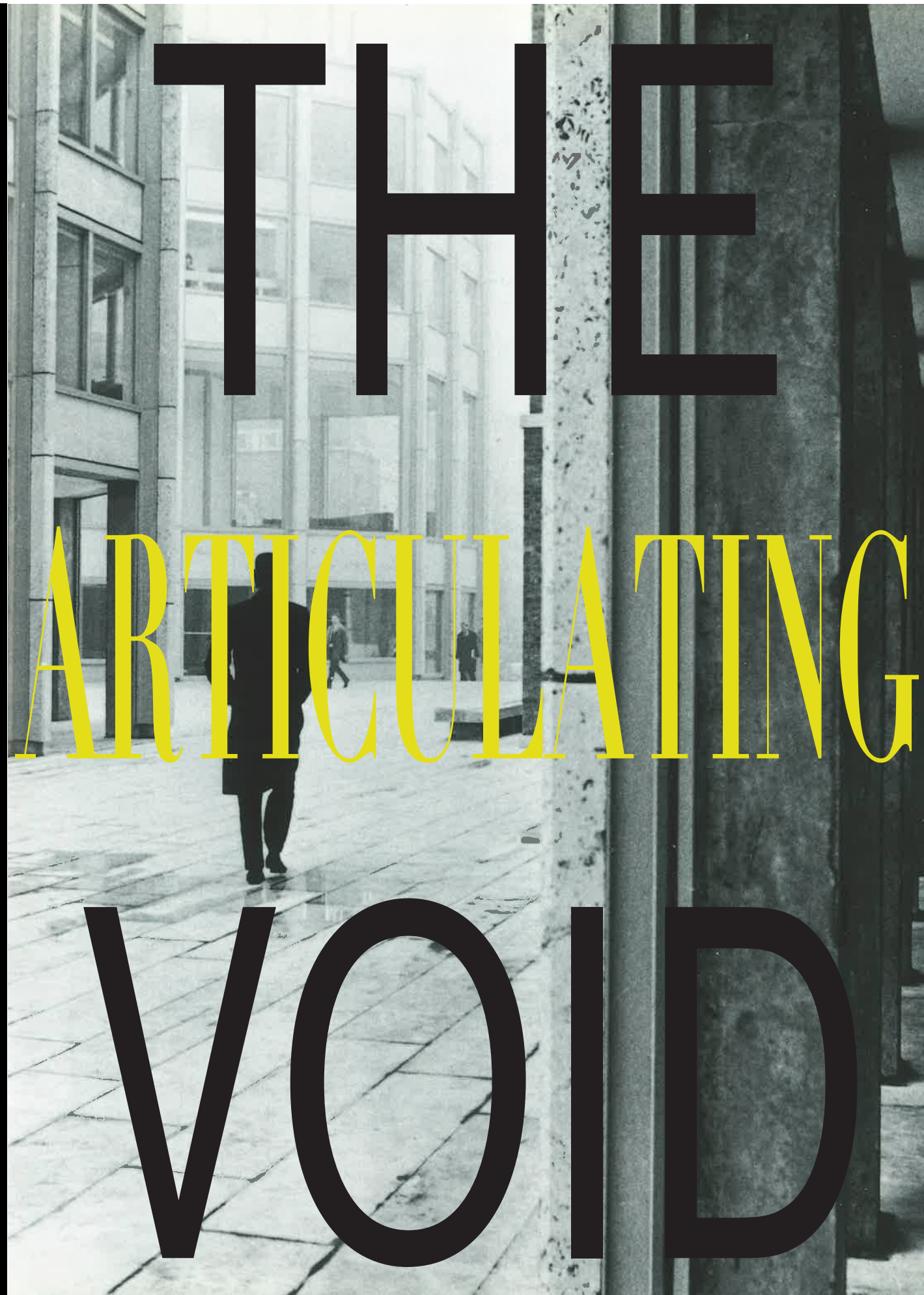


The goal of this dissertation is to thresh and understand the connection of buildings to the network of urban void spaces, what could be called as well void between buildings – such as streets, alleys, boulevards, squares, etc – Which is their connection with the city and citizens? How is this void acting for connecting the building to public space and the other way around? Until which point can architects control how this void acts like a threshold and the way the exchange can be produce, through the design of their buildings? Which are the limits of architecture when designing public space? Through a series of speculations carefully illustrated with examples, the aim is to understand until where void can influence on public realm. Importance must be given to a proper and consciously way of designing public space. Even if old pre-industrial city fabrics could be considered obsolete in terms of economic, political and cultural progress they are still showing themselves alive and gracefully profited by their users. Their well composed through time sequence of voids, of public spaces, can be looked as models for building today. The idea of threshold is something apparently not large enough to understand the notion of this spatial interaction. The power of this relations can go beyond actual architecturally delimited

portions of space. This kind of conditions where a void becomes both related to the building and urban at the same time looks much richer in old city centers, where the mix between an infinity of different conditions and scales – from the entrance door of a house to the biggest and most majestic public square – makes the whole question of particular notoriety. All examples analyzed through this essay are carefully picket following several criteria. All of them are public buildings or have a mixed program. They are constructed in centers of European cities during the late XXth century and beginning of the XXIth. The aim of this choice is to see and learn from projects designed by architects which attract a personal interest like for example, Alvaro Siza, Rem Koolhaas, Herzog and de Meuron or Caruso and St John. Through a very short classification of types of urban voids that basically divides them in two families, the linear voids (street-like) and the more dilated voids (cores square-like), the idea is to start from the smaller scale towards the bigger and more complex. Finally, several will be the tools or discoveries made in these contemporary architectures about the treating of public space around and so, the city. In order to understand how to successfully design public space, the strategy adopted starts from the scale of the building. Then, the main exercise will consist in to look at how this building connects itself spatially to the existing public spaces of the city. All this having as a main theme the so called void, that here is used to define this space existing in between different buildings or “filled” masses.

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THE ARTICULATING VOID



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Enoncé Théorique MA3
January 2017

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The Articulating Void

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Importance must be given to a proper and consciously way of designing public space. Even if old pre-industrial city fabrics could be considered obsolete in terms of economic, political and cultural progress¹ they are still showing themselves alive and gracefully profited by their users. Their well composed through time sequence of voids, of public spaces, can be looked as models for building today.

But what is void? And why is it of main interest? Void is an element for composition. As in any sequential design, not only spatial but for example musical, void is an ingredient that permits transmitting meaning, that brings understanding. When writing music, composers have the possibility to enhance what they have to transmit bringing silence to their pieces for a bounded fragment of time. By it, the sequence of sounds is articulated through time. This voids let the executors of pieces as well take breath and continuing playing the rest of the piece successfully. For the politician or the orator, a void in their speech, if well placed, can enhance their message proposing the audience a time for reflecting or interiorizing the last word said. It as well gives time to rest the voice for some seconds and prepare the listener for new information. Spatially void is defined as emptiness, an absolute empty space, unfilled space, gap, from Latin “vacuum” - emptiness of space². But as well as a gap or an opening, as in a wall³.

Citizens have the opportunity to go over a sequence of spaces to arrive to destination. During their route, they find fragments of space that are constantly changing, sometimes offering them to contemplate a particu-

1 Porphyrios, D. (1984) Cities of stone. *Architectural Design, Volume 54 (Houses, palaces, cities)*, 15-19.

2 http://www.etymonline.com/index.php?allowed_in_frame=0&search=void

3 <http://www.dictionary.com/browse/void>

lar building, sit and rest on a proposed surface or under a tree, and even having the opportunity of interacting with other passersby. The alienation of irregularities in new extensions, drawn theoretically on paper and sometimes not that much taking in account the importance of properly designing void, make of them probably a much harder city paradigm for people to use and satisfactorily experience.

So, what about this spaces that are capturing the empty air? L. Kahn would say, they are “the most mysterious, the most charged of architectural forms⁴”. So can architecture consider the design of enclosing the emptiness for creating a balanced and well executed void, related to both the totality of the city and the buildings which is in touch with, having the potential of giving a frame where people interact again?

Peter Smithson, looking at American cities in particular, is convinced that “The only mediator between building and building, and between the individual and the collective group is interval...and trees⁵”. He applies this way of looking at the city in the conception of his projects. In particular and talking about “The Economist” building (1959-1964), conceived together with his wife, M. Riselada states that in the complex of buildings, “...the separation would make it possible to give the parts their own formal expression – expressing both the individual identity of the building and contributing to the collectivity of buildings or parts of buildings.{...} In the Smithsons’ work, the space between is also present in a metaphorical sense as a space that is left open for interpretation⁶”.

Examples of contemporary buildings, located in existing centers of congested European cities, will help to illustrate the power of this “articulating void”.

Looking at the question of how apartment blocks are connected to the urban network of spaces is already contributing to understand the notion of sequential spatial experimentation meant before, and this “going through” different void dilatations, form the intimately private to the absolute publicity. At least a step is found between the entrance door of the building and the walkway. The possibilities of managing this moment of transition are infinite. Sometimes some bushes grow on both sides of the entrance drawing a corridor between the walkway and the first step pre-

4 Smithson, A. ; Smithson, P. (1974) The space between. *Oppositions* 4, 75-78.

5 Smithson, P. (1981) Space is the American mediator; or The Blocks of Ithaca: a speculation. *Harvard architecture review*, Volume 2, 106-115.

6 Risselada, M. (1999) The space between. *OASE*, Volume 51, 46-53.

vious to the door, stating in this way a thicker walkway-door separation. Then the question would be, until when is the apartments block arriving? Is it stopping before the door, after the step at the door, or where the bushes start growing, just immediately after the walkway? Imagining the question just formulated the other way around can help to perceive the ambivalence of the problematic. Is the walkway arriving to the first step before the door instead? In any case the duality exists.

Another example where both spheres, public and private, merge in one again. Old southern European women, either Italian, Greek or Spanish, use to clean and wash the part of the street directly in front of their houses. This could be a subtler way of acknowledging the space between the street and their houses. They wake up very early in the morning to “refresh” with water the ground right in front of their dwellings: sometimes only the walkway, others they include the road as well. Seems like an unimportant event of the everyday life but the fact of taking care of urban public void as if it was part of their own houses is revealing. The wet surface on the floor stands like the public area this particular householder is in charge of. Rectangular shapes clearly delimited by what is wet and what is dry have fixed borders consciously decided. There where it is believed their authority or control over the street stops, they stop washing. It’s the land of their neighbors. It can even be seen as an offense to wash someone else’s “land”, because it could mean they are not taking care of their threshold or “active” void, so you do it. Without any kind of spatial element further than the length of façade or of the door, this everyday act talks about the richness and duality of this spatial interactions that happen in the urban void between the whole of the city network and the entrance to a building.

The idea of threshold is something apparently not large enough to understand the notion of this spatial interaction. The power of this relations can go beyond actual architecturally delimited portions of space. This kind of conditions where a void becomes both related to the building and urban at the same time looks much richer in old city centers, where the mix between an infinity of different conditions and scales – from the entrance door of a house to the biggest and most majestic public square – makes the whole question of particular notoriety.

All examples analyzed through this essay are carefully picket following

several criteria. All of them are public buildings or have a mixed program. They are constructed in centers of European cities during the late XXth century and begging of the XXIth. The aim of this choice is to see and learn from projects designed by architects which attract a personal interest like for example, Alvaro Siza, Rem Koolhaas, Herzog and de Meuron or Caruso and St John. Through a very short classification of types of urban voids that basically divides them in two families, the linear voids (street-like) and the more dilated voids (cores square-like), the idea is to start from the smaller scale towards the bigger and more complex. Finally, several will be the tools or discoveries made in these contemporary architectures about the treating of public space around and so, the city. In order to understand how to successfully design public space, the strategy adopted starts from the scale of the building. Then, the main exercise will consist in to look at how this building connects itself spatially to the existing public spaces of the city. All this having as a main theme the so called void, that here is used to define this space existing in between different buildings or “filled” masses.

WALKWAY

By fragmenting the street in different parts one finds elements of two different natures, the roadway in the middle and the walkways at one or both sides. Focusing only in the part used by passersby and not cars, is a conscious choice taken to limit the vast extension of a potential study about “the street” as a theme. Analyzing walkways on which pedestrians perambulate through cities might help to concretize the interest researched in the essence of the street used by citizens spontaneously. Walkways are elements that already appeared in ancient roman cities, today they serve not only proposing possible paths of circulation for pedestrians, but in most cases they are protecting city users from cars. Sometimes they are designed just with a separation marked by color or a different material used for the floor, other times they are separated from the roadway by metal pylons. But most of the times several centimeters lift

walkways from the road, giving in this way a clear spatial boundary between both elements. In addition, this last way of differentiating pedestrian lanes from roads is taking care of water evacuation, making the flow of rain water run along the road but not at the same level pedestrians walk. So, several are the solutions used for proposing walkways along the city, though the essence is only one. Walkways, in opposition to roads, cannot create a continuous network of connections. They can surround a city block, continuously, but at some point pedestrians are forced to cross a road in order to reach the following footpath, and repeatedly, until destination. Walkways are appearing then in the totality of the city as islands found around volume’s perimeters and are somehow isolated from each other but linked by possibilities of crossing roads at the same time. They propose all kinds of ways to be reach from one to the other. The experience of the city that this sequential walking ritual gives to users is potentially infinite and has as many solutions as ways of each user decides to move through the city. Sometimes when a street is lacking of traffic, because of the time gap during the day or because of the period of the year, a natural impulse of walking in the center of the street is predominant; at least in small streets where the passerby has the feeling of controlling the reduced speed of cars and his time for reacting to them. In narrow streets mostly located in medieval city centers walkways are sometimes so narrow that one cannot feel comfortable walking along them and the use of this elements is reduced only when a car wants to pass by. The completely in-existence of footpaths is as well a possibility. In this case, pedestrians act instinctively walking through the center of the road. Though, an imaginary walkway is drawn sometimes, so if there is a strong sun and facades can proportion shadow, walkers will take this imagi-

nary path next to the façade. Or if for example is raining, the periphery of the road would be a good option, because the water flow is a little bit stopped thanks to the presence of the façade and maybe some balconies attached to it. One could speculate endlessly about an infinitude of different uses of this walkways systems that are present in every city. In any case what is important to remark is the consideration that is given to individuals in public space though the construction of this dispositive. Most of the time these footpaths are following the hierarchy of the road which they are directly attached to. The way a pedestrian chooses is going to be then similar to the one of the car. From when quitting their houses, they will follow a route until destination, going through different footpaths dilatations, probably from narrower streets to larger avenues and back to narrow again. Experiencing the city becomes richer when crossing through a broader quantity of different typologies of space and dilations.

Different buildings chose consciously ways of connecting themselves to this island-like networks of footpaths. Transitions are sometimes executed in a more or less enriching way. For example, using a step in front of the walkway of an apartment block can be extremely useful to protect the entrance of water, any kind of dirt and at the same time marks a change on the status of the space, from public to private. It can be used as a surface for kids to sit on or play with.

Analyzing contemporary buildings in three different paragraphs, treating the matter of designing void though three successive steps, will try to explain and build the discourse from a public void that starts expanding towards a void that becomes 'self-sufficient'.

The public void that expands

Whenever a building is conceived, a major importance should be put on how the transi-

tion between city and building is articulated. When designing then, architects must propose adequate solutions based in the specificities of the territory where the object is located. In particular, for what is researched here, in an urban condition, buildings located along streets are connected to the tissue of the city through the walkway, an element created "naturally" throughout time for practical and pragmatic reasons, like water evacuation or pedestrian protection from vehicles. This specific location of a building along a street makes of the element called walkway the main support for spatial articulation. As it is going to be developed further in this paragraph, several are the ways to manage this precise moment where the programmatic essence of the new building gets in touch with the rest of the existing. Different "typologies" or forms get born from the solving of this moments.

Looking closer to a building hosting a crèche in the lower floors and apartments above, located in the center of Geneva, in a district that was repeatedly the focus of new urban planning projects, the building of Sergison & Bates of Rue du Cendrier (2012) is inscribed in this complex place between "French" 18th century dwelling houses, a historicist school an "American" 20th century commercial buildings and "occupy the seam between these different kinds of architecture with a 'strong, independent image' that incorporates characteristics of the surroundings buildings". Choosing to show an exposed structure image of the facade can be partially understood thanks to what has been just quoted, since adjacent buildings are using the same strategy. A part from giving a strong character to the whole building, 8 massive pillars transmit the charges in the ground floor along the façade line, standing

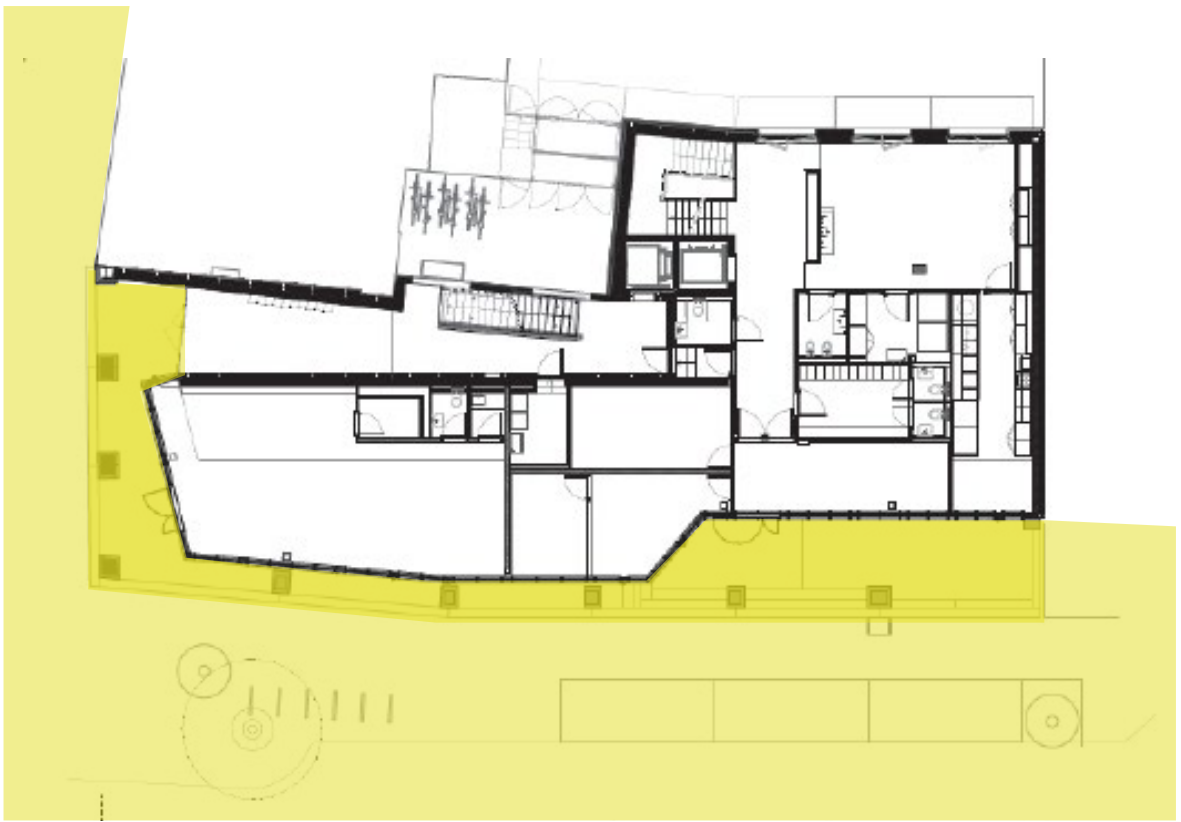
7 Steinmann, M. (2012) *Bebauung Rue du Cendrier. Werk, bauen + wohnen, Issue 03*, 34-41.

between the walkway and the building itself, delimiting the perimeter of the parcel. This pillars establish a rich relationship between the activities and spaces of the building and the street, and in particular with the pedestrian part, the walkway. This system of transmitting the charges only through punctual elements has been used previously a multitude of times. They articulate the passing from the publicity of the street until the privacy of dwellings. But here the architects go beyond just the application of a simple covered footpath. A very transparent façade, composed by big glass surfaces hold by metal frames, is found behind the pillars that touch the ground along the perimeter. This second line of the façade is directly related with the interaction between the void of the street and the building. So in first place when looking at the plan, a “dotted” line created by the pillars, carrying the weight of the building, establish the external boundary of the building. The other element of the façade, the very transparent second layer, acts like a continuous line which folds itself creating spatial dilatations, urban pockets of no more than 2m depth, proposing the different entrances to the building. Both lines of the façade, the massive pillars along the perimeter, and the transparent glass wall along a new drawn line that create little pockets, are able to articulate a clear transition between the street and the activities of the building. This uncomplicated gesture is able to give hierarchy to the different entrance spaces to the building, bringing different spatial dilatations.

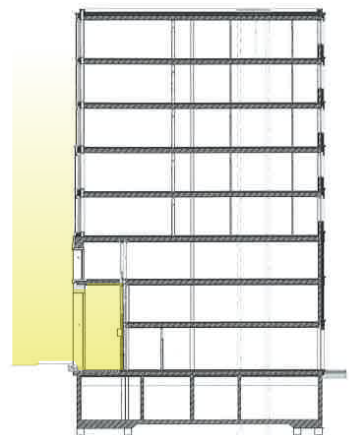
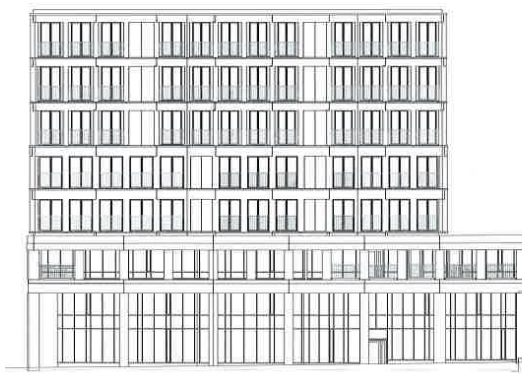
On one side, the straight vertical plane proposed by pillars along the façade is talking about the insertion of the building in a pre-established urban order and image. The building doesn't want to appear like a stranger and prefers to give a first impression of “normality”. The unifying esthetic of the arcade system is able to even hide the small irregularity

of the plot, rendering the whole façade as a unique surface. But beyond this first “allure”, the second layer, conceived in a very discreet way, becomes more specific in order to treat the urban insertion problem at the scale of the user. Along the Rue du Cendrier, a first “expansion” of the walkway occurs towards the interior of the building.

In the center of Nottingham, a gallery for contemporary art, was built by Caruso St John (2009). At the north side, and before arriving in front of the church, the sidewalk reacts expanding itself towards the entrance of the gallery. A big canopy is covering part of this not too extensive open square-like surface. A not too drastic change on the floor materiality but mostly on the way plates are assembled, informs the visitor that this urban void, accessible by any passerby, is already part of another different entity than the street itself, in this case the foyer of the gallery, and that at the same time still is a public open space. A one meter and a half high existing brick wall is delimiting the entrance to the church's parking. The same wall acts like the end of the spatial dilatation of the walkway created at the gallery access. Architects reacted to it constructing a grey wall delimiting the south border, along which a bench is proposed and the name of the gallery is written on at the same time. So when someone arrives from the street to this urban pocket both walls are directing the visitor directly to the façade of the gallery where the entrance is under the canopy. Pedestrians can take a rest and sit on the proposed bench that gives the possibility of admiring the flow of passersby along the street. The expanded footpath here reaches a certain kind of independence, like almost becoming a separated element from the walkway itself, proposing an urban pocket that isn't totally belonging to the gallery nor the city. The church just next to the gallery is reacting to the city public space in a completely



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different way. After becoming a restaurant, a little garden in front of the main facade was enclosed by iron fences. The walkway is completely erased and is the roadway this time that comes inside of the plinth allowing cars to get in and find a free car park spot. The site has not been thought for pedestrians to experience it. Clients arrive with their cars, eat either inside or in the enclosed garden and leave again. Because of its use or the intentions of the owner, a traditionally public hub becomes stripped off from its former influence towards public realm. The way this urban void is treated could be seen as analogously opposed to the goals void between public life and gallery has.

Coming back to the precedent example in Geneva, design by Sergison and Bates is continuing with the covered walkway proposed by the contiguous building introducing a new element in its design. Now looking closer at the floor, one notices that it is slightly going downwards, introducing carefully the direction towards the entrance door of the crèche. From the walkway itself, three steps separate the level where pedestrians walk along the street and the level of the kindergarten. The “changing of level” strategy that allows to separate the road from the walkway is here re-used for separating both spaces. So the sidewalk expands itself towards the inside of the building as said, crossing the plane of the first facade proposed by the columns and being retained by the second plane, a layer of glass windows. The space created in between this two planes is belonging both to the kindergarten and to the public urban fabric. Enhanced by a discreet digging into the ground, the spatial configuration of this threshold is making of it almost a room, an urban one. Architects consciously conceived this pocked to “create a sense of permeability within a dense city block⁸”. After this moment, and continu-

ing towards Rue de Rousseau, the second layer of this double facade, gets directly attached to the first one, running parallel both plans of the facade until almost the end of it, where a corner condition appears. This rather simple way of treating the building-street relationship, applying this system of two vertical elements that interact between them creating spatial dilatations, appears to be a powerful one. Probably thanks to the transparency of both planes, the effect perceived from the walkway is very subtle.

Due to the double height of the colonnade, the building is included in the existing big-scaled status and urban rhythm. However, the fact that the ground floor of the building is slightly carved makes a big difference for passers-by and users. Pedestrians don't have the feeling when being closer to the facade that the double height is that important, partly because the first floor is lower than expected (because the ground floor is too). The inhabitants of both, ground and first floor have a relation towards the walkway that is specific. People on the ground floor can feel somehow completely detached at some point from the urban life without though losing a direct connection with the street. The big care with which architects treat this connection of the building with the urban sequences of voids, based in a consequent study of the city, its history and evolution, is characteristic of their architecture: “Rather than declaring how the city should be, it is defined from the observation of the city as it is, instead of proposing a radical alternative to reality it suggests adjustments to what exists (...) with the result that their buildings acquire an ambiguous urban presence, halfway between desire for individual expression and respect for collective anonymity⁹”.

Continuing analyzing this particular urban

⁸ <http://sergisonbates.com/>

⁹ Davidovici, I. Tectonic presence in Tranfa, F. (2014) Super normal. *Casabella*, Issue 834, 4-26.

treatment, at the shorter fragment of the façade, the one on Rue de Rousseau, both layers composing the façade act similarly, creating this in between void capable to make the connection with the urban sequence of public spaces. The covered void along this façade of the building is divided creating two separated entrances, one that permits to access a commercial or office space, the other one directly connected with the main entrance of the building permitting to access all apartments. Using the same strategy than before, the second layer of the façade allows to make this division of two different extensions of the walkway, for accessing different parts of the building. Both spaces are again slightly excavated so to enhance again this “room¹⁰” character, inscribed at the same time in a larger sequence of urban rooms or voids. The system of arcades its not continued further after the end of this apartment block in the Rue Rousseau. This gives even a stronger character to the main entrance of the building, which is preceded by this void contained between the two layers of the façade and the delimiting wall of the contiguous building. The access to the apartments is via this extension of the walkway that works as an articulating void, both owned by the building and the city fabric, connecting the street with “an alley leading to a small open court, with gallery access providing a shared semi-private threshold between apartments¹¹”. As defined here, apartments are provided of access almost in an analogue way, thinking about the articulation of private and collective space.

The programmatic difficulty of not only hosting a public program but mostly housing is treated here with a common strategy. By means of a system that can control the thick-

ness of the façade at ground and first floor, the walkway interacts here directly expanding itself towards both of the programs, the kindergarten and the dwellings. The spaces created between both layers have the power to break down the scale of the city into a more intimate one and act like transition voids having this ambiguous character of semi-publicity, blurring boundaries. The changes on height of both, the entrance to the kindergarten and the apartments, is big enough in a subtle way to enhance an own status of this in between voids. Without any bigger gesture, the building is at the same time well inserted in the urban fabric and extremely specific for its use, proposing a series of spatial conditions with very few elements, even inherited from the existing, like the series of arcades. Public space and walkway in particular are at the same time enriched and able to transmit spatially this duality to passersby that, having a global view of the activities happening in the interior, thanks to the transparency of both facades lines, can feel naturally directed towards the entrance they are looking for. Pedestrians that are not related to the building can use the steps for sitting and eat a sandwich bought in front, to take a rest when speaking on the phone and see people pass by. Kids can play with both different levels of the walkway and the slope when leaving the kindergarten, etc.

Expansion that is “site-specific¹²”

The triangular shaped plot of Nottingham Contemporary is delimited by a transited road at west and a narrower street at north. At south-east side, a church and its parking garage are on top of a plinth hold by a retaining wall that faces directly the sloppy plot of the museum. Caruso specifies that in terms of the insertion of a building in its site, the

10 Kahn, L. (1971) The Room, the Street, and Human Agreement. *Louis Kahn. Essential texts*, 252-260. London, United Kingdom: W.W. Norton & Company.

11 <http://sergisonbates.com/en/projects/houing-rue-du-cen-drier>

12 Lucan, J. *Précisions sur un état présent de l'architecture*. Lausanne, Switzerland: Presses polytechniques et universitaires romandes, 2015.

Nottingham Contemporary art gallery is “site-specific”. Surrounding the whole north and west facades there is a walkway. “The artistic ambition of the project, encompassing object based visual art and time based performance art, has its origins in the artist run spaces of downtown New York in the late 1960s, and in the work of artists like Gordon Matta-Clark and Trisha Brown, whose work was directly engaged with the spaces of the city¹³”. As the architects affirm themselves, this strong connection with the urban and the city fabric is looked for from the beginning. Matta-Clark through his art interventions has always shown his particular interest for space. He studied to be an architect and even if he never became his profession, architecture became both his medium and subject matter. In 1975, in “Conical Intersect”, even if the reason was to “manifest his critique of urban gentrification in the form of a radical incision through two adjacent buildings designated for demolition¹⁴”, the resulting object was a void that showed passerby the building internal skeleton. Somehow this art piece stages in a metaphorical way the essence of the spaces referred in this text. The void, even if located inside of the body of the building, belongs to the public sphere as well, since it proposes an opening to look at the inside permitting to analyze its structure. It is then this space between, belonging both to the building itself and to the structure of the city. In the center of Berlin, not far from the former city Hall, the Dutch Embassy (2003) is a particular example of how the specificity towards the context can be treated. R. Koolhaas likes to declare the close relationship of his architectural object to the city and its metropolitan character: “The Netherlands Embassy is a disciplined cube with equally disciplined irregularities which aims to facilitate

13 Caruso, A. ; StJohn, P. (2015) Nottingham Contemporary. *A + U, Issue 3534*, 122-125.

14 <https://www.guggenheim.org/artwork/5211>

a better understanding of Berlin, confronting divergent ideas about how the city, with its complexity, heaviness, opacity, and beauty, should build / rebuild.¹⁵” The actual sequence of public voids through which a pedestrian is confronted with, when moving in the city, is not ending after the slope that brings the user until the “entrance”. A so called “trajectory” is actually running through the depth of the volume browsing all spaces of each floor. It is a continuous path that could be even understood like the continuity of the pedestrian outside sidewalk of the street. “...The trajectory is conceived (...) as a twisting boulevard with wider segments, squares, blind alleys, crossing the body of the building, confirming the “metropolitan” character of OMA’s architecture.¹⁶” The connection with the urban goes beyond the access sloppy platform. The “trajectory” described is inspired of the urban void dilatations and crosses the whole volume from the entrance until reaching the roof deck. From up there, one can enjoy a view over the whole city. The central location of the building doesn’t allow the visitor to identify any unbuilt region, being in the epicenter of all this “European” congestion. A hole carved through the totality of the ensemble (cube, void and wall) allows pedestrians being in the park, next to the Spree, enjoy a crossing view over the ‘Fernsehturm’, the TV tower. This constitutes another unconventional strategy to render the building extremely site-specific.

The interaction of the embassy with the city open public spaces is yet accomplished with the several already exposed strategies. In particular, the treatment of the void, how to enclose it and design a successful spatial sequence of it, is what architect R. Koolhaas and OMA experiments with the most in this particular example. Consisting of a yet quite

15 <http://oma.eu/projects/netherlands-embassy>

16 Gargiani, R. *Rem Koolhaas / OMA The construction of Merveilles*. Lausanne, Switzerland : EPFL Press, 2011

closed diplomatic “public” program, the building shows itself inserted in the existing city fabric and openly connected with its public spaces like the Klosterstrasse or the park. The surrounding wall-like volume is perforated not only in the higher floors to let people on the park see the Tv tower, but as well at the entrance level of the embassy, permitting to look at the façade of the non-demolished old City Hall of Berlin. The building becomes a public machine establishing visual links with the iconic silhouettes of the city, and treating programmatic issues in a generic way, letting at the same time public circulation void penetrate inside of the ensemble and through the totality of the volume. The void is able to articulate the relationship with the city, being part of the building itself. Void and built are here one only entity, being designed by the architect and able to react to the existing urban condition in a strong way. Architecture shows its power of solving this spatial connections, being the void an extension of the built and finding inside the building an extension of the urban sequence of void at the same time.

Back in Nottingham, a stair located south of the upper platform is running along the retaining wall that holds the church plinth, creating a vertical connection between the lower and higher part of the gallery. The very narrow space squeezed between the existing wall and the façade of the gallery proposes a fast connection to reach the extremities of the museum. Stairs are an element that complement in this way the sequence of void urban spaces proposing a potential scene, not only for pedestrians to admire the interior of the new building through some punctual openings but, for artistic manifestations and performances that can take place in a urban controlled context. Even if the stairs belong, as said before, to the ensemble of public spaces of the city, the blind wall holding the

church is giving totally the legitimacy to the museum to appropriate the space. The surface of the retaining wall can become even a surface on which artistic expression can take place too, acting like a theatrical décor. On the lower platform one can find tables and chairs in summer, proposing an outdoor extension of the cafeteria of the gallery. Both platforms, lower and higher propose then a dialogue between them, becoming at the same time only one void that runs along the whole façade and two separated ones. The duality of happenings between this side of the building and the west side is fascinating. On the side of the road, a constant traffic of cars and trams talks about a congested city where citizens have almost no space other than the interior of those machines. Even if there is a walkway that proposes a pedestrian condition, it is in vain. On the other side, a void compressed between gallery and retaining wall is activating a real pedestrian life proposing proper spaces where people find reasons to stop for some seconds at least and interact with their surroundings and even with people sitting along the bench, or talking halfway along the stairs, looking through the openings that the museum gallery proposed. The architectural object is inserted in the middle of both different kinds of urban tissue, the big traffic lanes periphery-like one and the old town center existing one. All this urban voids are working complementary with the inside activities of the building, on one side the lower platform is an extension of the café, and the higher one of the foyer and reception of the gallery, without loosing at any time their character of open public voids. The synergy created in this “double belonging” fragments of the city is the key for understanding a successful insertion of a building in its city tissue.

The façade of the museum is conceived as a kind of curtain, not only architecturally in terms of construction (curtain-wall) but lit-

erally, giving an impression of continuous wrapping of the exhibition spaces. The green prefabricated elements that characterize the object have a lace fabric-like surface treatment. Together with the metallic golden-colored parts, both are almost the two main elements of the façade. So the curtain extends itself all along the perimeter. The golden metal frames are used there were an interaction with the outside occurs. For example, along the western façade there is a big window and a service access. Golden metallic plates and profiles are used for both the doors and the window frames. Same for the rest of openings along any façade. Material is used here as a tool for helping in the comprehension of the building from the city “a preoccupation about materials that has as goal to make the material present according to the methods of its near and distant perception¹⁷”. What apparently in the higher level was just an extension of the sidewalk happens to be part of a longer and more complex collection of urban spaces that are enriching public life around the museum. In terms of accessibility, this ascendant corridor is an extremely useful element, bringing fluidity in movement for visitors, reaching easily the totality of the building coming from any side. The fact that the building is visible from any of its facades is revealing so the object is in contact with the city from any point of view.

The autonomy of the void

The following example might propose a new understanding of the “site-specificity” concept by means of using complementary tools and elements to the ones seen before. Located in the very center of Berlin, between the river and the old city hall not destructed during world war two, the plot where the Dutch embassy is erected had to respect planning

17 Translated from: Lucan, J. *Précisions sur un état présent de l'architecture*. Lausanne, Switzerland: Presses polytechniques et universitaires romandes, 2015.

guidelines from the municipality, based in a wish for reconstruction needing to reflect the local 19th century state of the city. But the architect was not ready to just accept the given parameters and stated: “Since we now are in charge of the design of the entire site we can further explore a combination of obedience (fulfilling the block’s perimeter) and disobedience (building a solitary cube).¹⁸” This double decision of following the rules only until a certain point and at the same time bringing the so wanted isolated cubic volume is creating a spatial compromise that can be looked at closely in this particular case, wanting to thresh how urban voids articulate the connection between the city and a building. So combining programmatic requirements to site ones, a “Generic Volume¹⁹” was designed to stand on the plot corner. Opposite to it, a thin and high wall filled with program draws a L shape creating a void between the cube in this wall-like volume. The use of the very thin volume symbolizing a wall shows in a metaphorical way the specificity of the design to its city, being the theme of the wall a constant reference to Berlin wall in the architecture of R. Koolhaas. So this time the walkway space got expanded to a big extend. From the Klosterstrasse, a sloppy surface runs between the cubic volume where the embassy functions take place and the wall-like thin volume where the personnel residences are located. So the volumetric scission is not only formal but programmatic as well, corresponding with a traditional understanding of the city arrangement. This surface cannot be longer considered an extension of the walkway but an element on itself that is directly connected to the street and to the building. It acts like a progressive plinth, starting from the level of the street and reaching the official entrance of the embassy in the first floor, from where

18 Koolhaas, R ; OMA. (2006) OMA. Netherlands Embassy Berlin. *GA Document, Issue 90*, 50-69.

19 <http://www.oma.nl>

one gets an amazing view over the park and the Spree.

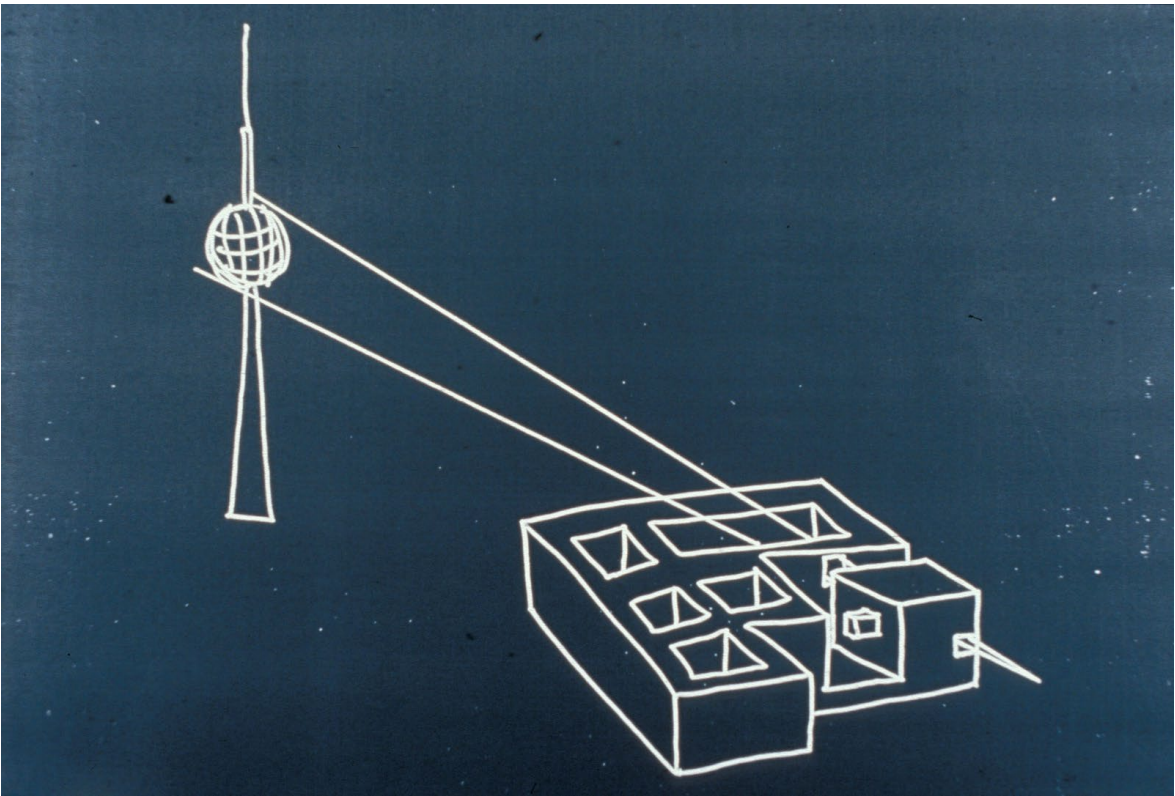
In Nottingham, the gallery is completely surrounded by urban void, not reacting to it particularly in the west nor the north part but clearly creating a sequence of space dilatations along the remaining side, the one directly confronted to the retaining wall, proposing two platforms: one in front of the lowest facade of the museum where the cafeteria is located and the other one in the highest part, acting as main access. The space between both permitting to link both is a conventional stair along which pedestrian can have a look inside some different spaces of the gallery. This connection between both, the access and the cafeteria level is creating a path that makes part of a broader network of void sequences at the scale of the whole city. The architects amplify the existing system of spatial links. This paths can almost be considered like an autonomous element, a new type of void that acts like a “maker” of the city.

Around the embassy of Berlin, the open spaces directly in touch with the building acquire an independent character from other existing public voids. The cubic volume, even if defined as “generic” can be considered specific to its site since it can be understood as the inversion of the plein-vide scheme of surrounding buildings. In this case, the central and squared void of courtyards is translated in the main volume of the embassy, and what surrounds it is void instead. The relationship established between both volumes, the cube and the wall, is even physically executed through a series of several bridges connecting both bodies crossing through the generated void in the middle. This void, a part from bringing access to the embassy, is connecting the building to the city. Because of the real use and functioning of an embassy, this space between is not easily accessible by

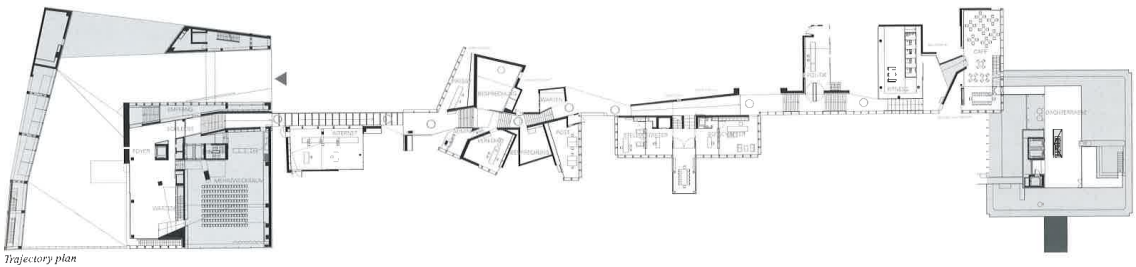
any random citizen but was certainly conceived wanting to represent an open relation with the city and its urban tissue, “the client requested a solitary building that would integrate requirements of conventional civil service security with Dutch openness.”²⁰ This would not be though the only element that talks about the relationship with the public spaces of the city. The whole cube is lifted by concrete columns, creating the feeling that the cube is completely detached of the ground. The façade is stopped then, less than two meter before reaching the ground. In addition, under the massive block, there is a corridor carved along the perimeter of the box, accessible through a subtle connection of both floor levels (sidewalk and corridor) next to where the big ramp joins the street with the entrance to the building. Again one more detail talking about this ambiguity of obedience and disobedience, of being implanted very much specifically in its site and at the same time having a generic character. What is that renders the essence of a building at the same time both site-specific and generic? Could it be that there is strategies regarding the insertion of a built mass in an urban texture that, used every time in the same way, are able to respond to the specificities of each territory? Which would be these strategies?

The strategy used by Koolhaas in the construction of the embassy allows him to place the regular “solid” and absorb site specificities with the void generated thanks to a surrounding wall, analogously to how the plans of renaissance palazzos in Italy where absorbing irregularities. Rooms had to be geometrically regular so some courtyards or service became trapezoidal shaped to give the image of regularity to the exterior. Palazzos were generic ideal structures in this way, counting with a very well fixed ruled that

20 Koolhaas, R ; OMA. (2004) Netherlands Embassy in Berlin: OMA. *Quaderns d'arquitectura i urbanisme*, Issue 241, 74-89.



4



Trajectory plan

5

allowed them to adapt to any form of plot, showing always a regular façade and axial distribution of the main rooms. Like in Palazzo Ducale in Urbino or Palazzo Borghese in Rome, where in both cases one of the two courtyards couldn't be regular and had to absorb the specificities of the plot, becoming trapezoidal shaped, the ascending surface permitting the access to the embassy is at the same time adapting specifically to the site and allowing the generic solid to exist. Visitors access to the building thought the ramp having the radical image of the generic shape in mind. The strength of it renders the whole ensemble – void + volume – autonomous, but the design of the void links permanently the ensemble to the city and its specific location. The void created around the block is offered back to the city sequence of public voids. Even if in this particular case the use of this open space is not completely reaching expectations, the formal expression of it is strongly enough talking about the principle. It is the surface where the sphere of both public entities, the city and the embassy, share their sovereignties in an unconventional way. Squeezed between both parts of the embassy, the cube and the wall, this dilatation of the city's sequence of public voids is from an unknown typology. It isn't a street, a little square nor a plinth exactly. It is just a void contained between both facades and a sloppy surface with a quite generic character as well.

Image index

- 1 Sergison & Bates, Urban housing and crèche, Rue du Cendrier, Geneva, Switzerland, 2011. Ground Floor.
- 2 Sergison & Bates, Urban housing and crèche, Rue du Cendrier, Geneva, Switzerland, 2011. Facade and section.
- 3 Caruso & St. John, Nottingham Contemporary, Nottingham, Great Britain, 2004-2009. Ground Floor
- 4 OMA/ R. Koolhaas, Netherlands Embassy, Berlin, Germany, 1997-2003. Explicative hand drawing.
- 5 OMA/ R. Koolhaas, Netherlands Embassy, Berlin, Germany, 1997-2003. Unrolled 'Trajectory' floor plan.

The first part of the paper discusses the importance of understanding the underlying structure of the data. This is particularly relevant in the context of machine learning, where the ability to identify patterns and relationships in the data is crucial for making accurate predictions. The second part of the paper focuses on the development of a new algorithm for solving the problem of finding the optimal solution to a given set of constraints. This algorithm is based on a combination of linear programming and dynamic programming techniques, and is designed to be both efficient and robust. The third part of the paper presents the results of a series of experiments conducted to evaluate the performance of the proposed algorithm. These results show that the algorithm is able to find the optimal solution to the problem in a significantly shorter time than previous methods, and is also able to handle a wider range of input data. Finally, the paper concludes with a discussion of the implications of these findings for the field of machine learning, and suggests some directions for future research.





b





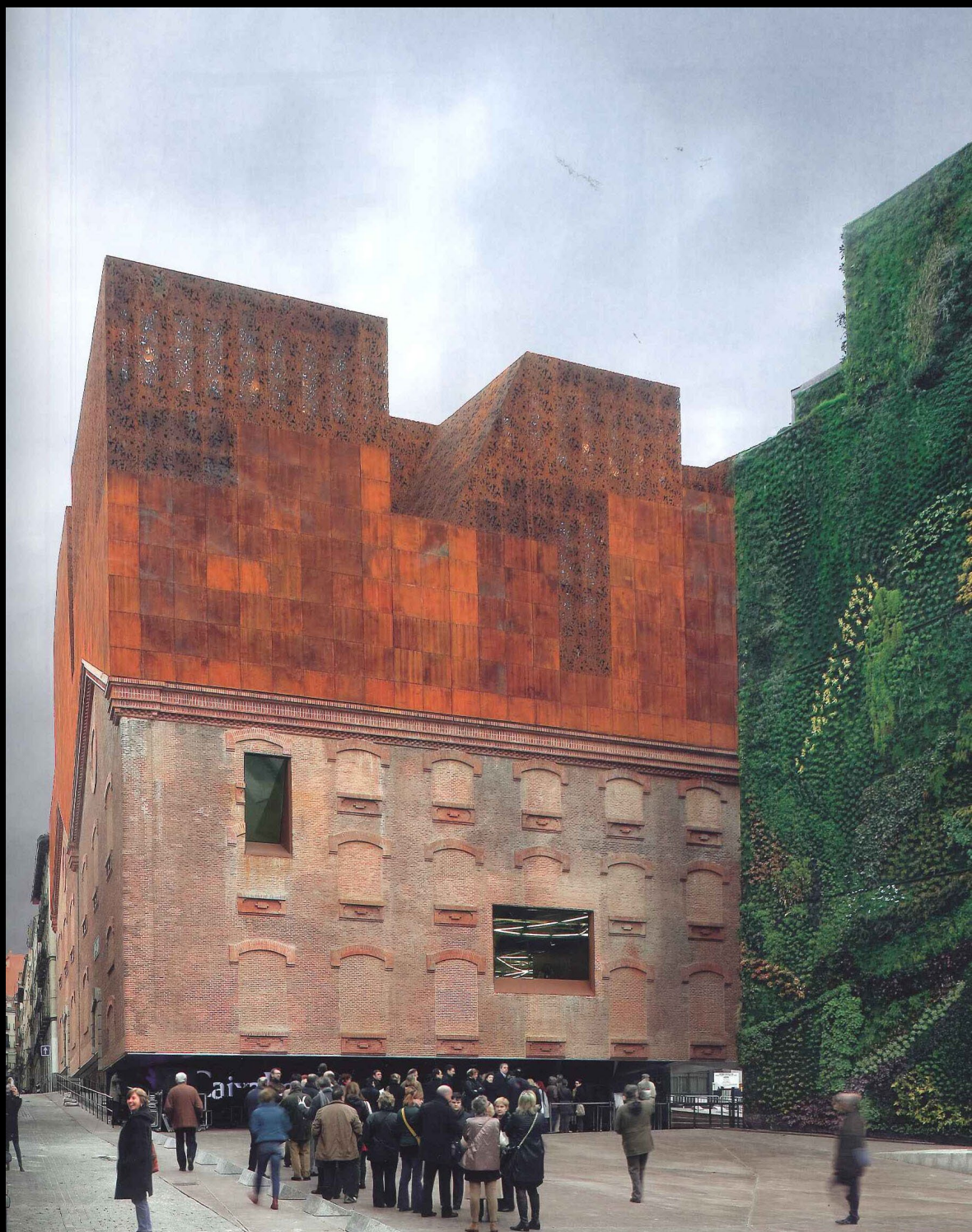
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The first part of the paper discusses the importance of understanding the underlying mechanisms of the observed phenomena. This involves a thorough review of the existing literature and a clear identification of the research gaps. The second part presents the methodology used in the study, which includes a combination of qualitative and quantitative approaches. The data collection process is described in detail, along with the statistical analysis performed. The results of the study are then presented, showing the key findings and their implications. Finally, the paper concludes with a discussion of the limitations of the study and suggestions for future research.

The study aims to explore the relationship between the independent variable and the dependent variable, taking into account the moderating effect of the third variable. The research hypothesis is that there is a positive correlation between the independent variable and the dependent variable, which is moderated by the third variable. The study is designed to test this hypothesis using a series of statistical tests.

The data was collected from a sample of participants who were recruited through various channels. The sample size was determined based on the requirements of the statistical tests used. The data was then analyzed using a series of statistical tests, including regression analysis and correlation analysis. The results of the analysis are presented in the following sections.

The findings of the study indicate that there is a significant positive relationship between the independent variable and the dependent variable. This relationship is moderated by the third variable, as predicted by the research hypothesis. The results suggest that the independent variable has a positive impact on the dependent variable, and this impact is stronger when the third variable is present.

The study has several limitations, including the use of a convenience sample and the reliance on self-reported data. Despite these limitations, the study provides valuable insights into the relationship between the variables of interest. Future research should aim to address these limitations and further explore the underlying mechanisms of the observed phenomena.

PARVIS

It seems clear until now that buildings, and so architecture, are able to control how relationships are wanted between themselves and the urban fabric. Imagining walkways as public realm elements, not necessarily linear, they proved having the power of changing form and expand as wanted by architects when interacting with a building. Lifted from the road, walkways become then sometimes urban elements capable of articulating a powerful interaction or exchange, from urban public sphere towards the building, and the other way around. At some points, expansions create little nook-like spaces able to manage this moment of interaction between city and building. In some other examples, looked at previously, footpaths can reach a scale that is going beyond of their essence. Public buildings particularly are highly expected to be accessed from a noticeable different kind of space. The accesses seen before were all design having in mind the kind

of building they were serving and their status. Walkways are not able anymore to respond to this demands when talking about a bigger scale or purpose of a building. Thinking about temples or churches, buildings historically linked to religion and so to power, usually are accessed through a bigger public open space. A church or a temple in a city is still considered like a big gesture and an important point of intensity. Because of this, their connection with public space has been carefully looked at.

Parvis is an original French word that serves to name the big open space right in front of a church or a temple. Traditionally, the most important churches and cathedrals where not only well considered and famous due to their architecture and design, but as well thanks to the open space they had in front, that allowed citizens to contemplate the façade and the magnificence of it, choosing an adequate position, further enough, to get a good perspective of the totality. This void or empty space, allowed inhabitants at the same time to interact in between them, to chat after and before the mass, etc.

This spaces today are still extremely appreciated by people nowadays. Why? One obvious reason is the lack of motorize traffic. Kids can play freely and parents can let them run around. The vast amount of void space allows an infinitude of activities to take place on the surface. But the activation of such “platforms” is tightly related with the use of the main building which the surface is attached to. The presence of one only building is already enough to activate the surface. All different uses then are highly inspired by what happens in the inside of the temple or other. The program contained in the inside is projected to the outside. Building and Parvis work like in a symbiosis then, two different elements interact endlessly and could even be considered almost like a unit. The one ex-

ists partly because the other. So, where is architecture ending or starting?

The void is in direct touch with the city and articulates then exchanges between the urban fabric and the building in a completely different way from the walkway. A Parvis is not a walkway anymore. It has reach autonomy and it has become something else. It is not either a square. It can be considered part of the architecture of the temple or public building that is linked to.

This surface is though not always flat and “abstract”, it can be as well designed. A common thing to do is to divide the whole extension in two parts, a higher platform next to the façade and so acting like the actual entrance, and a lower part further away. A monumental stairway can as well be conceived at the entrance door. Thickness is given then to the surface. As seen before when treating about walkways, change on height is a very common strategy when designing this kind of urban elements, a shared one. It can be that the ground is carved out to create differences between several fragments of the whole surface or even to access the building from a floor lower than the city main ground floor.

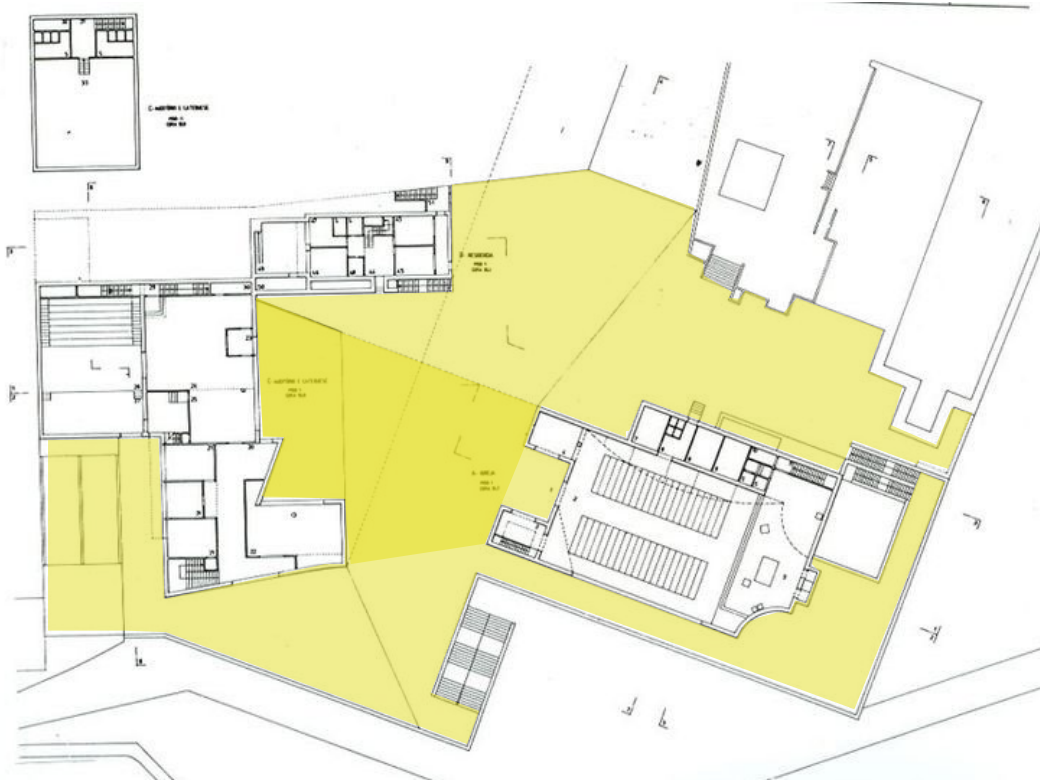
The designing of the building can perfectly conform the design of its parvis as well. Parvis being an extension of the building and the building itself at the same time. Being a void in the city and of course very much part of the urban tissue, making of it a richer ensemble of spatial relations. Looked from the citizen point of view, parvis are these so much look forward lungs where the space between gets greatly expanded and one can breathe.

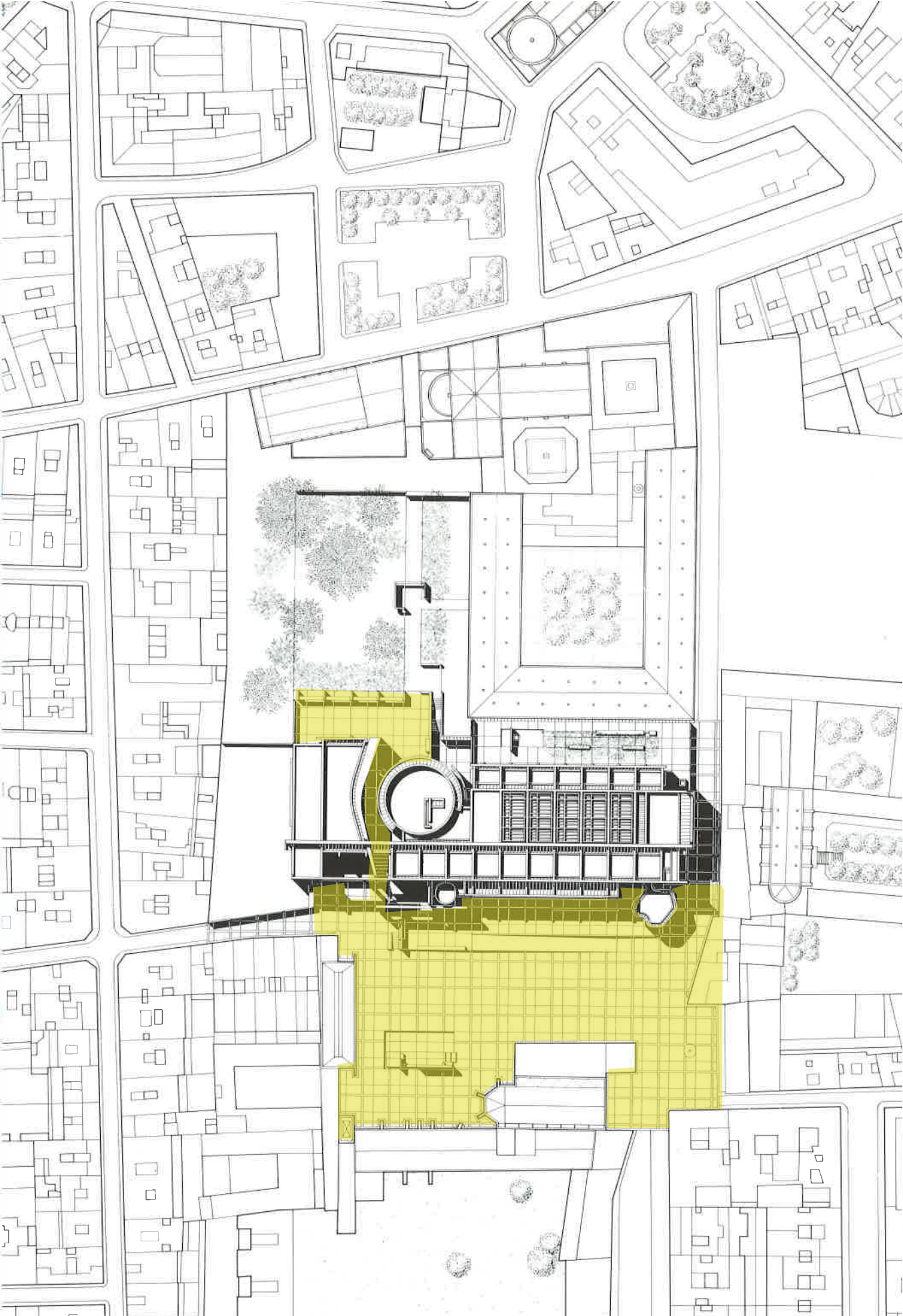
Once more the way of threshing the complexity of this kind of voids is to build a successive classification in three different paragraphs. These open public spaces are analyzed through different contemporary examples and looked at from three different points of view.

A sacral dimension: the meeting of the vertical and the horizontal.

Numerous churches and temples have been conceived together with a void in front. Finding its origins probably in a roman forum, where a congregation of temples and objects were taking place, parvises are the result of individualizing every single object constituting this whole. In a roman forum, the rectangular void surrounded by all constructions, the hegemony was barely controlled just by one building. In a parvis, the existence of only one building is enough to create and control the activation of the void with which it is related. This open space, as part of a congested city, happen to be surrounded by other built structures. It doesn't matter that much. Only the main building related to it is dominating the existence and sense of the void, formally and programmatically. Through a series of examples, the aim is to defend and explain how pertinent are this structures of public voids in the tissue of cities. Its “sacral dimension”, direct heritage of Catholicism's strong influence in European culture, can establish clear and rich relations between any public and the building and its activity, acting together with the built as a fragment of particular intensity amongst the city. As in the past, these influential points in the city are forcedly related with a certain religiosity but slightly tend to move towards a freer expression of culture. Parvises are not anymore only devoted to churches but to cultural centers and laic public icons of the city.

For starting with a traditionally religious program, the catholic complex built in Marco de Canaveses (1990-1997) by Alvaro Siza proposes a first step. It hosts not only a church but a mortuary chapel, an auditorium, a Sunday-school and the priest's house too. This complex exemplifies the power the church has when talking about its influence towards its parvis as main building over the rest. In





this “node of heterogeneous coincidences”²¹ where the complex is placed, existing structures cohabit with new ones. The importance of the main building is architecturally expressed using several techniques. First of all, and in terms of scale, its already obvious when looking at the façade that the church is the main building. It appears as the biggest volume put on site, as an abstract white object touching ground thanks to a one-meter-high stone socle.

The connection of the vertical with the horizontal is a recurrent obsession in Siza’s work. The mineral socle can even suggest that the ground goes up to the façade, making the building completely linked to the floor without losing its autonomy of an abstract object. The two ten-meter-high metal doors are displayed in a central position, and together with the symmetry of the entrance give to the main façade of the church its monumental character. The main door is carving out a threshold between the public void and the interior, leaving at both sides two tower-like volumes that remember a traditional gothic two-towers temple. This supplementary void carved out from the volume of the church is generating a specific connection with the city, proposing a richer sequence of urban voids until the entrance. Specific design solutions that are showing clearly the authority of this building over the rest are as mentioned, the over scaled dimensions of the access towards the interior of the temple, as much as how the connection of vertical planes of the façade with the horizontal abstract surface of its parvis is treated or to the religious symbolism of church-bells integrated inside one of the tower-like volumes. Even the lower buildings hosting the rest of the program and situated in front of this façade are reacting formally and metaphorically to the church.

21 Moral de Andres, F. (2013) Continuous conditions: two notes on the Alvaro Siza’s work and city. *Arte y Ciudad – Revista de investigación*, n°3 (I), 799-818.

In contemporary architecture one can find the power that traditionally was emanating from religion in other non-religious examples too. Architectural design and detailing for expressing magnificence, power or authority have been used when designing cultural buildings nowadays. Located in a former monastic enclave, in the very center of the city, the Museum of Contemporary Art in Barcelona (1987-1995) designed by Richard Meier is placed in a strategic way, framing with its imposing main façade a “square-like” rectangular square that in reality is a parvis and not a square. The fact that the length of the whole open space coincides with the actual length of the museum façade is already assimilating the belonging of this public void to the museum. Surrounded just on one side by the monumental post-modernist façade, the space is framed in the rest of its sides by existing housing and public buildings, a street and medieval buildings like a little chapel that is part of the exhibition spaces of the museum as well. The majestic image of the building results from the use of strong volumes that remember to the ones used by modernists previously. An irregular curved-plan room creates, by extrusion, a “tower” in the east part of the façade, that reminds of those of fortresses. The abstraction of materials and the use of white as a generic feature of Meier’s architecture are bringing even more strength to this symbiosis building-parvis, that happens to be a very well known fragment of intensity in the city. The monumental building can be freely penetrated without acceding to the museum through a “paseo”²², which runs parallel to the main entrance and forms part of an existing pedestrian network running throughout the old city like a cultural promenade, connecting various civic institutions. The notion of “paseo” or promenade

22 Meier, R. (1991) Museum of Contemporary Art, Barcelona. *Architectural design*, n°61 issue 3-4, 46-53.

is extremely useful in this example to understand the belonging of this open void space, and the museum linked it to, to the overall system and sequence of public voids with which the city is composed and constituted. The esplanade then shows itself clearly linked to a bigger system of public relationships, of a “net” composed by several points of intensity. Here, museum, plus its public space in front, create a single unit with a magnificent image that is able to work at the scale of the city working as one “island²³” amongst others. The intensity brought by this kind of void typology, an “esplanade-like” open space that can be called *parvis*, is intrinsically gifted of a certain “sacral” or at least powerful aspect. The expression of contemporary culture replaces religion here. New temples creating new point of intensity in cities are not anymore Christianity related. Public realm is spatially accomplished through an architecturally controlled void or space between²⁴.

When looking at the section of the architectural object and its *parvis* together, the interrelation becomes obvious. Looking almost like façade is a reversal of the floor surface, both, museum in the vertical and the abstract surface in the horizontal, conform an architectural frame for a public activity, giving birth to a “typology” of public space completely controllable by the architect. This form or idea could be one of the keys for understanding the limits of architecture in the design of a city and its public realm, being potentially strong enough to influence with its creation and presence the way cities work. A good example of a symbiosis of a building and its *parvis* would be the centre Georges Pompidou (1971-1977) in the center of Paris. This machine-like building, or “culture

factory²⁵” like architects define is extremely well indicated to be read in section. The majestic façade, having a completely stranger look invading the center of the city, is working once again strongly together with the surface which had been freed in front. On this surface, new symbol together with the building of contemporary and modern culture, several are the activities linked with the museum program taking place. The length of the façade is corresponding exactly with the length of its void in front. Colored ventilation tubes that compose the rear façade, the one on the rue de Beaubourg, are appearing at some points on the surface, indicating the belonging again of this surface to the building. The façade acts as well as a true information screen, equipment support that becomes an animation element for the environment. The movement of visitors is not only visible on the *parvis* but as well along the façade due to the extreme transparency of the building. Lifts, escalators, ventilation pipes or electricity cables are able to translate how the mechanical equipment work.

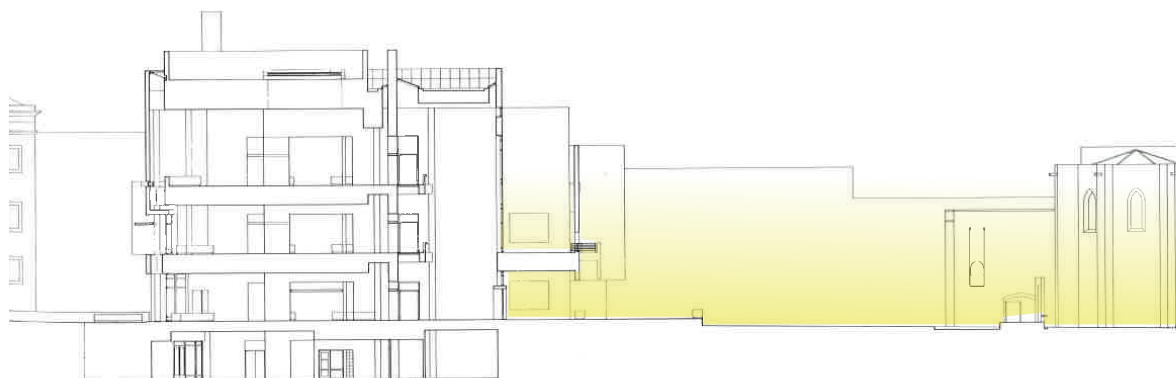
But not only activities related with the museum are happening there. The centre is the main activator of this surface, but Parisians use this open space as part of a vaster net of public open spaces of the city. Beaubourg becomes a meeting point, a fragment of intensity in the city, a new “sacred” spot inside Paris. Comparable to the one in front of the cathedral of Notre Dame, the *parvis* in front of Centre Georges Pompidou allows citizens to contemplate as well the magnificence of this cultural “palace”. Even if the longest dimension of the rectangular void is not placed in the direction towards the façade but along it²⁶ the visitor can admire the new monumen-

25 <http://www.rpbw.com/project/3/centre-georges-pompidou/>

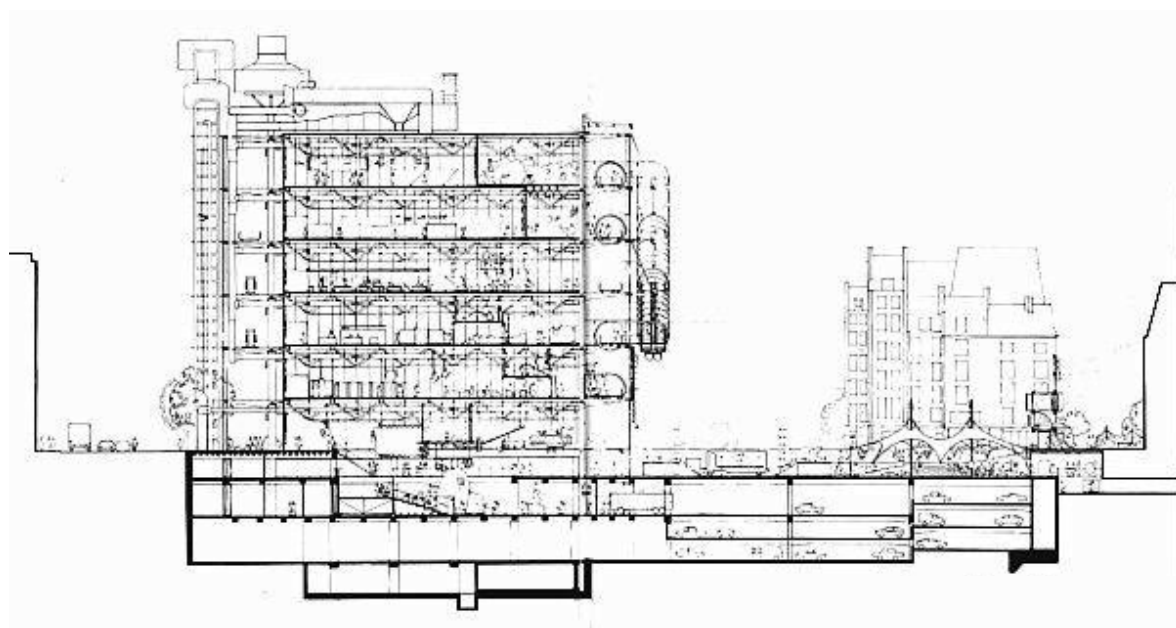
26 C. Sitte would defend that in order to have a good perspective of monuments: Sitte, C. (1889). *L'art de bâtir les villes: l'urbanisme selon ses fondements artistiques*. Paris, Éd. du Seuil.

23 Term taken from: Lee, M. (2011) Two deserted islands. *San Rocco, Islands* (n°1), 4-10.

24 Term taken from: Smithson, A. ; Smithson, P. (1974) The space between. *Oppositions* 4,75-78.



8



9

ality of this transparent object.

“Half of the area is taken up by the building with the other half, following a radical design strategy, devoted to the creation of a public space – the piazza, ‘parvis’, that gently slopes down to the lower-ground-floor entrance hall²⁷”. The architects decided to actually use half of the available plot for constructing their building. They condensed on ten floors all the program, having like this the possibility of offering this link with the city; the parvis. “Yet the achievement at Beaubourg is urbanistic as much as architectural (...) Success of the Pompidou’s role as a catalyst for urban regeneration²⁸”.

Changes on heights; void and plinth.

Issued from the same idea of changes on heights, which both, walkways and Parvis, benefit from, the paradigm of the plinth could be seen here as complementary to the one of Parvis. Plinth is defined as a slab-like member beneath the base of a column or pier, a square base or a lower block as of a pedestal. Pedestal, synonym of plinth, which is as well an architectural support for a column, statue, vase, or the like, a supporting structure or piece; a base²⁹.

When looking closer at the city, plinths can be found under bigger objects than columns for example, originally temples and later institutional public buildings. These displays have the power of spatially articulate objects of the city with its urban fabric, as walkways and Parvises do. It is important to ask until when architecture is able to respond through design to these spatial articulations. And which are the differences between a parvis and a plinth, is there is any. A plinth probably cuts out the building from the urban fabric establishing in this way the relation with it.

“The way the plinth reorganizes the connection between buildings and its site affects not only one’s experience of what is placed on the plinth, but also – and especially – one’s experience of the city that is outside the plinth³⁰”. With this statement P.V. Aureli refers to Mies van der Rohe’s use of plinths in lots of his buildings like the Barcelona Pavilion (1929), the Seagram Building (1954-1958), or the New National Gallery in Berlin (1962-1968). Plinths are analogous displays to parvises. They could even be considered as parvises with a certain height or thickness.

The church of Marco de Canaveses is located between two different levels of the city. The ensemble of buildings that hosts the church and residence of the priest is, in Siza’s words, a “stitching of dissonant pieces in a complex new order³¹”. The design of the church is able to articulate through this platform-like open space the main avenue of the town, in the lowest point, with the other higher existing level. But what is interesting here is to see the relationship that the platform or plinth creates with the city. From the main avenue, so the lower part, what one can see is a three-meter-high stone socle holding several white objects on top. Like in a sort of acropolis, the objects are displayed on top of the higher platform that becomes a big plane where accesses and relationships happen. The elements that allow citizens to climb up, such stairs, create a complex sequence of views over the church and the city itself. As defended by Aureli, the power these plinths have “... whether in New York or Berlin, is the experience of turning one’s back to the building in order to look at the city³²”. The strategic use

30 Aureli, Pier Vittorio. 1 Towards the archipelago. *The possibility of an Absolute Architecture*. Cambridge, MA:MIT, 2011.

31 Siza, A. (1997 :11) in: Moral de Andres, F. (2013) Continuous conditions: two notes on the Alvaro Siza’s work and city. *Arte y Ciudad – Revista de investigacion*, n°3 (I), 799-818.

32 Aureli, Pier Vittorio. *The possibility of an Absolute Architecture*. Cambridge, MA:MIT, 2011.

27 <http://www.rpbw.com/project/3/centre-georges-pompidou/>

28 <http://www.rsh-p.com/projects/centre-pompidou/>

29 <http://www.dictionary.com/>

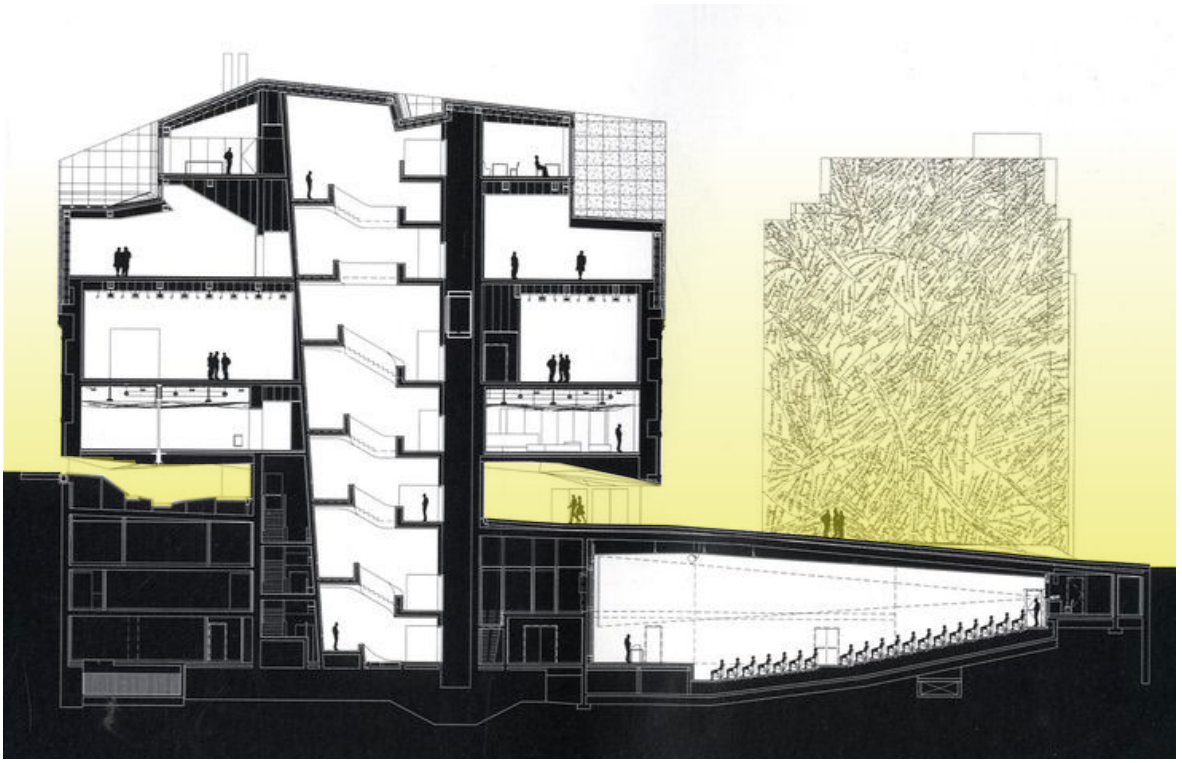
of plinths is able to bring a complete new understanding and experience of the city, making new connections and contributing to a better public realm. The changes on levels that the use of this dispositive entails enriches in a spatial way the notion of “publicity”, considering the rest of the surrounding urbanization as a continuous mass, feeling how the “fragment of intensity” detaches from the ground plane. The void created in the city by the use of a plinth cannot be understood in the same way of a flat plinth. Changes in height provoke an ascension of the actual parvis, now not counting only with the power of the activated abstract surface but with the need of climbing up in addition.

Another different case can be experienced when accessing the Caixa Forum building in Madrid (2008). Herzog and de Meuron chose here to leave part of the surface available on the plot for creating an urban void which would serve as entrance and that actually became the parvis of this cultural center. The program of the building is here condensed on top of the existing reused building block and under the public open space. What is newly introduced in this example is the way of accessing the interior. The building wants to appear like a floating mass over the esplanade. The parvis continues under the building proposing a continuity of the urban void until the very central core of the building, through which the access is provided towards the block above. This cultural center, that re-uses a former industrial building found on site, is located in between two different kinds of city fabric. It is actually absorbed by a traditional network of narrow streets and semi-tall buildings but borders the big madrilenne avenue of paseo del Prado which constitutes a transversal linear void along the whole city. A part of the building façade is visible from the avenue but getting closer one discovers subtler design features of the building and its par-

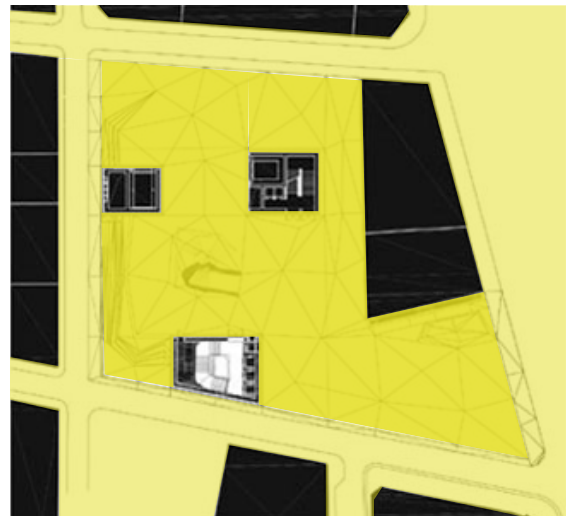
vis. The ground is treated with a kind of geometric relief that shapes the whole surface and from which the main entrance seems to emanate. “Problems such as the narrowness of surrounding streets, placement of the entrance, and architectural identity were solved in a single urbanistic and sculptural gesture³³”. The open space created on the “topographically landscaped plaza” is acting here like a plinth somehow, supporting the “floating structure” above. Instead of a massive plinth made out of stone or masonry, here the void of the semi-covered plaza can be considered as a parvis which is actually a metaphorical plinth holding this new icon of the city. This newly built again building-parvis tandem, appears to be a new fragment of intensity for the city, working systematically together with other intense public points amongst Madrid like the Reina Sofia museum, the Prado or the botanical garden. Architects define: “The Caixa Forum is conceived as an urban magnet that will attract not just art lovers but all people from Madrid and beyond. They will be drawn both to the cultural program and to the building itself³⁴”. Completing the synergy of this public equipment made mostly between building and open space, an enormous vertical greenscape stands in contrast of the former industrial brick façade. It proposes a contextual link with the botanic gardens opposite. The sculptural aspect of the silhouette reflects the roofscape of the surrounding buildings. Once again, the importance of the “site-specificity” is revealed through kind of metaphorical acts in the design. The industrial existing use of the site still somehow present in the building that is intended to be seen from all angles. In addition, and because of the slightly sloppy territory on which Madrid was constructed, the

33 Herzog & de Meuron in: Salgado, J. (2008) Juan Salgado reports on Herzog & de Meuron's eagerly anticipated Caixa Forum Madrid. *Architecture Today*, n°187, 12-17

34 Ibidem



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surrounding streets are higher than the covered parvis, that stays more or less flat from the paseo del Prado until the end of the plot. This gives quite a strong specificity to the object inserted in the city. The access to the public open space is possible only from the paseo on the east and from the north. The south and west part are not accessible; the building facades are corresponding with the existing alignments of the streets, since the existing volume was conceived this way. The Caixa Forum complex becomes a very particular and specific site for Madridians, a cave-like spaceship temple for the culture, a true pole in the public activity and agenda of the city.

Probably one of the best well known public and cultural poles is the Centre Georges Pompidou. Paris was the place where this new formal and programmatic experimentation took place in the late seventies. A big political effort was needed for the crystallization of this wish, a democratization of culture, open and transparent for every citizen. This project can be looked at the materialization of previous ones like for example the Fun Palace (1961-1964) of C. Price. The idea of a “clip-on” architecture, “a-formal and undetermined”, where every element has the same value as another and can be replaced by any other, an “endless architecture”³⁵. A place made for the public to be used and to be appropriated specifically. The programmatic indetermination is reducing the architecture to a basic frame (volumetric structure) where everything is flexible and can be decided and arranged differently in relation with time. This same idea is shared in the conception of the 8'000 m² “square-like” surface, “a real meeting point, assembly space, technically

equipped for hosting exhibitions, manifestations and spectacles³⁶”. The parvis that is part of this ensemble of spaces, made not only for conserving pieces of art but to propitiate encounter and sharing of ideas, is designed for accessing the building from the first level under ground. A descending slope is bringing the visitor towards the lowest point where the access is made like a kind of water evacuation system that wants to control and direct the flow of water because of pure and natural gravity. Users of this spot can be or not wanting to interact with the program of the building itself, they can only come to sit along the slope, this space is as much part of the city as of the centre. But, even though only one side is surrounded by the art and culture hub and the rest by historic existing buildings, the power the new building has over the activation of this sloppy surface makes of it its own parvis and not a city square. The changes in height of the esplanade render more specific the implantation of it inside of the city, creating a spatial pocket along the public surfaces of Paris. The power of this kind of public voids resides in the ambiguity of belonging, on one side being overcome by the omnipotent influence of this one big public building or temple, on the other being so much part of the bigger network of public voids of the city. Another use given to a parvis, that is not directly related with the activity of the main building attached to it, is the improvised skate park going on in front of MACBA in Barcelona. The changes on height of the esplanade linked to the contemporary art museum seem to be perfect for skaters to practice their sport. A ramp that runs along the main façade is accessing the higher platform on which the museum is placed. The difference on height is only of about one meter, a perfect measure allowing sportive young guys to rehearse and

35 Lucan, J. (2009) Chapitre 25. Structures argégatives et non-plan. *Composition, non-composition. Architecture et theories, XIX-XX siècles*. 465-483. Lausanne, Switzerland: Presses polytechniques et universitaires romandes.

36 Unknown (1975) Centre national d'art et de culture Georges Pompidou : une opération originale à chacune des étapes de son élaboration. *Urbanisme*, n°44 Issue 147-148.

train on this slightly landscaped area. The plaça dels àngels, how is it called the parvis of the museum, has become not only a space from which one can contemplate the building and meet people regarding the activity of the building, but an icon for all skaters of Barcelona and even beyond. This improvised and spontaneous activity, which has gained importance even over the cultural ambitions of the museum, is again one more example to illustrate the belonging of this parvis to both, the cultural building, that gives the size and frame for it as well as the materiality and floor design, and the city itself, and every citizen, being able to use freely this open public space, with regard towards the activity of the museum or not.

A generic³⁷ type of void

The idea of the parvis is looked here as a pure conceptual spatial display having the strength of articulating the relationships occurring in the city between its different components. Becoming a component as well in itself, this abstract idea of void, formally and programmatically linked to a remarkable public building, has the potential of responding at today's European cities' development challenge's. Having its origins somehow linked to the religious influence of temples and churches and allowing the citizen to contemplate the magnificence of their facades, parvises created today are mostly linked to laic public buildings. The ambiguity of belonging of such spaces, in between city and building, could be retained as a pertinent hint for the conceptualization for further developments of European cities. Somehow the type of void that a parvis generates within the city, always linked to a major public building, can be understood as a generic one. This means that even if the site-specificity of each void would

need to be treated in each case, the idea behind of a parvis can be "universalized" and applied anywhere along the city fabric and in any different city. The urban fabric of San Marco de Canaveses and the one of Madrid are highly differentiable, but the idea behind an abstract activated surface in a close relation with a public building is the same. This kind of in between spaces have the power of constructing the city. When talking about a Metropolitan condition of congestion, parvises appear as centers of public relationships and activities like lungs of publicity amongst the city. Architects in the twentieth century have been worrying about the apparent decomposition of European cities between its center and periphery. "...Inevitably the distance between center and circumference increases to the breaking point. In this perspective, the recent, belated discovery of the periphery as a zone of potential value – a kind of pre-historical condition that might finally be worthy of architectural attention – is only a disguised insistence on the priority of and dependency on the center: without center, no periphery³⁸". Somehow in contradiction with what R. Koolhaas is stating here, probably one can still learn from centers and apply what is discovered towards peripheries. Some other architects show themselves intrigued by peripheries because according to them, "...so many forms of sociability{are} developed in urban hinterlands (the urban tribes as a model of socialization)³⁹". But along the precedent examples, all constructed in a contemporary time and place somewhere inside the so considered "centers" of cities, it is shown a series of rich spaces where people interact freely. About this voids in between, most characteristics and spatial tools

38 Koolhaas, R. (1995) The generic city. *S,M,L,XL*. 1239-1264. Rotterdam/New York: 010Publishers/The Monacelli Press.

39 Abalos, I. ; Herreros, J. (1997) A fragile skin. *Areas of impunity*, 9-47. Madrid, Spain: Actar.

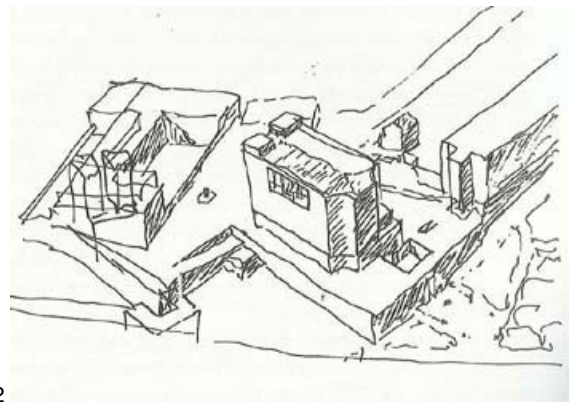
that are the same or analogous, regardless of their location. Bringing this notion of parvis towards the congested periphery can render the understanding of cities a continuous and harmonious one, having this type of void ambitions in the developments of cities in the old continent, becoming “makers” of the city. “... It is also no longer the real center but an overblown mirage on its way to implosion; yet its illusory presence denies the rest of the city its legitimacy⁴⁰”. And it could be true. The way of looking at cities differentiating between two different plasmas or components, like for example Leon Krier showed to do, can be counterproductive in the sense of acting on it. The cores represented by a public building and its parvis can bring the understanding of the city towards the one of a multi-centric extension of built. A city conceived somehow analogously to the “city within the city⁴¹” model that L. Krier developed, where the city was composed by smaller fragments copying the broader scheme of the city. In a city composed by a multitude of public “cores”, acting like icons or moments of intensity, one could even imagine that the city is just “conceived as a group of islands within a sea of urbanization (...) an archipelago of monuments⁴²”. The power of this such spaces being in charge of the future of cities can be questioned. However, the idea seems to represent a certain clarity based not only on the historic origin of this such public spaces, but in its contemporary re-appropriation and use. Because of the social exchange richness happening in this voids, a parvis appears to develop such an important role in today's everyday life in the city. Normally connected with a cultural

40 Koolhaas, R. (1995) The generic city. *S,M,L,XL*. 1239-1264. Rotterdam/New York: 010Publishers/The Monacelli Press.

41 Krier, L. (1984) The city within the city. *Les quartiers. Architectural Design, Volume 54* (Houses, palaces, cities), 70-100.

42 Aureli, Pier Vittorio. 2 The geopolitics of the ideal villa. *The possibility of an Absolute Architecture*. Cambridge, MA:MIT, 2011.

building and being part of it bringing different facilities for the expression and transmission of its program, these type of voids reveal themselves as indispensable activators of the society, having the potential of transmitting knowledge and bringing coherence to it. “The iconic building is no longer because emblem of market competitiveness. (...) Within the present urban situation there is the possibility to redefine the meaning of the city as a site of confrontation and thus coexistence⁴³”. Parvises can be seen as voids that don't only articulate the city spatially but play a role, together with the building they are connected to, in the actual essence of the city and its politics. A network of this type of voids can complete the existing public voids in the city, producing a new system of open public spaces that erases the traditional understanding of center and periphery, able to perform in any kind of urban fabric with its essence extracted from a traditional and historical type of public space. “Public space, as in the traditional city, is both the space between the parts and the ensemble of parts of institutional use⁴⁴”.



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43 Aureli, Pier Vittorio. 1 Towards the archipelago. *The possibility of an Absolute Architecture*. Cambridge, MA:MIT, 2011.

44 Abalos, I. ; Herreros, J. (1997) Areas of impunity. *Areas of impunity*, 189-253. Madrid, Spain: Actar.

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6 Alvaro Siza, Church in Marco de Canaveses, Portugal, 1990-1997. Overall ground floor plan and auditorium basement plan.

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10 Herzog & de Meuron, Caixa Forum, Madrid, Spain, 2003-2008. Section.

11 Herzog & de Meuron, Caixa Forum, Madrid, Spain, 2003-2008. Ground Floor.

12 Alvaro Siza, Church in Marco de Canaveses, Portugal, 1990-1997. Axonometric, hand drawing.

SQUARE

Can a parvis be considered a square-like urban element? Is there any difference between square and parvis? Can a square be “architecturally” as controlled as a parvis? The hegemony of a building over a parvis is bringing clarity to this kind of open space. In a square, the situation is slightly different. It can happen that one of the buildings linked to the square predominates amongst the rest of them. Still, this building will never get the hegemony over the whole square. As Sitte would say, all most beautiful and relevant buildings should be concentrated around a main square “...in order to be the joy and pride of its inhabitants...”⁴⁵. In this situation, the autarchy of a building over the whole space is not anymore possible. So then, in this case, which would be the rules to manage this surrounded void? Which are the tools of the architect to control this articula-

45 Sitte, C. (1889). *L'art de bâtir les villes: l'urbanisme selon ses fondements artistiques*. Paris, Éd. du Seuil.

tion between the public void and the inside spaces of each building. Trying to respond to this certain lack of clarity in squares, composed of so many different objects, the Place Royale was conceived as a fully enclosed void which different facades would have been re-designed all the same way. But actually the main purpose of this equalization of different building facades was not aiming to control or manage the spatial exchange between the different buildings and the actual square. It was just looking for an image, a theatrical frame where to organize battles and luxurious celebrations, having as an omnipresent idea, the figure of the almighty king.

Squares are an idea inherited from previous times, as both notions developed before. What could simplify the understanding of this urban figure is to define them as a voids enclosed by a perimeter relating different elements. Relationships establish with the totality of the city can be compared in parallel with the ones that parvis can produced. But the complexity of a square is something maybe that can be understood in the scale of the whole city and not in the scale of the building, like a parvis. Can a square be completely designed by an architect, and can architecture reach this level of complexity? Or would the exercise result on a typologically undefined void between buildings? Would be time an essential condition for consolidating the form and status of a square? Is it a compilation of different designs?

Thinking about an hypothetic parvis attached in front of every building of the square, a collection of individual spatial transitions can be pictured. A square could be seen then as a patchwork of different parvis, as much in number as different buildings existing around the perimeter. But is it this really how a square works? The spatial transitions through cities' different voids is managed probably in a slightly different way

when talking about squares than to parvis. However, the relationship established with the city, probably less clear, is much more intense. Squares seen as fragments of intensity in a city can have the power to influence spatial sequences of public voids to the point of characterizing a city. Are squares public voids and parvis void buildings?

Time-architecture and the baroque way of planning⁴⁶

The relationship squares establish with the city, probably less clear and straight forward than a parvis, is much more intense. Squares, seen as public voids and acting like fragments of intensity in a city as well, can have the power to influence spatial sequences to the point of becoming major definers of its public realm. For so long, squares were considered the only public space of cities. But “Is the ‘density’ of the forum, the plaza, the public square – that felicitous intersection of commercial activity and political debate which from the Athens of the Sophists onwards determined all notions of civic space, of the city as collective expression – possible today?⁴⁷”. Nowadays architects ask themselves whether it is possible to design new square-like structures that succeed in their purpose. And there is even some which are convinced that “the search for a contemporary agora is a pathetic endeavor that only manifests the weakness of our political understanding of the city⁴⁸”. They are probably a less generic element of the city as a parvis can be. The specificity of squares in European cities is probably one of the reasons of their success. As C. Sitte enumerates in his book “City Planning According to Artistic Principles” there is lots of different types of squares with different ideas behind

and not all created through the same process. The opposition shown in the book between ancient existing squares (until the baroque age) and the so called “modern” ones, is the major characteristic of its content. C. Sitte is convinced that new urban arrangements lack of artistic ambitions and so, they are not able to respond successfully to the needs of cities. He defends that a theoretical knowledge of matters and facts that found beauty in ancient urban facilities can replace this artistic tradition. But the truth is that probably squares have as their main architect Time. Designing and building the totality of a square and its perimeter is one of the most failed exercises still nowadays. Architects might not have the power or live long enough to develop such types of public voids successfully. C. Sitte uses as an example the fact that in the baroque era, “realizations are not developed progressively but rather they have been already conceived in the modern way, from a single act, on the drawing board⁴⁹”. This can make one think that probably what Sitte call “baroque squares” are actually parvises. Thinking for example about the Campidoglio in Rome, the void between the three buildings is owned by the program of them and its activated because of it. Or even the Piazza dei Popolo, crowned by both symmetrically displayed temples. The St Peters “square” in Rome acts like a parvis as well.

So in fact, understanding the difference between a parvis and a square one could reflect on the limit of architecture when designing a public open space. In the Dutch city of Utrecht, Enric Miralles refurbished and made the extension of the Town Hall (2000). Located in the very center of the town, within a medieval city fabric, the existing building is part of a broader group of buildings that surrounds a void making a square. The architect is very

much aware of the square and not parvis con-
⁴⁹ Sitte, C. (1889). *L'art de bâtir les villes: l'urbanisme selon ses fondements artistiques*. Paris, Éd. du Seuil.

⁴⁶ Sitte, C. (1889). *L'art de bâtir les villes: l'urbanisme selon ses fondements artistiques*. Paris, Éd. du Seuil.

⁴⁷ Abalos, I. ; Herreros, J. (1997) *Areas of impunity. Areas of impunity*, 189-253. Madrid, Spain: Actar.

⁴⁸ Aureli, Pier Vittorio. *The possibility of an Absolute Architecture*. Cambridge, MA: MIT, 2011.

dition and wants to talk about the forming of this public space by lots of different buildings and programs. “Additionally, the concept was to return to the idea of a municipal office as a conglomerate of different city structures, which blended different styles and materials as a reflection of the diversity of building arts in the Dutch town⁵⁰”, he states. The richness of all different elements is bringing to this type of void a complete different character which is specific of the city of Utrecht and its very central location. Throughout time, the space has been shaped slowly. The result is not comparable to a space conceived in a short period of time with a very limited quantity of diversity in materials, designs and structures. The architect will contribute to the diversity of shapes and images existing previously. He will re-design the pattern of the square floor right in front of the new access, wanting to somehow signalize the power or the intensity of the building over the totality of the square. The design of facades and rooms benefits from a wide variety of shapes, colors and materials. A newly design fountain is somehow stating the “ancient” character of such spaces formerly which were the access point to such facilities and information.



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50 <http://www.mirallestagliabue.com/project/utrecht-town-hall/>

13 Enric Miralles & Benedetta Tagliabue, Utrecht Town Hall, Utrecht, Netherlands, 2000. Site plan.

Bibliography

BOOKS

Koolhaas, R. *Delirious New York*. Oxford University Press, 1978

Aureli, P.V. *The possibility of an Absolute Architecture*. Cambridge, MA:MIT, 2011.

Sitte, C. *L'art de bâtir les villes: l'urbanisme selon ses fondements artistiques*. Paris, Éd. du Seuil, 1996 (Original from 1889)

Lucan, J. *Précisions sur un état présent de l'architecture*. Lausanne, Switzerland: Presses polytechniques et universitaires romandes, 2015.

Gargiani, R. *Rem Koolhaas / OMA The construction of Merveilles*. Lausanne, Switzerland : EPFL Press, 2011

ARTICLES

Diaz Moreno, C. ; Garcia Grinda, E. (2016) Third Natures: ten years of mundane, carnal assemblies. *El Croquis*, N.184 (AMID.CERO9 / MOS), 23-39.

Diaz Moreno, C. ; Garcia Grinda, E. (2003) The future is not Barbarella. *El Croquis*, N.118 (no. mad/cero9/abalos&herrerros), 116-119.

Krier, L. (1984) Urban components. *Architectural Design*, Volume 54 (Houses, palaces, cities), 43-48.

Krier, L. (1984) The idea of Reconstruction. *Architectural Design*, Volume 54 (Houses, palaces, cities), 38-39.

Krier, L. (1984) Critique of the megastructural city. *Architectural Design*, Volume 54 (Houses, palaces, cities), 20-29.

Krier, L. (1984) Critique of zoning. *Architectural Design*, Volume 54 (Houses, palaces, cities), 32-35.

Krier, L. (1984) The city within the city. Les quartiers. *Architectural Design*, Volume 54 (Houses, palaces, cities), 70-100.

Krier, L. (1984) *Architectura patriae* . *Architectural Design*, Volume 54 (Houses, palaces, cities), 101-102.

Krier, L. (1984) The size of the city . *Architectural Design*, Volume 54 (Houses, palaces, cities), 103-105.

Krier, L. (1984) Critique of Modernisms . *Architectural Design*, Volume 54 (Houses, palaces, cities), 106-108.

Rowe, C. (1984) The revolt of the senses. *Architectural Design*, Volume 54 (Houses, palaces, cities), 7-19.

Porphyrios, D. (1984) Cities of stone. *Architectural Design*, Volume 54 (Houses, palaces, cities), 15-19.

Kahn, L. (1944) Monumentality. Louis Kahn. *Essential texts*, 21-31. London, United Kingdom: W.W. Norton & Company.

Kahn, L. (1960) Form and design. Louis Kahn. *Essential texts*, 62-74. London, United Kingdom: W.W. Norton & Company.

Kahn, L. (1971) The Room, the Street, and Human Agreement. Louis Kahn. *Essential texts*, 252-260. London, United Kingdom: W.W. Norton & Company.

Lucan, J. (2009) Chapitre 26. La pièce et au delà. Louis I- Kahn. *Composition, non-composition. Architecture et theories, XIX-XX siècles*. 484-503. Lausanne, Switzerland: Presses polytechniques et universitaires romandes.

Lucan, J. (2009) Chapitre 25. Structures argégatives et non-plan. *Composition, non-composition. Architecture et theories, XIX-XX siècles*. 465-483. Lausanne, Switzerland: Presses polytechniques et universitaires romandes.

Lucan, J. (2009) Chapitre 27. Concavité et convexité, encore. *Composition, non-composition. Architecture et theories, XIX-XX siècles*. 504-521. Lausanne, Switzerland: Presses polytechniques et universitaires romandes.

Koolhaas, R. (1995) The generic city. S,M,L,XL. 1239-1264. Rotterdam/New York: 010Publish-

ers/The Monacelli Press.

Koolhaas, R ; OMA. (2004) Netherlands Embassy in Berlin: OMA. *Quaderns d'arquitectura i urbanisme*, Issue 241, 74-89.

Abalos, I. ; Herreros, J. (1997) A fragile skin. Areas of impunity, 9-47. Madrid, Spain: Actar.

Abalos, I. ; Herreros, J. (1997) Areas of impunity. Areas of impunity, 189-253. Madrid, Spain: Actar.

Smithson, A. ; Smithson, P. (1974) The space between. *Oppositions* 4, 75-78.

Smithson, A. ; Smithson, P. (1965) The pavilion and the route. *Architectural Design*, Volume 35, 143-146.

Smithson, P. (1981) Space is the American mediator; or The Blocks of Ithaca: a speculation. *Harvard architecture review*, Volume 2, 106-115.

Risselada, M. (1999) The space between. *OASE*, Volume 51, 46-53.

Avissar, I. ; Persyn, F. (2013) OMU OMA. *San Rocco*, Volume 07, 101-110.

Avissar, I. (2013) Things fall apart. *San Rocco*, Volume 07, 181-186.

Unknown (1975) Centre national d'art et de culture Georges Pompidou : une opération originale à chacune des étapes de son élaboration. *Urbanisme*, n°44 Issue 147-148.

Salgado, J. (2008) Juan Salgado reports on Herzog & de Meuron's eagerly anticipated Caixa Forum Madrid. *Architecture Today*, n°187, 12-17

Moral de Andres, F. (2013) Continuous conditions: two notes on the Alvaro Siza's work and city. *Arte y Ciudad – Revista de investigacion*, n°3 (I), 799-818.

Lee, M. (2011) Two deserted islands. *San Rocco, Islands* (n°1), 4-10.

Meier, R. (1991) Museum of Contemporary Art, Barcelona. *Architectural design*, n°61 issue 3-4, 46-53.

Davidovici, I. Tectonic presence in Tranfa, F. (2014) Super normal. *Casabella*, Issue 834, 4-26.

Caruso, A. ; StJohn, P. (2015) Nottingham Contemporary. *A + U*, Issue 3534, 122-125.

Steinmann, M. (2012) Bebauung Rue du Cendrier. *Werk, bauen + wohnen*, Issue 03, 34-41.

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