% even has no connection with the functions above, meaning that the garage is an individual system that just share the space with the other functions, revealing the fact that garage is actually a new type of storage.

06. The height is restricted in most of the public garages, except some special cases under the plaza where the load above is much controllable. The average net height is 2m, allowing the entrance of some city cars and sedan cars. Large personal cars can always find their position inside the plaza while not likely in some personal garages under the apartments.

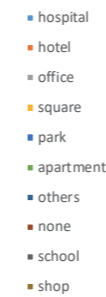
07. The garages are not only restricted to parking, car washing, places for the bikes, toilets and other facilities are included. It means that the renovation of parking system would avoid the consideration of some basic needs cause it already provided.

From the various types of garages, we can find out they can be divided into two main varieties: the underground and the upperground. It is hard to find the garage with both above and below ground. The only case in Barcelona is a few garages located in the center of Cerda block, which can be classified into the former one.

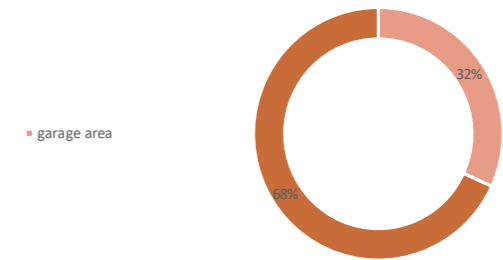
For garages built above the ground, it is restricted to the ones located in the core area of a block, most of them are inside the Cerda block, no matter they are newly built or renovated from the old factories.

Why would the garage could take place within the place of the original courtyard? Cerda's theoretically planned, two or three sided, 20 metre high manzana lacked profitability and with no strict government controls in place, after the great expansion of the population in Barcelona during 19th and 20th century, the majority of the blocks were soon built up on all four sides while far exceeding their originally

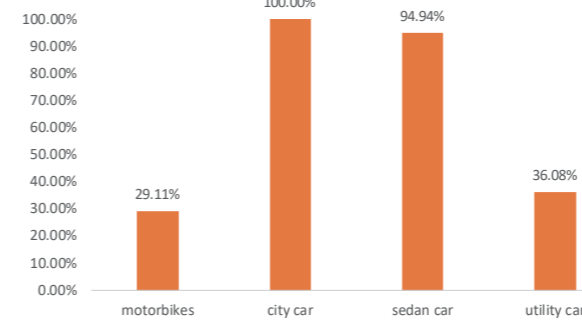
functions above



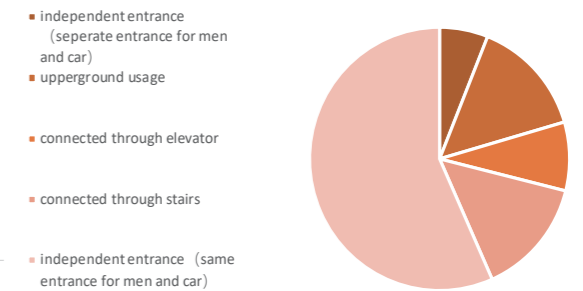
area in comparison to the old down



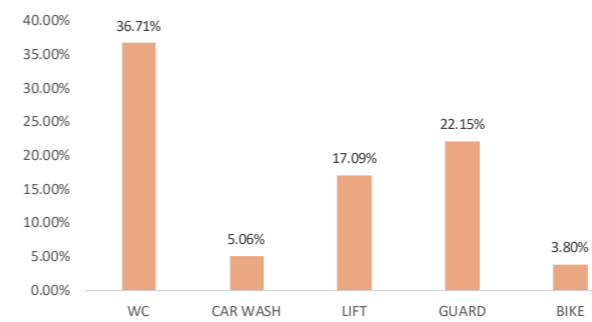
allowance of different cars



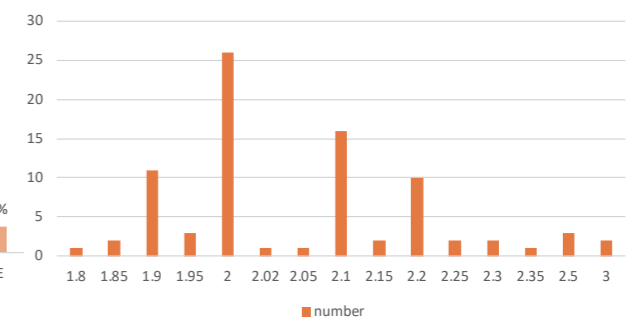
relationship with the upper floors (apartments)



different services in garages



height restriction of the garages in apartment



45 Charts about some facts in parking



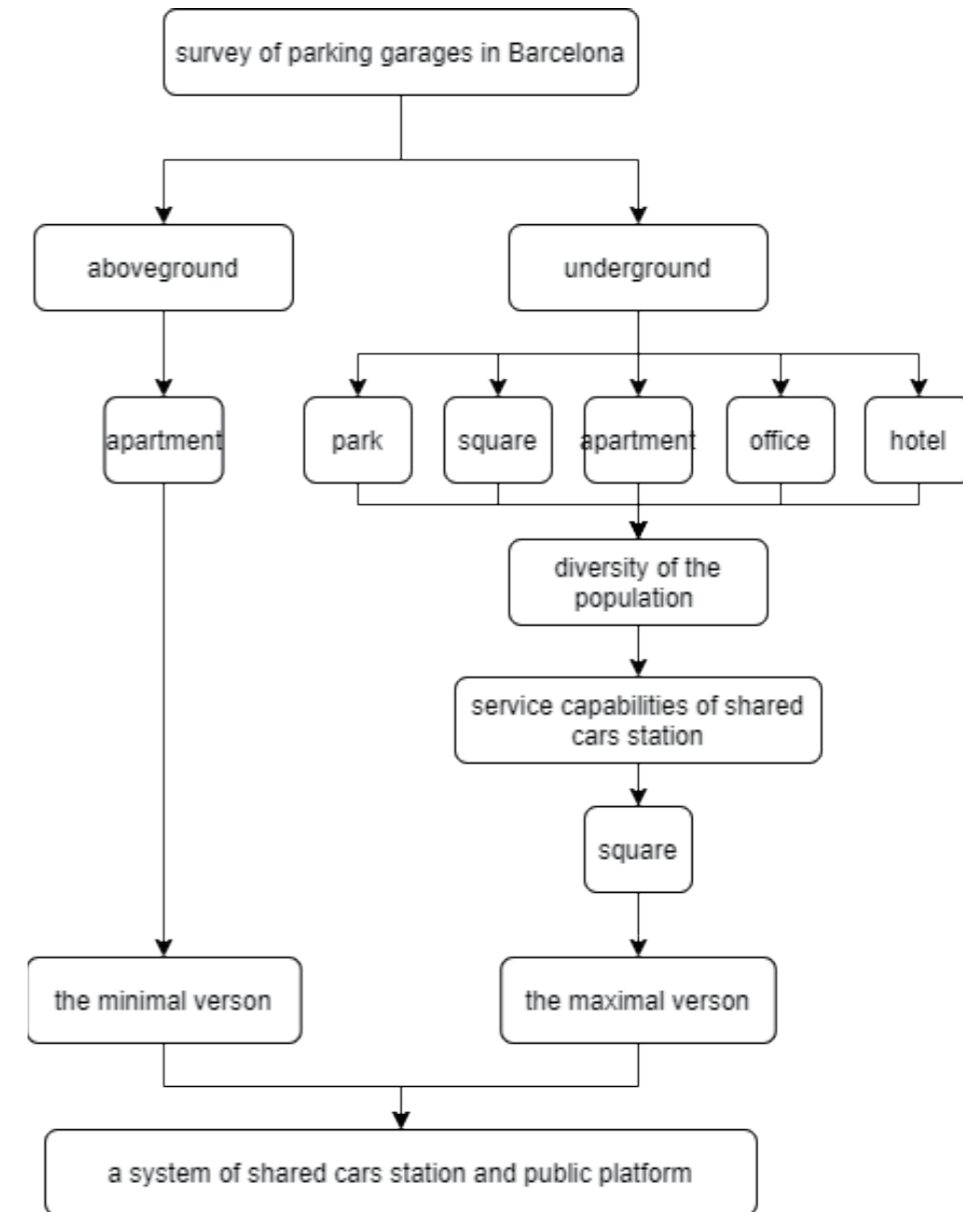
46 Parking condition in Barcelona

planned height. Likewise, manzana blocks which were planned as public facilities (such as schools, markets and social centres) were instead developed without regard to the plan: private leasable space. Later, under Franco's regime, the manzana blocks were further built up, resembling something more akin to Soviet block-brutalism than a greened, ventilated, publicly accessible neighborhood. Due to the low accessibility and privated owned character, most of the courtyards have been changed into car parks to solve the lack of parking places around Cerda block.

These blocks are of great value in consideration of the program to liberate courtyard spaces. As a witness of the time as a dense low quality area, these garages can be renovated into frames for activites, accomodating public functions such as library, meeting and exhibition, etc.

The garages underground can be catagorized into two groups: garages under squares or parks and garages under offices or hotels. After taking into account the possibilities of the renovation and the potential public values. The garge under a square or park is more profitable cause the space users are already created so the garages can be renovated to supplement the disadvantages of original public spaces, with the combination of both systems, it can create a more comprehensive public network. Beyond that, we need to clarify that the main function is providing a shared cars station, so the public waiting platform can only works well when it can attract different groups of people. The renovation on garages under squares or parks is a better option in both the diversity of the population and the service capabilities of shared cars station.

Considering all the characters of the parking condition inside Barcelona, the strategy should be a series of design not only focus on the site itself, but rahter pointing out the posibilities that lie in different conditions. The car park for 1000 vehicles is a good example to give priority to the size of the garage, my proposal choose apartments and square as the "the maximal verson" and " the minimal verson" cause the plaza resembles a highly public space with a huge garage underground ,while the garage inside the Cerda Block, a relatively private space for the users around, shows a way of renovation to give the space for public without completely demolish the buildings inside the courtyard. Both versons can show how the garages can be changed into a public space for the shared cars system, a port between the urban mobility system and the city life.



47 The selection logic of the site choosen

5.2 THE FUNCTION OF OBLIQUE

This strategy of positive questioning is the only means of moving towards a new modernity - a CRITICAL MODERNITY - that will free us from everything which is obsolete and allow us to consider anew the modern architecture of the 1920s and 1930s.

----- Claude Parent

The modern movement has come to an end when Claude Parent and Paul Virilio formed their "Architecture Principe group". Their studies are based on a rethink of the modern movement and a typological study on military architecture. The critical modernity, as they called themselves, aims to achieve three goals below:

- to avoid an unquestioning recourse to the formal vocabulary of the past
- to maintain significantly better relations with the historical built fabric than Modernism has achieved to date
- to expand the frontiers of memory

They found the architecture for the World War II is a new mode of space in accordance to the movement, bringing the body into a tactile relationship with the building. 'The function of the oblique' had its origins in the concepts of disequilibrium and motive instability. The idea of using the earth's gravity as a motor for movement inspired a very Galilean utilization of the inclined plane - a building form in which the horizontal was used only as a means of establishing a 'threshold' between two slopes.

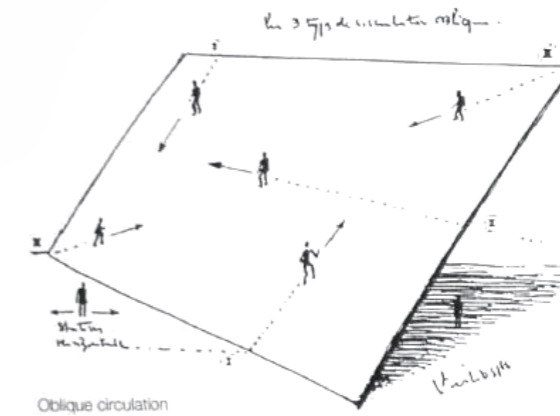
In their studies, the function of oblique can be classified in the following aspects:

01 a new form for the critical modernism

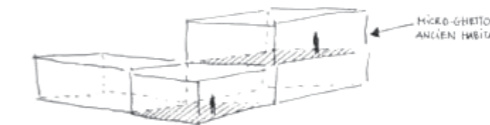
After the horizontal order of the rural habitat in the agricultural era, and the vertical order of the urban habitat in the industrial era, the next logical step was for us the oblique order of the post-industrial era.

02 a new definition of space

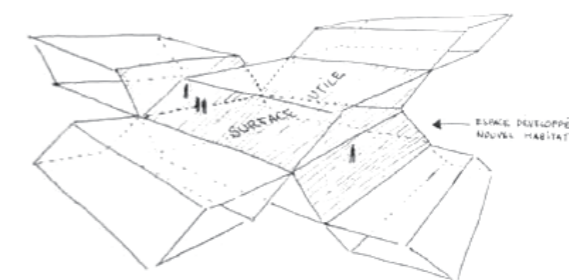
In contrast to partitions or vertical walls, which provoke an opposition between in front and behind, a combination of oblique and horizontal planes would result only in above and below; surface and soffit. Thus the artificial ground of the dwelling would become a living ground enclosing all the various articles that are required for



Oblique circulation



Habitable stasis



Habitable circulation

domestic life.

03 a total habitable and accessible space

By setting the structure on an incline, and by making every part of the built surface (except for the underside) habitable and accessible, the range of truly habitable spaces would be considerably increased. at the scale of both the individua dwelling and the building as a whole, since the vertical facade would also cease to exist.

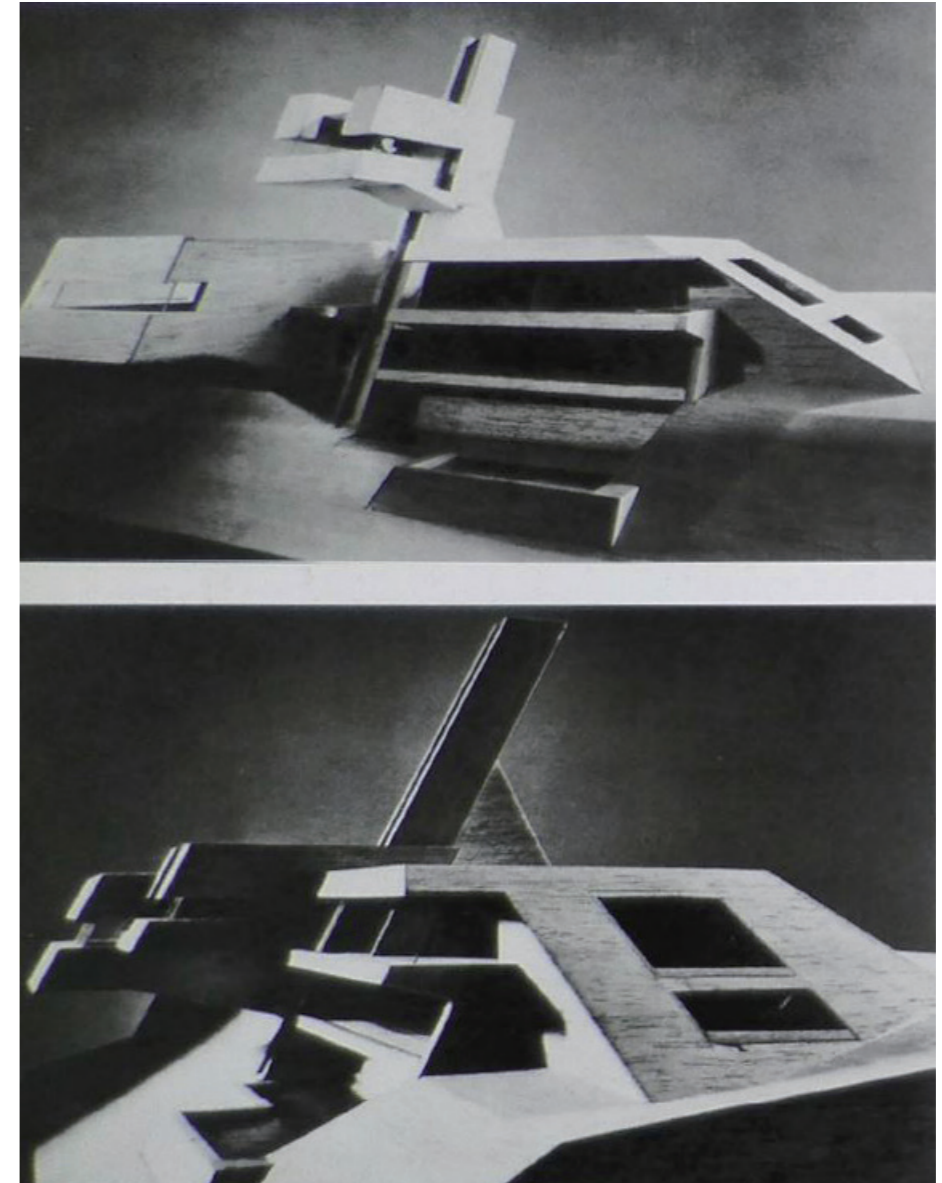
04 a generator of activity

Oblique architectmre thus became a generator of activity which used physiological principles to make buildings more habitable. 'It is not the eye which sees', according to the philosopher Maurice MerleauPonty, but 'the body as a receptive totality'. In their proects, the surfaces can be classified according to the angle and area. Some large planes are layed in a really flat angle to suit a specific funtion like the church or auditorium. Others are relativly narrow and steep like the trail for elevators, the ramps to upperfloors or higher platform.

Despite the outlook of proposals by the studio are shapped with rounded corners and inclined planes, the inner space are lack of the value of continues oblique as a total space. In Woog no 1, 2 and 3, the horizontal plane plays a major role in the both the space oragnization and the volume. The function of oblique is weaken as a decoration of form and circulation.

The shared cars station can be a better choice cause it is born with motion, the oblique is the only option to run the system. Cars run into the circultion through slopes connecting to roads, running down the original circulation route of the garage, and additional lanes are provided to let the cars booked jump out of the circulation and reach their users.

It can also be further developed inside to make the public space inside the station a total accessible and mixed space, to multiple its vitality and complexity.



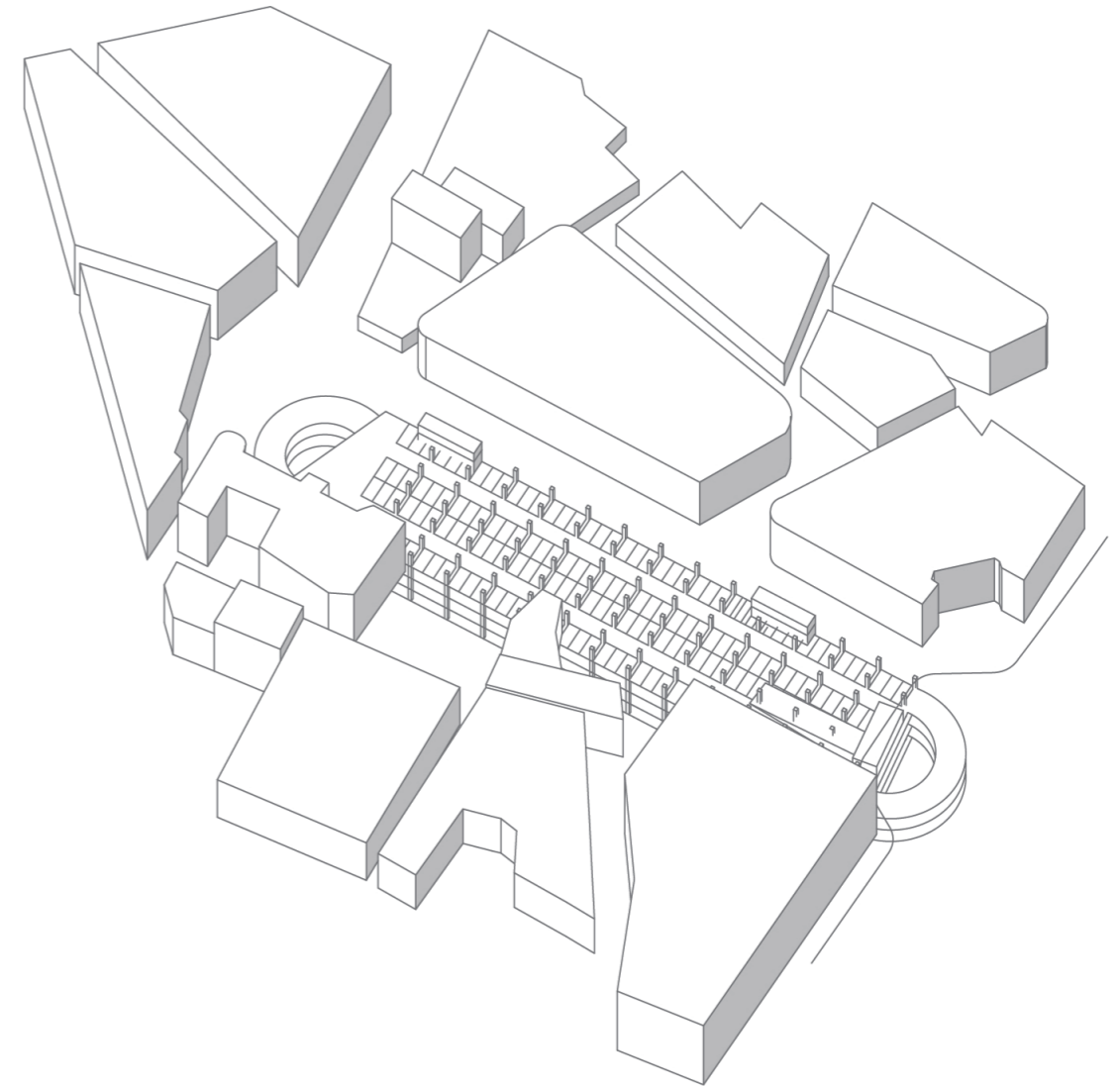
49 Oblique as a decoration without forming a main clue of the space

5.3 "THE MAXIMAL VERSION" IN PLACA NOVA: A NEW CENTRAL STATION BENEATH

Plaça Nova is the place where the old city was born : Barcino. These letters are sculptured in the square. The origins of Barcelona's Plaça Nova can be traced back to 1358, when it was the site of the city's hay market. At the time, the locals could still see one of the four gates in the wall to the Roman city, which led to the Forum, along the Cardus. Two circular towers flank the gate that leads into the heart of the Gothic Quarter. These are the result of renovations carried out during the 12th century, although the origins of the defence towers and wall can be traced back as far as the 1st century BC and the 4th century AD. A replica of a section of the Roman aqueduct emerges from the side of the Archdeacon's House, or Casa de l'Ardiaca, marking one of the points where water was conveyed to the city. Opposite, a visual poem by the Catalan artist Joan Brossa, spells out the word Barcino.

The building of the Architects' Association , the Col·legi d'Arquitectes de Barcelona, is located on the other side of the Plaça Nova. The most striking element is the series of sand-cast friezes around the façades, designed by Pablo Picasso and produced by the Norwegian Carl Nesjar: the "children's frieze", on the façade overlooking Carrer dels Arcs, the "giants' frieze", on the façade in the Plaça Nova, and the "frieze of the Catalan flag", on the façade overlooking Carrer Capellans.

The huge parking garage is located right beneath the plaza, which goes from the Placa de Antoni Maura till the boundary going in parallel with the western end of the cathedral. The garage has four levels, on the first lobby, it contains a washroom, information center and parking places for bikes. Cars go in and out the garage from the two-way ramp connected to the Via Laietana. People can go underneath through two groups of elevators on the northern edge of the plaza, with two stairs connecting the underground also. A line of trees are placed along the northern edge of the plaza, keeping the restaurants a relatively quiet environment from the crowded plaza.



50 Original condition of the garage

The renovation of this site is based on the theory mentioned above. We need to figure out the way to develop the new public spaces and the service line for the shared cars system.

In terms of the new public space, we have to figure out what is the old one and what kind of architectural strategy we can select to make a connection between the old one and the new. The original plaza has already provided various activities for both the citizens and travelers, we can do some commercial stay around the plaza like shopping and dining and there are some public activities like some festival gatherings, special market during weekends and temporary exhibitions. The new public space underground follows the advantages of oblique, making two main slopes connected with the horizontal plaza. The new place underground offers fields for activities which need relatively specialized venues and with less need of the daylight, the slopes are interconnected with two groups of slopes, and they form a continuous space which people can find different activities along the surface.

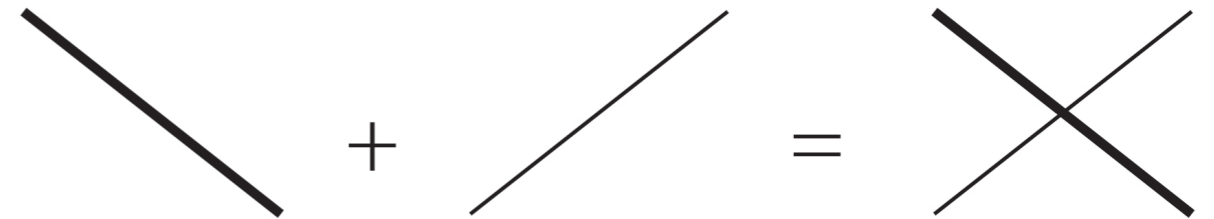
The multiplication of activities provide a diversity of motion which can not be achieved in the original plaza, people can move and join in different activities or just sit beside to enjoy the unique atmosphere given by the crowded culture.

Beyond that, the motion of cars are clearly shown inside cause the consideration of the combination of a central station for shared cars inside the old city of Barcelona. The original boards has been digged in the center for the oblique spaces, leaving the original circulation space to make the shared cars continuously run along this space from the roads outside, just like the taxi stop from the airport and the train station, but in several layers of ground. the station are set on the bottom of the garage, which can be reached by elevators on the western part or the continues slope above, four lanes are stretched out from the peripheral circulation system on the first lobby equipped with special elevators for the cars. So people can walk down through this continuous oblique surfaces while ordering a car through app. So the cars can come down through the elevators and costumers can watch their selected vehicles carried downwards in the center of the whole space.

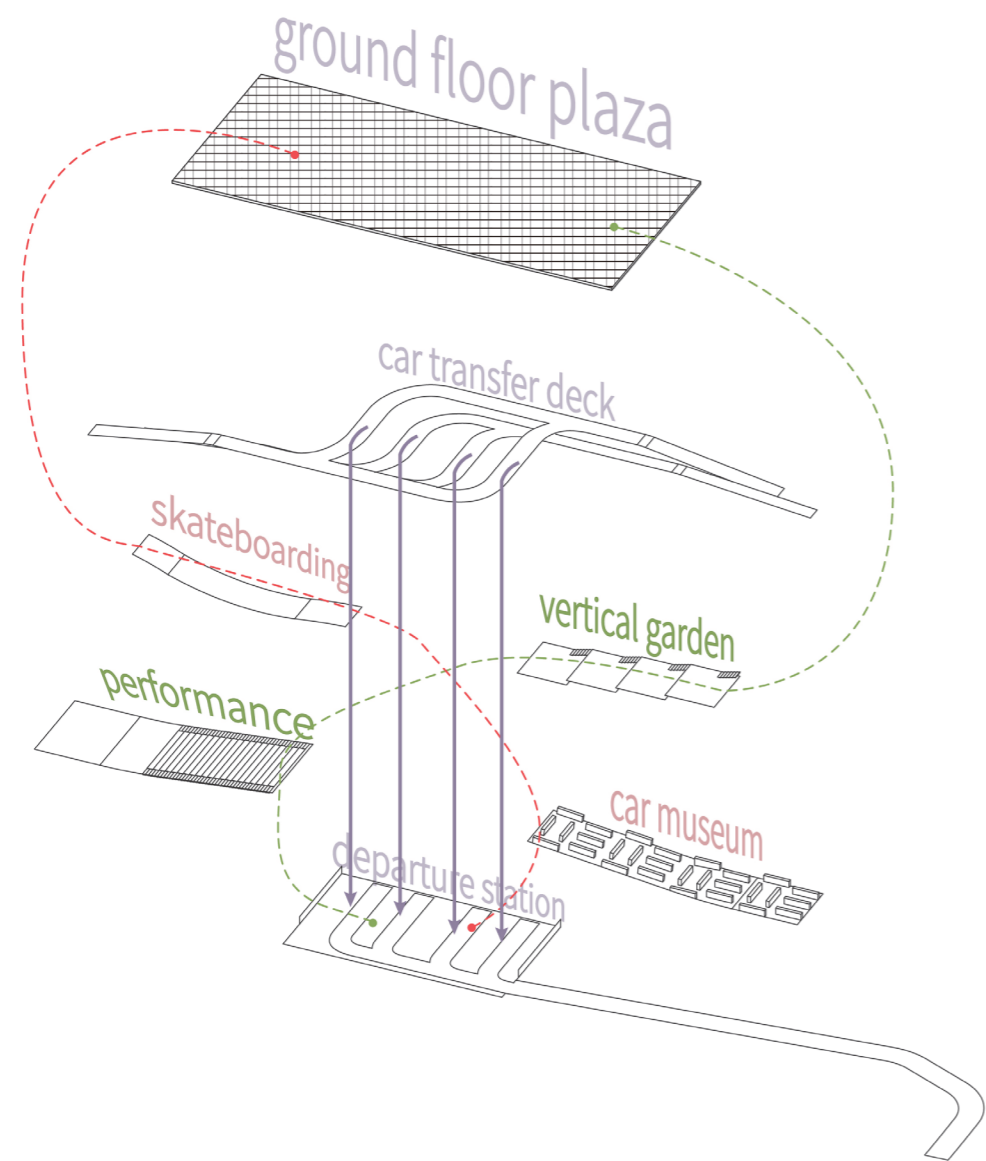
When you get a car and driving away from the station through the circulation system, you can have a general view of this comprehensive space where the motion themed spaces can conduct their own group of activities inside. It is a place that multiplies the separate activities into a theme park.



ADDITION

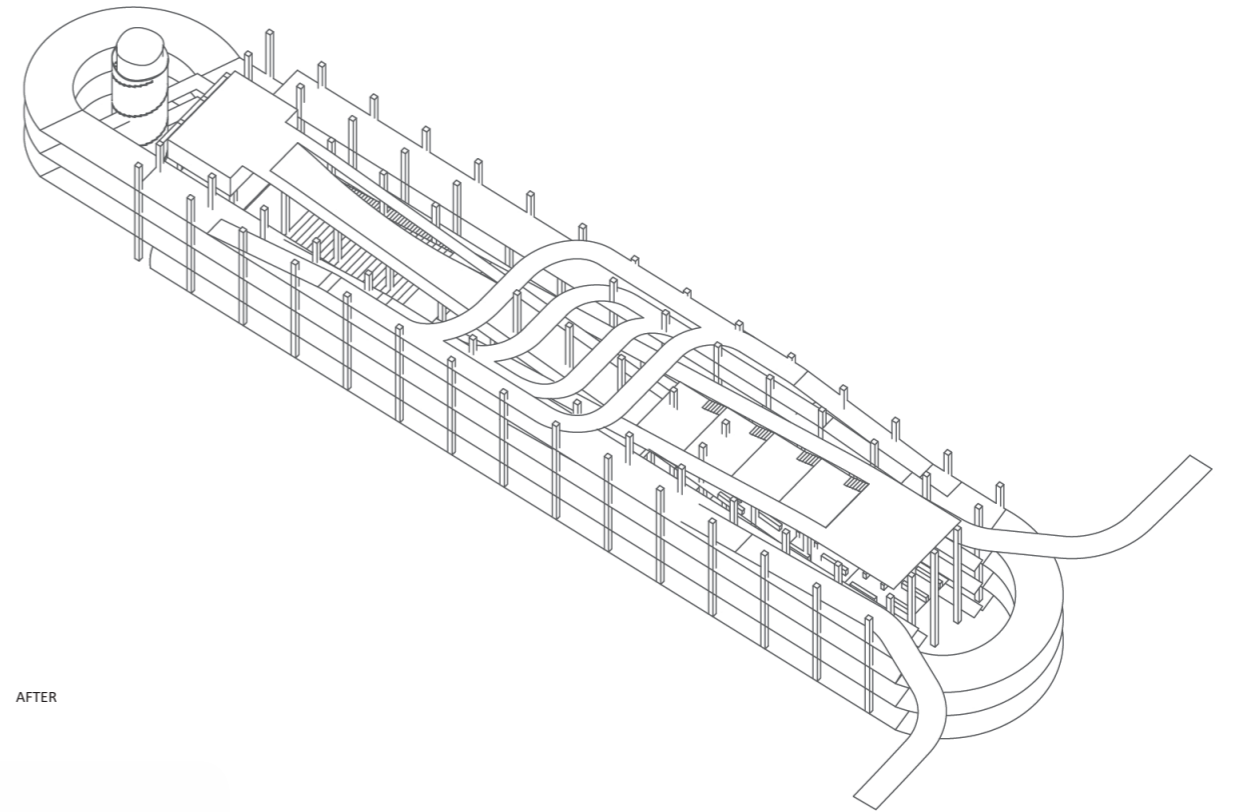


MULTIPLICATION

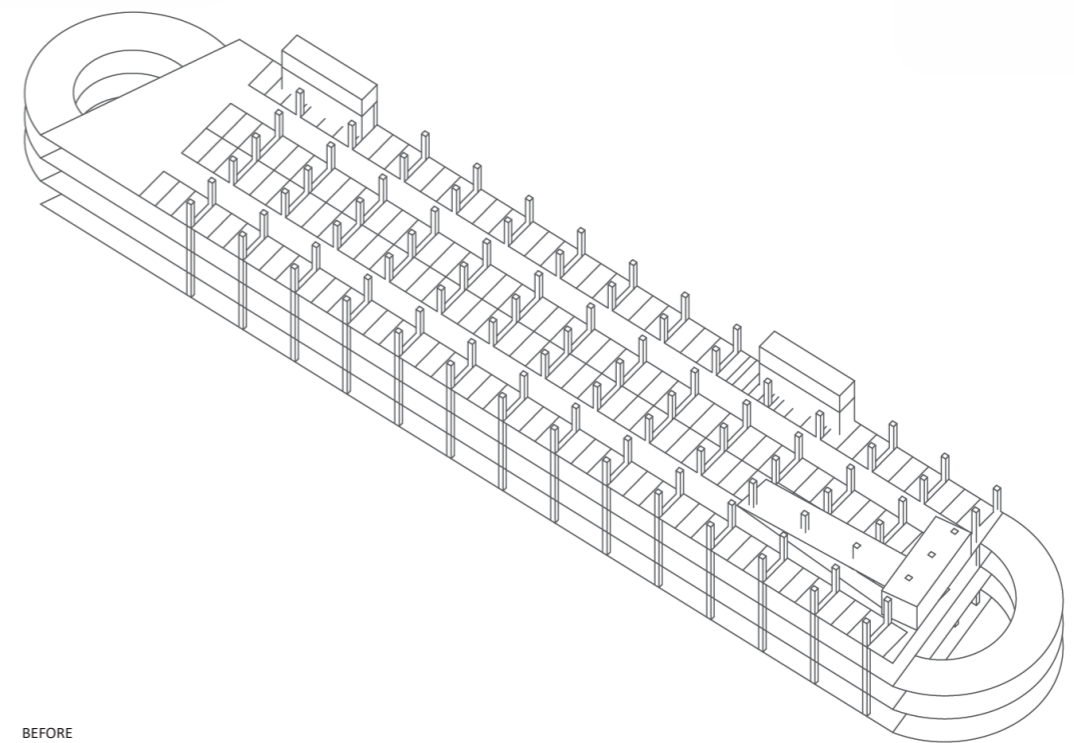


52 Mixture of continuous space experience and the motion of cars

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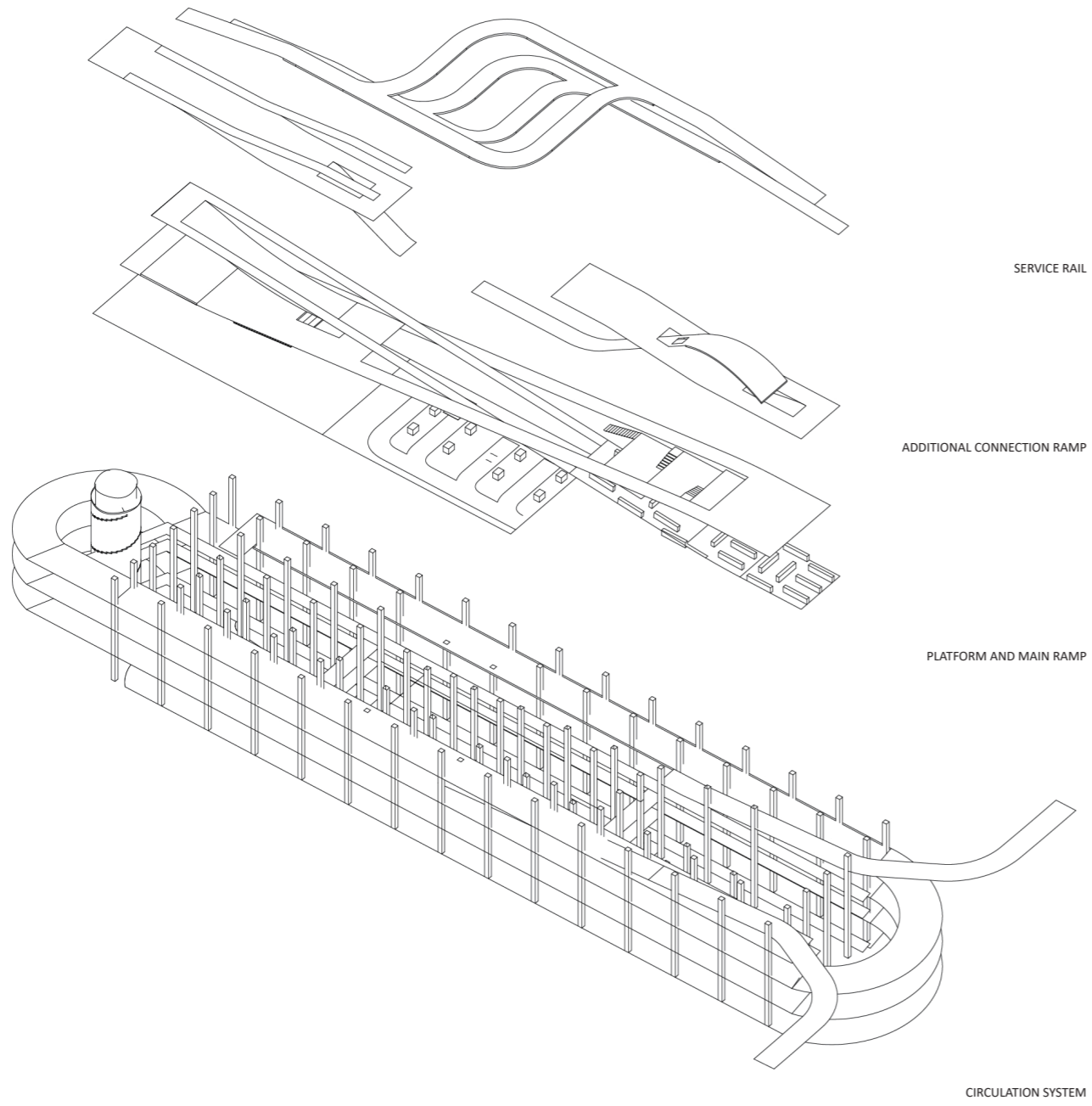


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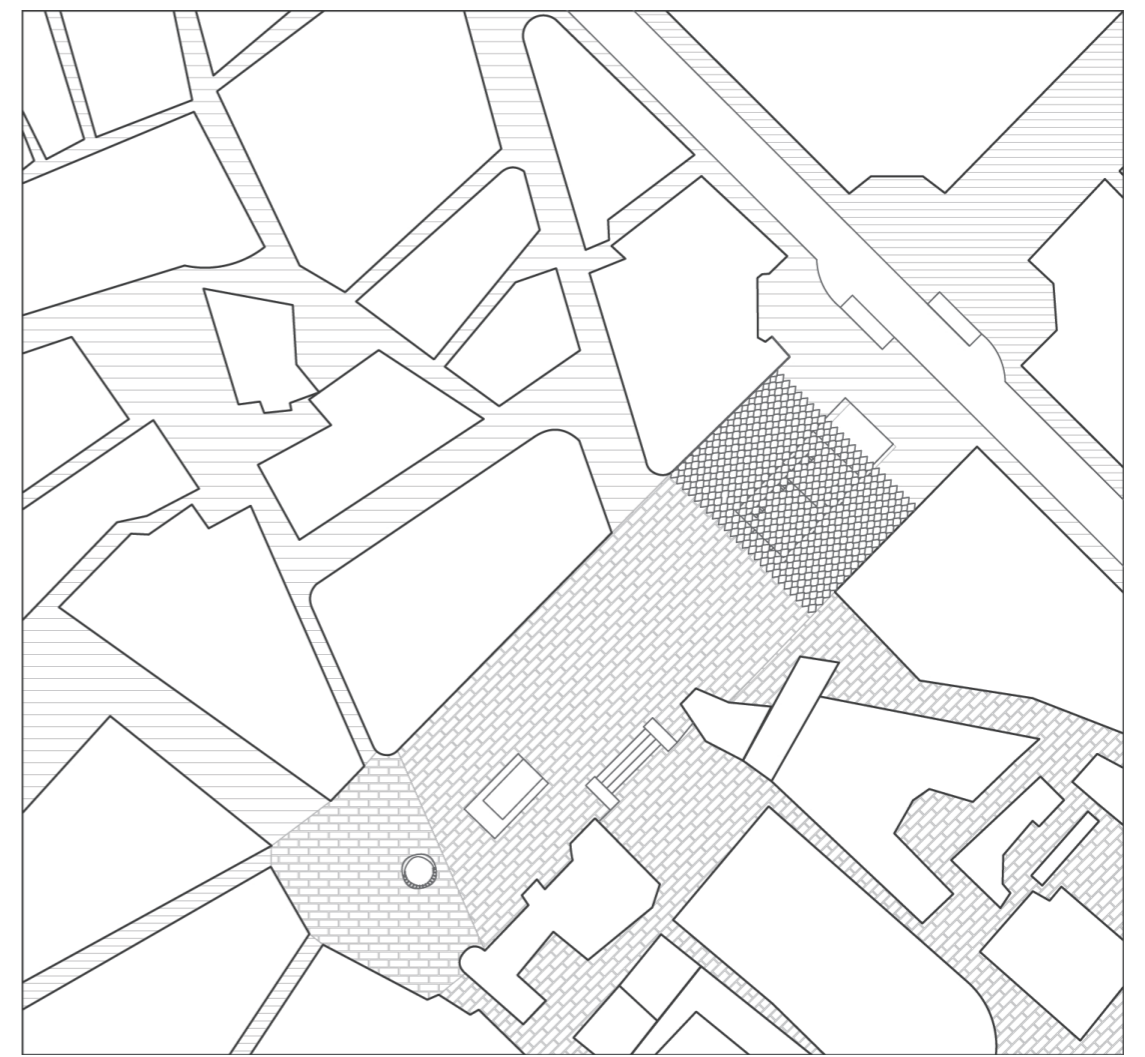


BEFORE

53 Autometric view of the change

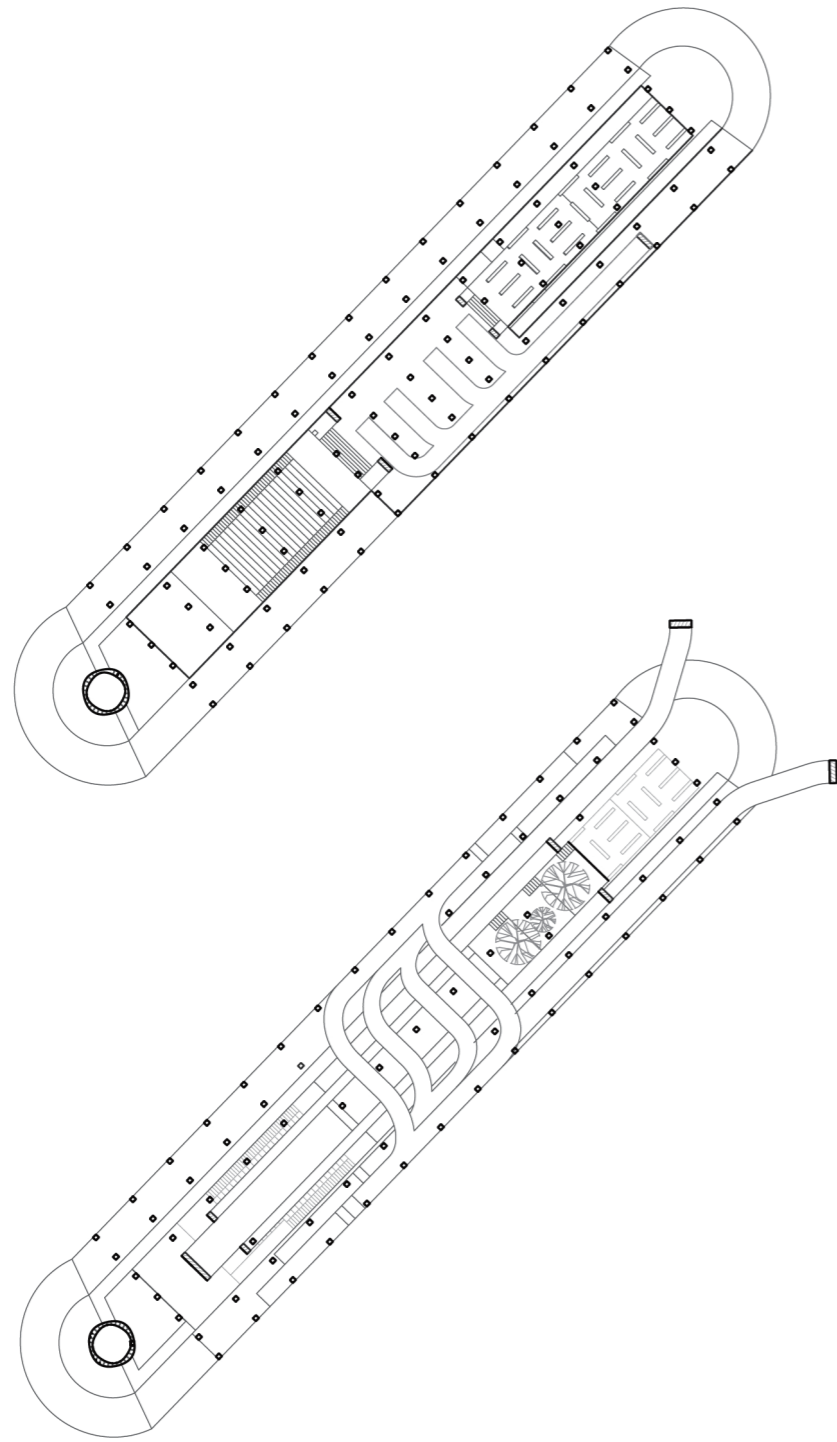


54 Separation of the system



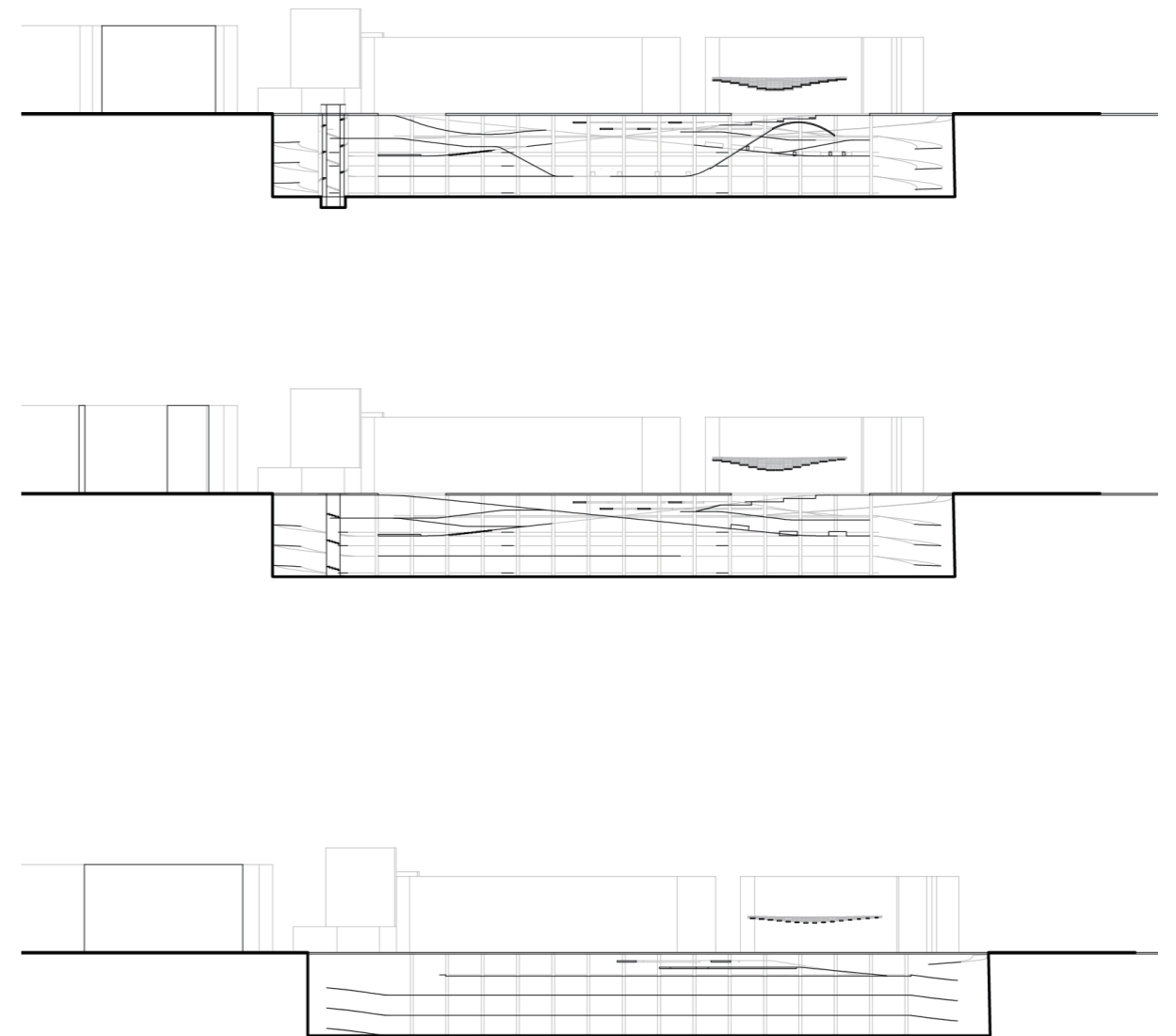
55 Master plan

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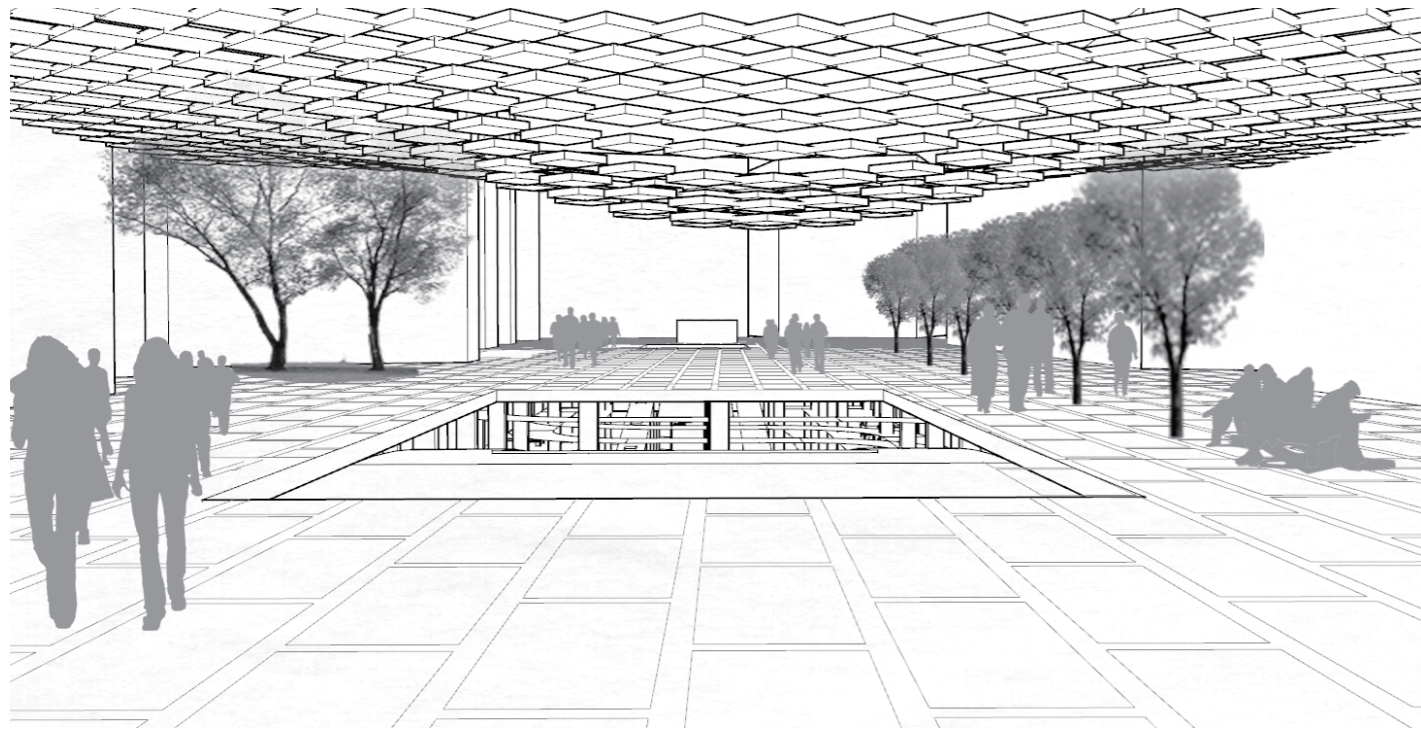
PLAN (-5m)

PLAN (-2m)

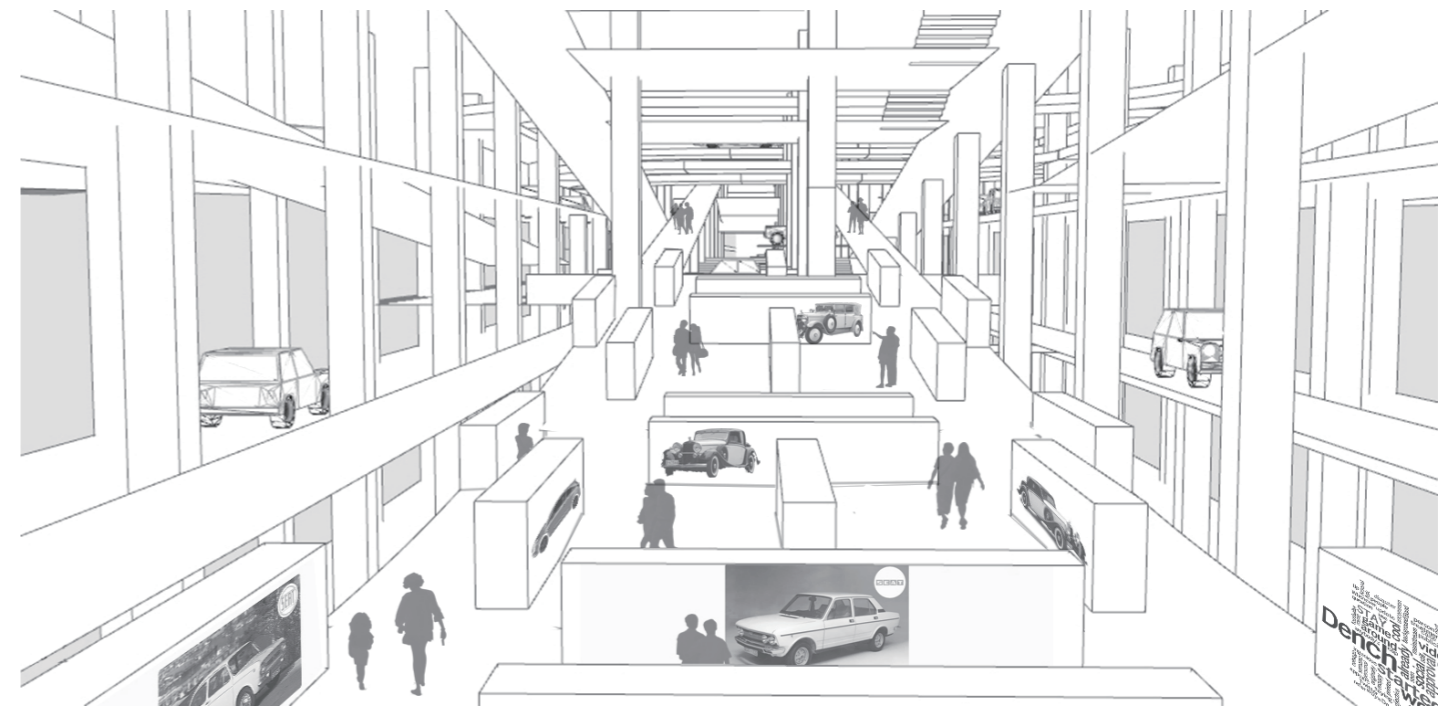


57 Section

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58 View from the ground floor



59 View from the exhibition space

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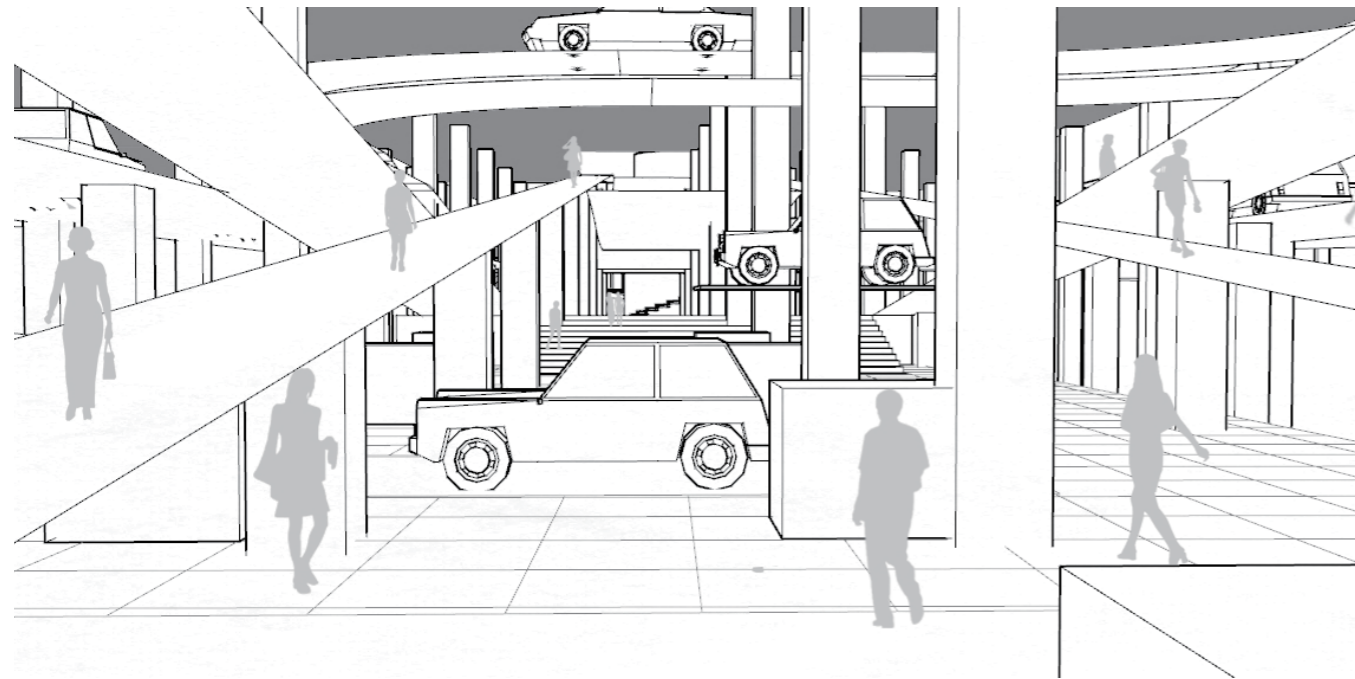


60 View from the underground skateboard plaza

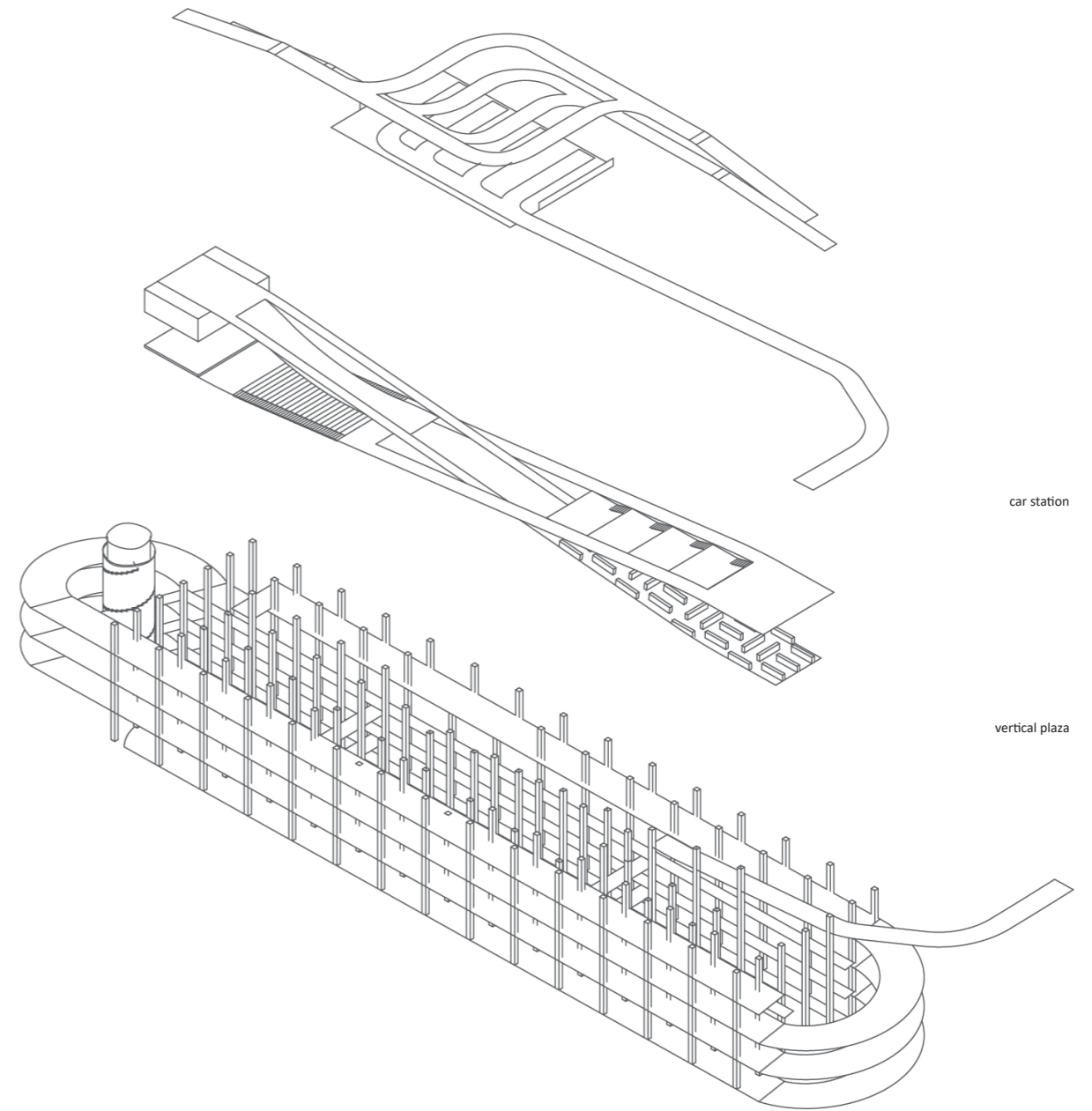


61 View from the car lane

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62 View from the shared cars transform place



63 Separation view of the oblique surfaces

maintainace line and car conveyor

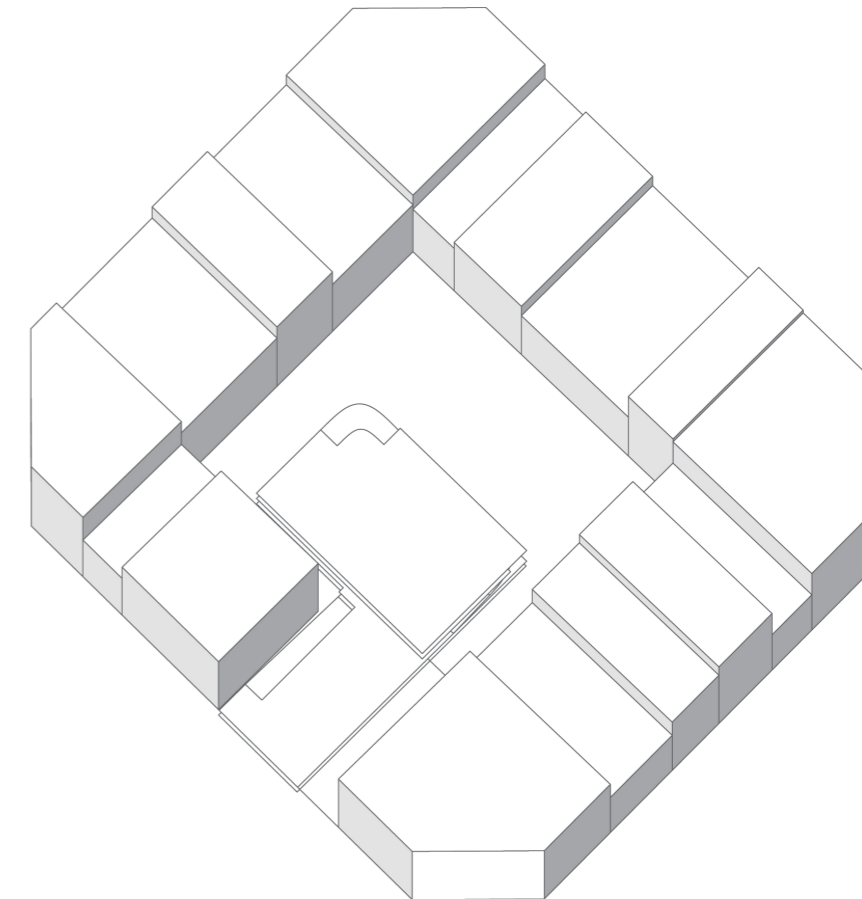
5.4 "THE MINIMAL VERSION" IN CERDA BLOCK: A REALM OF ACTIVITIES FOR THE NEIGHBORHOOD

In the original plan, Cerda has a general control of the blocks, both in height and perimeter. But the final plan proved by the Madrid government only adopted the physical outline of the blocks, the low dense, half closed blocks have never been able to realize. The courtyard we have for now is a renovation project carried out by the government to provide public spaces inside the closed Cerda blocks. There used to be piled with workers or other daily functions inside the block, for the rise of populations inside Barcelona in the 19th and 20th century, the height restriction has been changed four times to fit the increasing need of houses inside the city. Since the first interior gardens were opened, fifty or so have been inaugurated in the Eixample district and a score in Sant Martí, especially in Poblenou, and a total of more than 150,000 m² of green spaces have been reclaimed.

But the renovation cannot be assimilated into an open courtyard with different facilities. Functions like parking cannot be erased from the site without providing a compensation to the need. That is the reason why some areas refuse or cannot be changed or renovated, a few garages are located just next to the Sant Família Church. Shared cars provide a new chance to both satisfy the need of private transportation and the aim to improve the condition inside the block.

In this sense, the garage can be a small station for the shared cars system, cars booked can stay here for a while and people staying here can wait here, chatting with others or take part in some activities inside the garage volume.

This provides a new version of renovation: instead of demolishing all, we can leave some part as a memory and keep it alive with the public function we are going to turn into. Elements like garage can keep its physical outlook and be reshaped into a public space.



64 Original condition of the garage

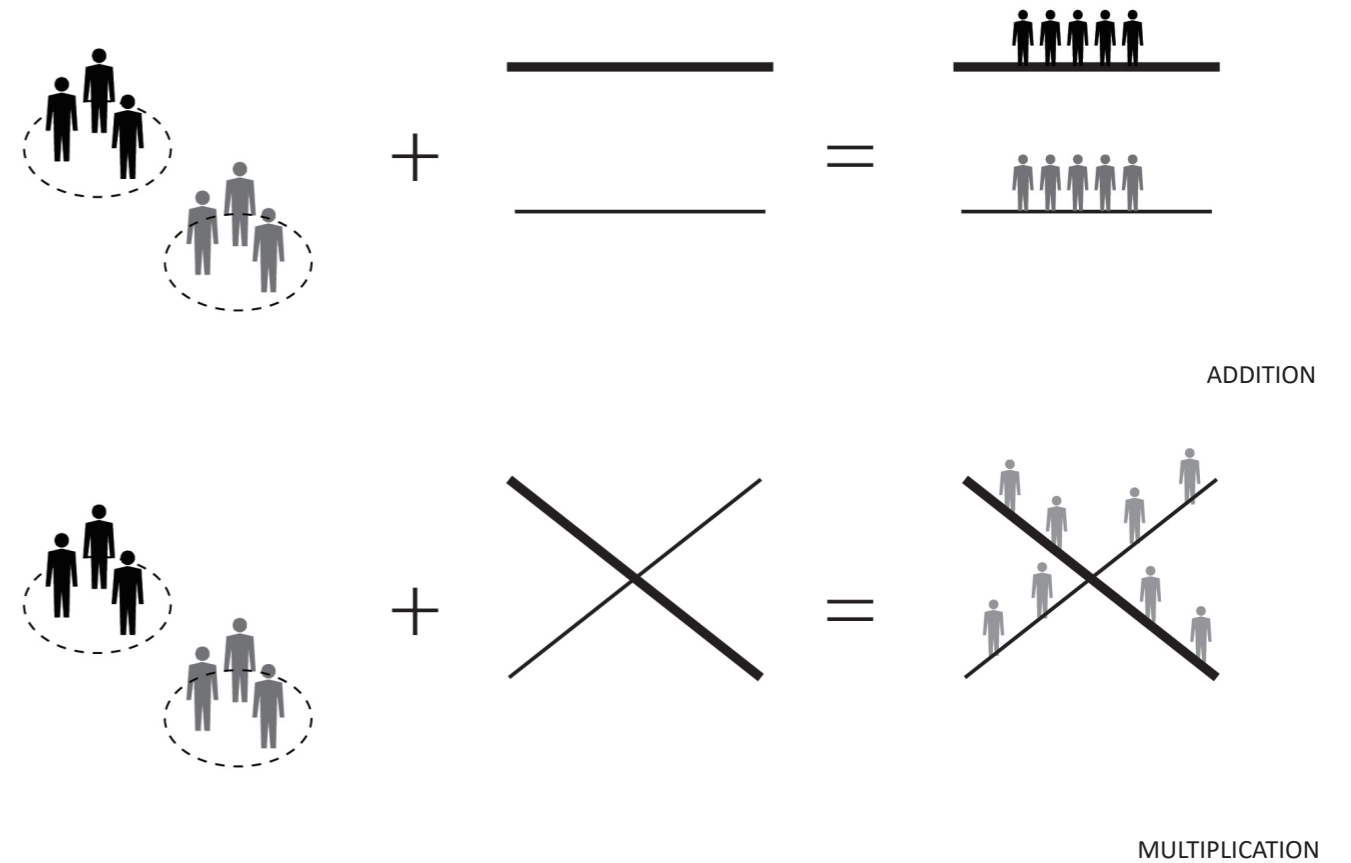
In response to the "maximal version" in the Plaza Nova, the "minimal" one is different not only in its size, but in its capability of service also. The station here only serves the surrounding blocks, providing a place for people to fetch their ordered cars and have a bunch of cars prepared dynamically on the roads and the underground conveyor on average.

Beyond that, the courtyard is renovated to provide a public space for the neighborhoods and visitors. So the original structure has its advantages to provide a series of obliqued surfaces on its continuous surface for the motion of cars, a few slopes are added also to the structure to form two flows of activities: one for the leisure activities and the other for the social gathering and small meetings, the two slopes intersect on top of the structure, with its roof redesigned as a floating grassland for the residents, they can come here to enjoy the sunlight individually or form certain activities as a family group. The slopes prove to be a good media for the function and human action; small libraries, mini auditorium, exhibition and a small cafeteria can be placed along the surface or turning part of it into terraced platforms. People can walk, run, sit and lay on the surface, doing whatever they like on this space inspired by the cars.

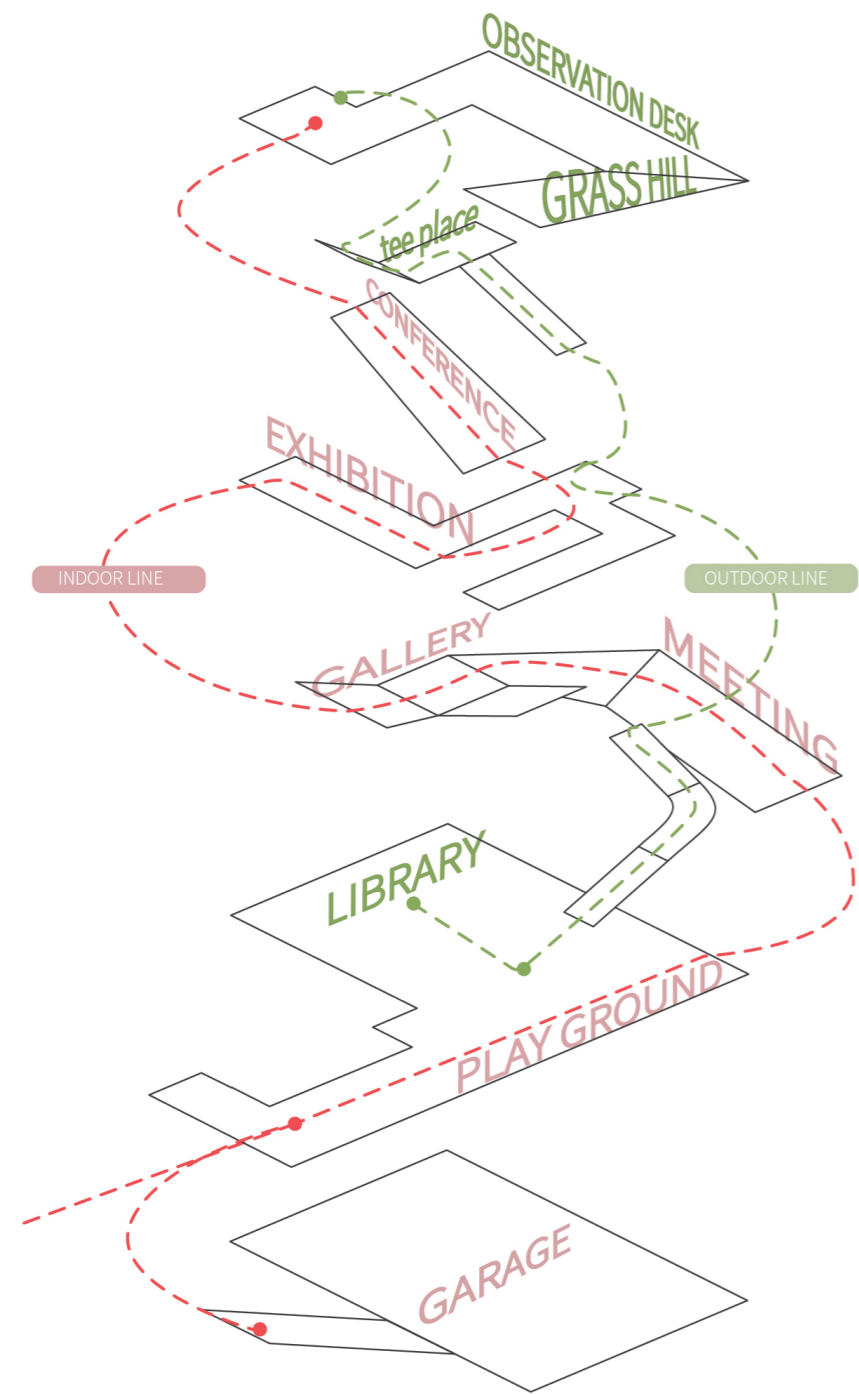
Through this idea, people are given a nice place to improve their relationship as neighbours cause they can gather at the same place, chatting as watching their children playing around. A new group could be formed based on the public space, which is more diverse than the courtyard developed by the government before. The garages are kept in a frame which still can be used to support the new layers and they together remind us of the multi level container for cars. This mixed outcome does have its value in its residents inside the block as a memorial of the past and it doesn't interrupt the public use of the courtyard, while providing a shelter for certain indoor activities instead.

As a shared car customer, you can book a car in advance and just sit at edge of the courtyard with the kids playing not far from you in the sand bunker, or you can just walk into the renovated to enjoy some public function if you arrive too early. As a resident you can just come here to join in the activities you want, or simply have a walk through the obliqued surfaces to refresh yourself.

Considering the place should meet the change or improvement in certain functions, most of the functions are kept without the enclosure structure, cause it already has its enclosure by the surrounding buildings. The surfaces are prefabricated can be linked to the structure through joints, so it can also be removed easily.

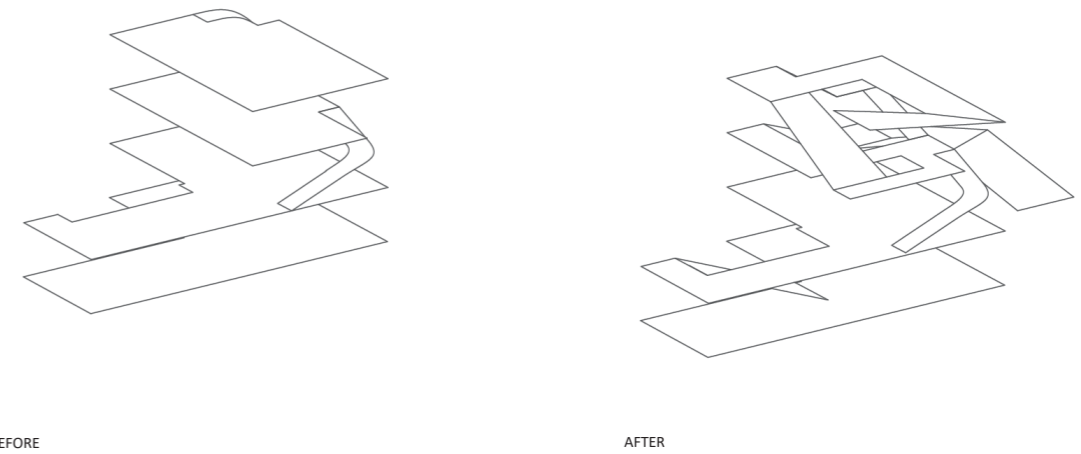


65 Multiplication of groups



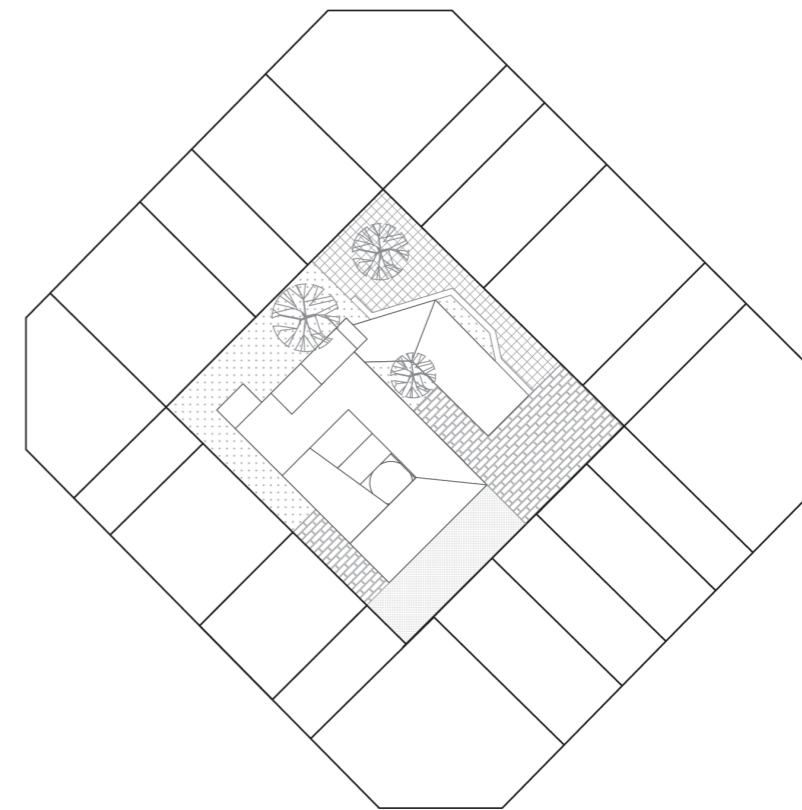
66 The continues experience of space and function

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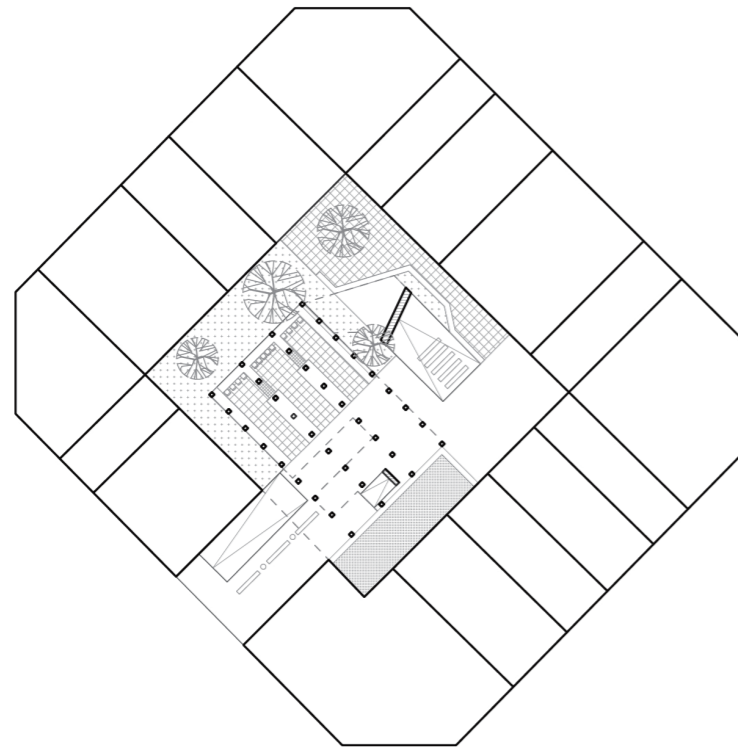


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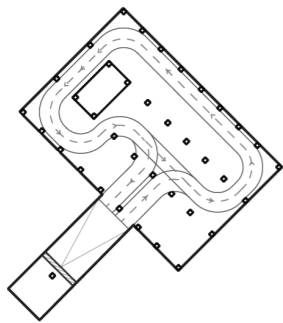
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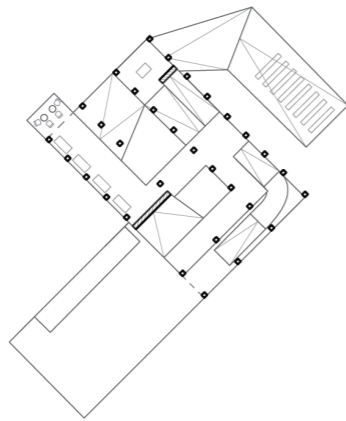
67 Master plan



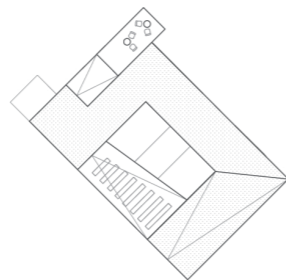
gorund floor plan



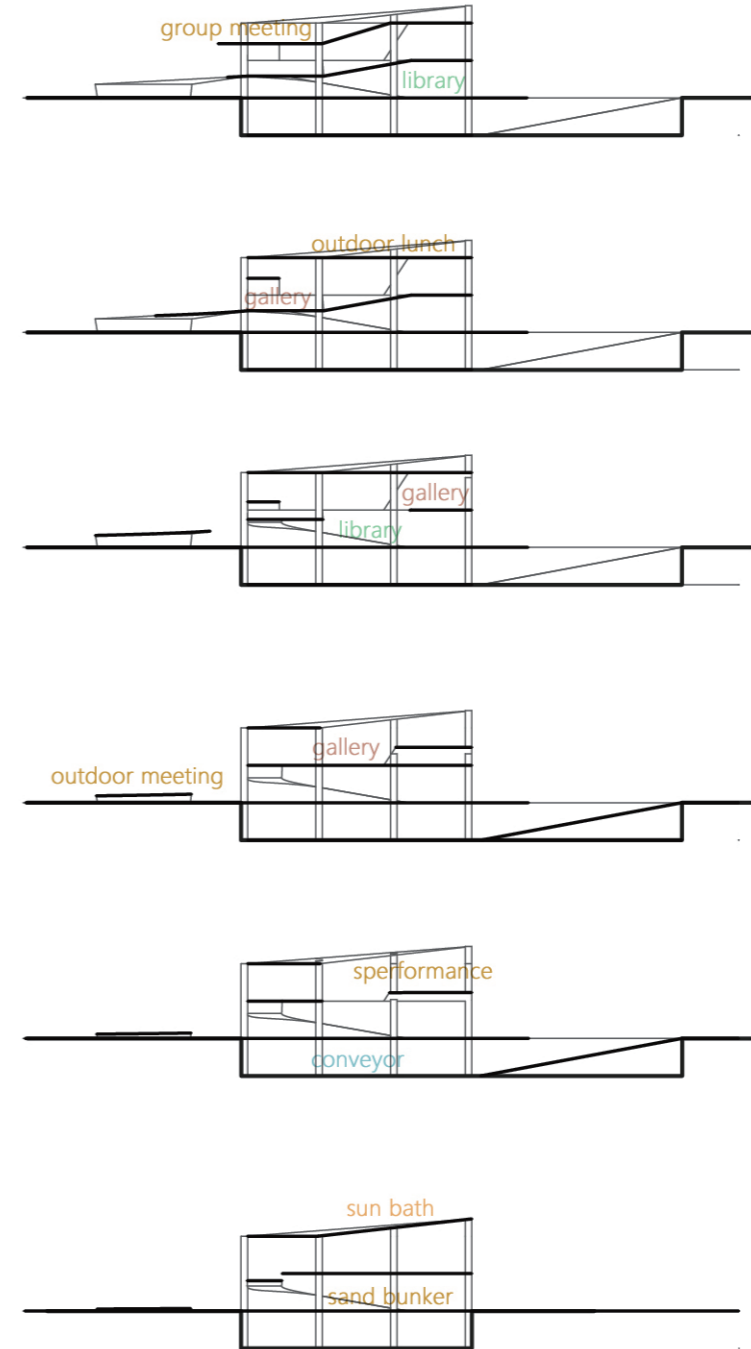
lobby plan



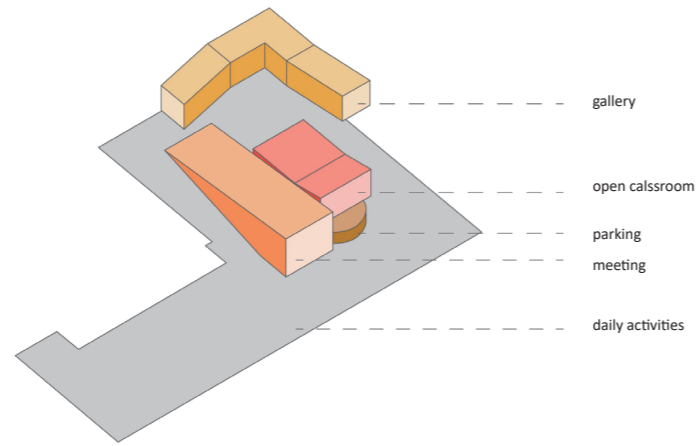
first floor plan



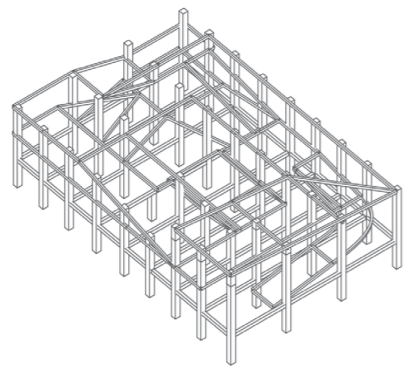
second floor plan



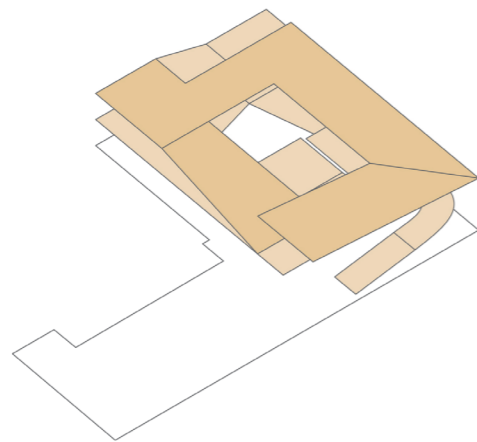
sections



FUNCTION

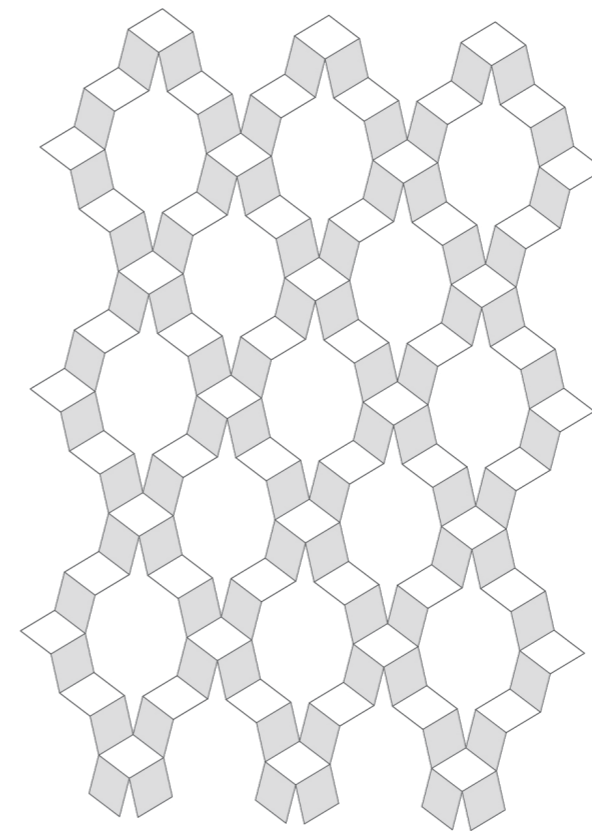


STRUCTURE

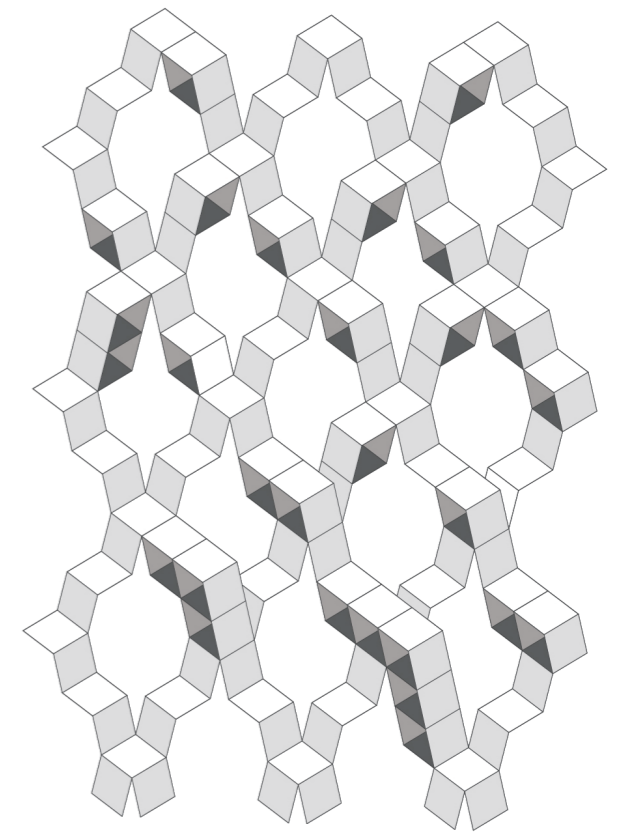


SURFACE

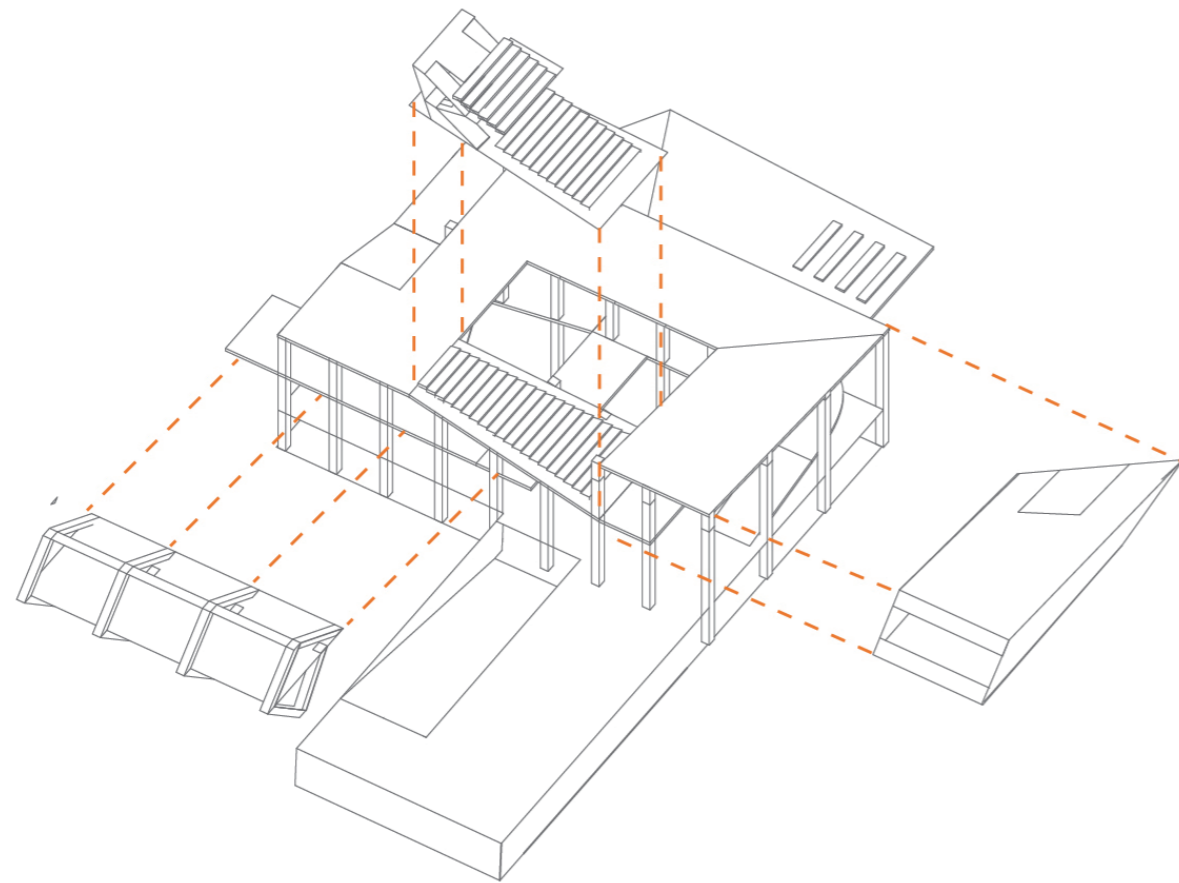
70 Items diagram of the renovation



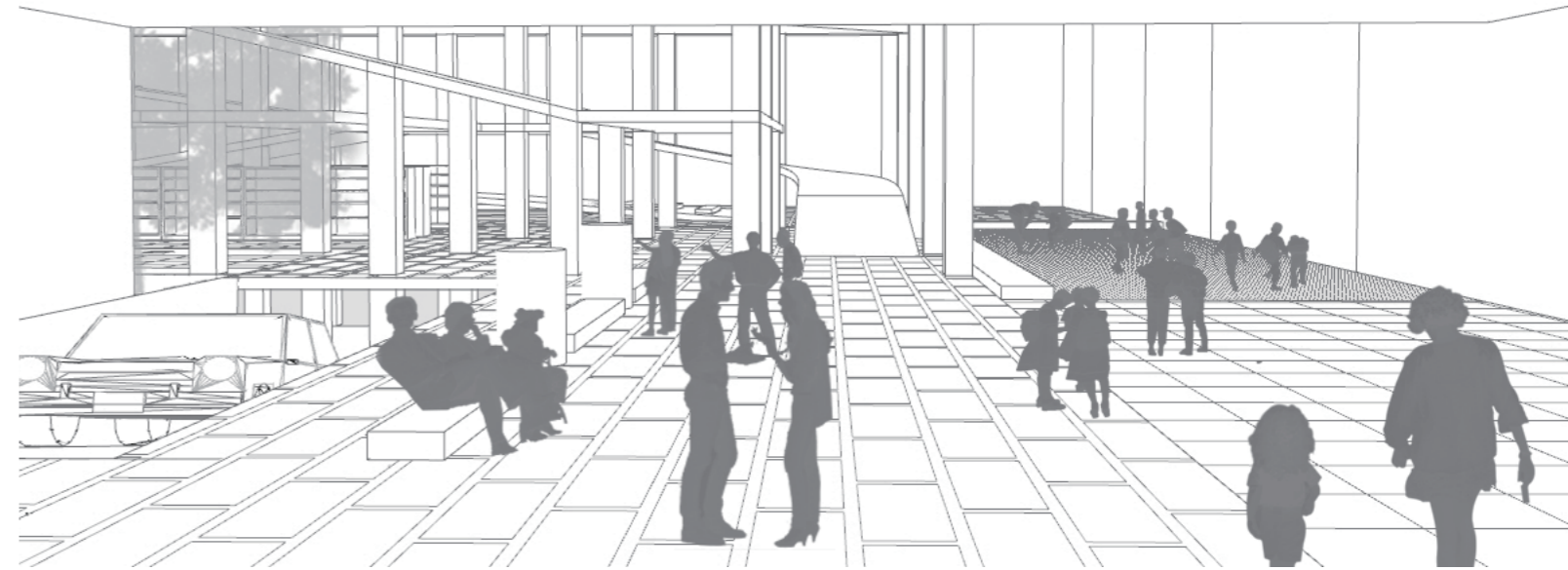
71 An additional slope system



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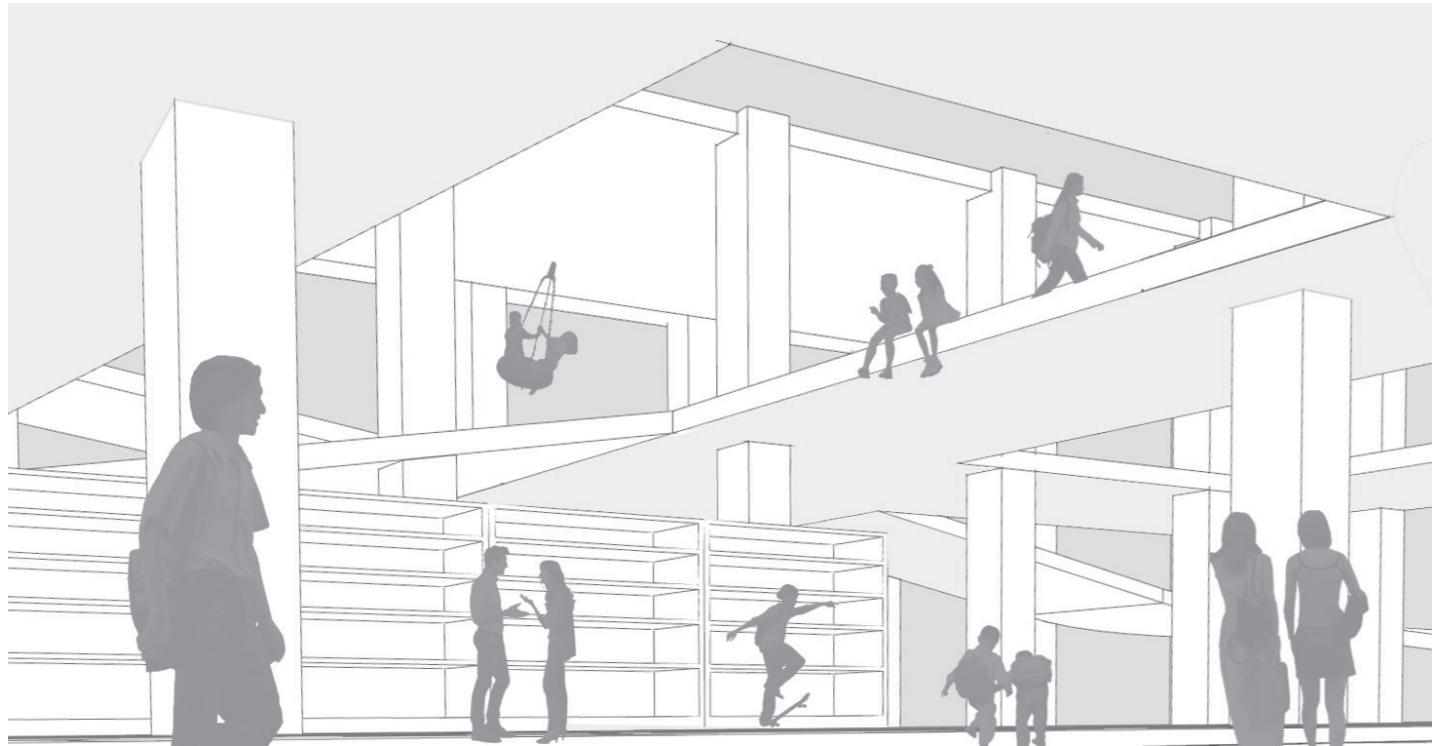


72 Example of the addition

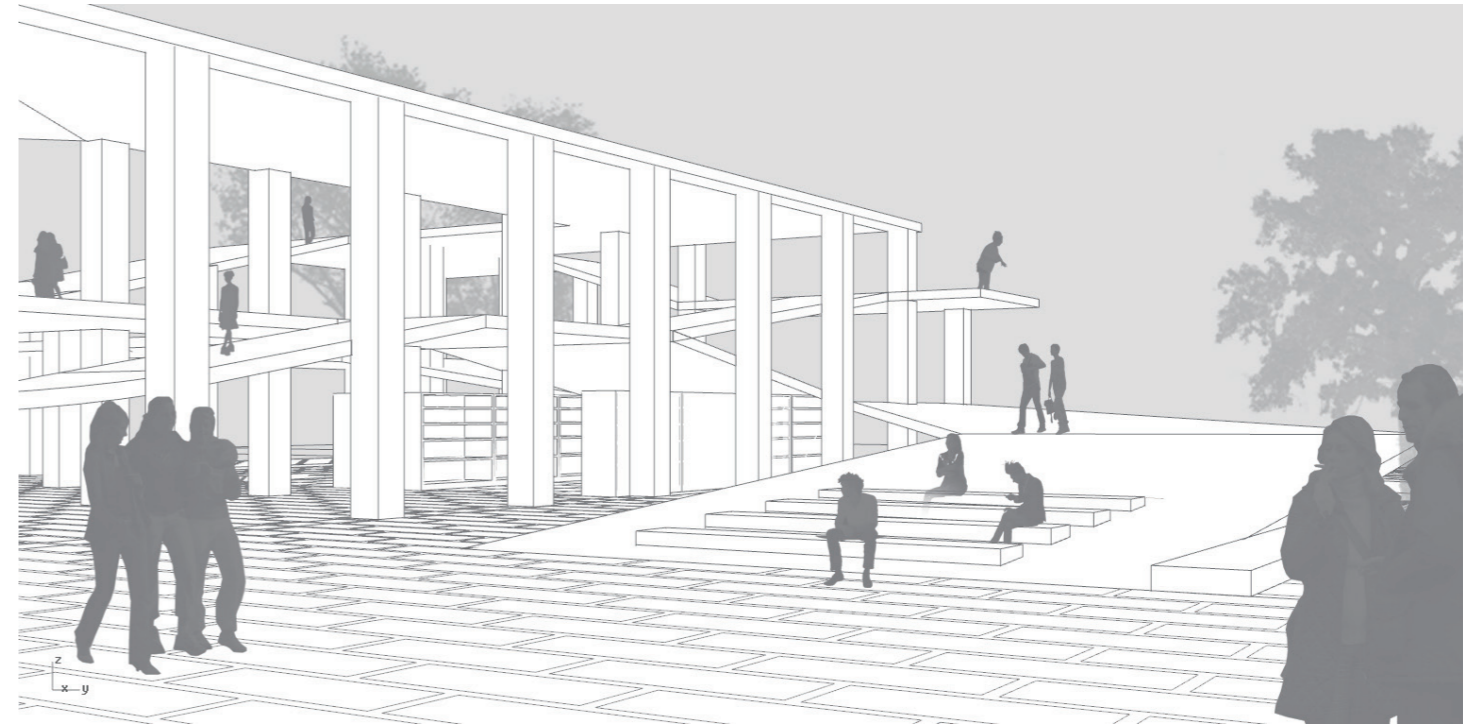


73 View from the entrance

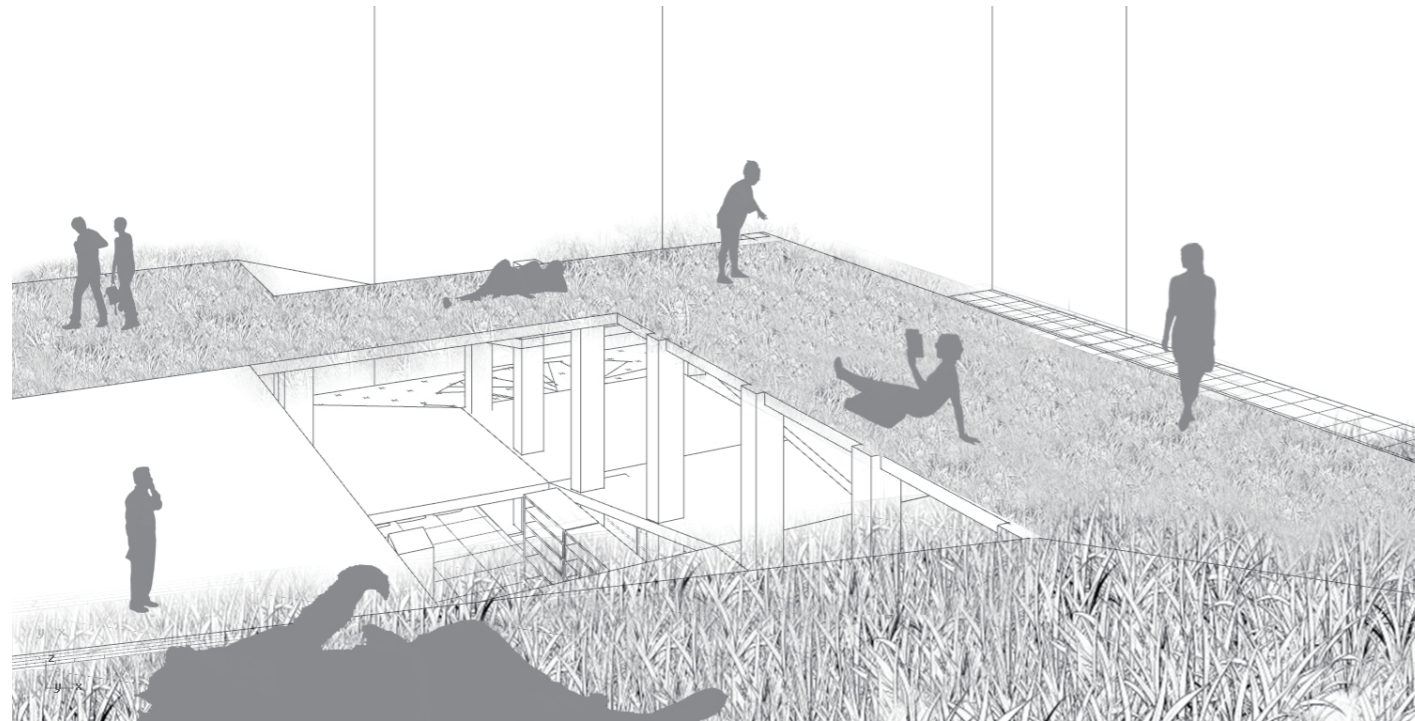
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74 View from the ground floor



75 View from the courtyard



76 View from the rooftop grassland

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PROJECTS

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2. Archizoom Associati, No-Stop City
3. Rem Koolhaas, working babel
4. NL architects, parkhouse
5. Micheal Webb, sin center
6. Zaha Hadid, Hohenheim Nord
7. NL architects, parkhouse
8. NL architects, parkhouse NT

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<https://www.youtube.com/watch?v=qdlq5Pwlh7s>
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