CONVERGENCE OF OPPOSITES

URBAN HYPOTHESES ON BILBAO
We would earnestly like to thank
Our directing Professor Martin Fröhlich for his inspiring enthusiasm. / Tiago Borges and Alexandros Fotakis for their thorough and detailed guidance, ongoing energy and sincere interest. / Our friends.

A mis padres, Irune y Javier, por su apoyo incondicional y por ser mis reporteros personales en el campo de batalla. A David, por sus ánimos y porque compartidas, las angustias son menos de la mitad. Gracias.

Besonderen Dank an meine Eltern für ihre ständige Unterstützung und ihr Verständnis und an Simon für seine Geduld, den Zuspruch und die anregenden Gespräche.

Thesis Project 2020
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“The contemporary town is not one but many places. It is a complex, many-layered, multifarious structure, made up of complementary and interconnected ideas, concepts and systems”\(^1\).
Convergence of Opposites, from the Latin *Coincidentia Oppositorum*, is a neoplatonic term introduced by the German philosopher Nikolaus von Kues in the 15th century. Applied to the city, the term pushes for an understanding of it as a polymorphous, many-layered and complex succession of concepts and systems. A city which is essentially made of contradictory, complementary and interconnected ideas, rather than a unitary one.

The present thesis offers three themes that deal with Convergence of Opposites in the city of Bilbao. Much has been written about architecture in Bilbao recently. These are crude accounts of the reconversion of an industrial city into a cradle of global tourism. In general terms, Bilbao has been described under a succession of facts regarding the development of its architecture in relationship to its immediate social-economic global context.

However this shall not be the issue of this paper. It will not directly convey a full chronological picture of the foundations and evolution of the city, or systematically link architecture with society, economy and history, nor create a comprehensive account of data, numbers and information about the city as it is today. Instead, the aim is to divert from a factual approach to derive architectural themes in Bilbao that treat the architecture and the urban as a valid entity *per se*, thus creating a theoretical essay that talks about architecture as a theme.

The hypotheses read Bilbao as a dialectic city, where urban qualities converge in the conceptual opposition between the architecture itself. Specific architectural moments were selected that reflect on their urban context, and thus speak about the city as such. The thesis is impregnated with analogies from outside Bilbao, which aim to extract concepts of architecture within the city, in order to transmit an alternative vision of it. The presented understanding of Bilbao is neither purely fictitious nor an objective survey of reality.

The text is composed of three themes, *House-Tower*, *Corners* and *Ría*, which should be considered as independent fragments or thoughts or obsessions, carefully arranged according to chronology, to create a linear narrative. Without claiming historical
completeness, the study discusses the most relevant urban developments of the city: Old Town, Ensanche and Metropoli from a contemporary point of view.

These three precise architectural moments are truly specific to the city. Nevertheless, in them we found the potential to learn from thematics that not only concern Bilbao. To each of these specific themes, the abstracted idea of Transition, Contradiction and Framing which is presented in the end of the chapter by a synthesis drawing. The chapters can be read independently or under the common thread of the dialectic city.

A final chapter, Ghostwriting, further comments on the method followed in order to curate this thesis, notably in its relationship with the work of Oswald Mathias Ungers, whose approach served as a model for this alternative proposal to the city study.
HOUSE-TOWER
OR
THE THEME OF TRANSITION
“If one were to summarize life in a city and life in a building in one gesture, it would have to be that of passing through borders. Every moment of our existence is a continuous movement through space defined by walls.”

Calzada a Mallona, Casco Viejo de Bilbao. Enero de 2020.
House-Towers are a medieval typology deeply anchored in the history of Bilbao. Initially, they were defensive elements, standing alone in the middle of the countryside. They also were an essential constituent of the first settlement of the city, the Villa of Bilbao, where they were located in the gates along with the medieval wall. As exceptional elements of the town, they marked the transition between outside and inside, emphasized by the verticality of the tower.

As such, House-Towers will be interpreted as thresholds, liminal spaces with its own independent and city specific language, which is not the one of any of the two limits they separate and face. In the autonomy and specialty of the system against the two sides of the wall, relies our particular interest for House-Towers.

Today, the original House-Towers have been hidden under the layer of time. Most of them demolished and built over, they have become a set of fragments, with additions and contradictions of many epochs. We understand the original typology as an internal analogy within Bilbao, which traces can be read in specific modern interpretations in the city.
These modern interpretations are the Lift of Begoña and the Tower of Bailén. They are considered in parallel to the original House-Tower along this chapter, as objects of urban transition. Even though each specific object holds unique characteristics, they are analysed for their shared common language of passage, multi-tasking, verticality and frontage.
In 1300 Don Diego Lopez de Haro, Lord of Bizcay and nicknamed el intruso, in Spanish the intruder, is granted permission to create a Villa: an urban settlement with special commercial and productive privileges. The Villa of Bilbao is at first an enclosed urban settlement in radical opposition with what lies outside of its walls, the villages and countryside, the tierra llana.

Like the roman villa, from which it might have inherited its name, the creation of the Villa of Bilbao was a political instrument used by the central crown of Castille, and its representative Don Diego Lopez de Haro, to diminish the power that internal local landlords exercise in the territory. This internal micro-feudalism which created sanguinary conflicts for two centuries, prevailed in the Lordship of Bizcay until the 15th century. The creation of Villas with special privileges all along the Basque territory, was the strategy developed by the central crown to inculcate its hegemony over the territory and centralise the power.
While the roman villa developed under the excuse of leisure, the Villa of Bilbao arose following the language of the French Bastides or the Italian Ricetto. The Villa was planned following a rigid street grid of 7x3. The seven streets of the grid, las siete calles, give the name still today to Bilbao’s Old Town.

The position of the Villa was highly strategic: Bilbao was located along the ancient Roman road of Northern Spain, the predominant road for travelling and commerce. Furthermore it was placed at the end of an Estuary, the one of the Ría Nervión, ancient Ibaizabal. The city was directly connected to the ocean, but back enough in the Estuary so to be protected from invasions. It soon became the harbour of the crown of Castilla for commerce with the North of Europe, specially the harbours of Bruges and La Rochelle. In addition to this, the natural resources of the surrounding mountains allowed for a strong iron and coal industry that was in place since Roman times.

The original urban settlement of Bilbao was enclosed by a wall, which marked the physical limit between the outside, la tierra llana, the rural

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6 “For rulers the bastide was a form of territorial control, while for the landowners was a way to improve the productivity of their territory. Quickly built and inhabited by farmers and artisans, these settlements were planned as gridded towns to ensure an efficient distribution of property both inside and outside the urban core. By receiving a plot of land – often for free. The new inhabitants received a plot of land – often for free – and given significant tax incentives, but in exchange they were obliged to build their house as quickly as possible. The bastide became an extremely efficient form of ‘civilian occupation’ that distributed masses of farmers and artisans in regions away from large cities, and as such this model was adopted in many parts of Europe from England to Tuscany, from Spain and Portugal to the Baltic countries.” Aureli and Giudici, Islands : Rethinking the Settlement Form from Property to Care, 6.

7 José Ignacio Linazasoro, Permanencias y arquitectura urbana : las ciudades vasacas de la época romana a la Ilustración (Barcelona: Gustavo Gili, D.L. 1978).

8 For further details see chapter Ría or the theme of Framing.

9 By natural resources we understand iron mines, stone carries and also a rich forest, from which coal was created.
world, and the inside, the urban life.

In the medieval *Villa* of Bilbao, the gates of the town perforated the defensive wall. To each gate, a House-Tower, the specific typology of the town, was designated. Built under the appearance of defensive elements, House-Towers marked the access to the medieval town, the ultimate expression of transition between outside and inside, symbolising the threshold of the city.
Engraving of Bilbao of Daniel de Meinsmer.
Published in Civitates Orbis Terrarum (1572-1617) in Frankfurt, Germany.
Fred Koetter defines the in-between zone, that is the liminal as “the realm of conscious and unconscious speculation and questioning—the zone where things concrete and ideas are intermingled, taken apart and reassembled—where memory values and intentions collide”\(^{10}\).

The medieval urban town was in clear opposition with the outer rural natural world. This segregation becomes very clear in the medieval model of the city. Athanasius Kircher in *Topographia Paradisi Terrestris* (fig.3) represents the concept of a delimitation, an inclusion. The paradise is portrayed as a walled domain, symbolizing the moral separation of good and evil and underlining a possible beginning of artificial prosperity in a generally wild environment. The walls mark the transition between inside and outside, a line that becomes the place of passage.

The characteristics that define those liminal spaces are exceptional, encompassing transition and posing the discontinuity between two universes, sometimes in opposition to
one another. Marking the passing between contrastive worlds, House-Towers become the incarnation of the urban limit between two distinctive spaces.

In analogy to the separating element of the wall and its House-Towers, the Tower of Bailén and the Lift of Begoña hold a comparable position in the modern city. However in the modern interpretations, the city is no longer enclosed. Instead of the division between inside and outside, we can refer here to a division between areas that have different qualities and rules. One rather observe the situation of an invisible border than that of an enclosed city. In this analogy, our two modern House-Towers become the border station, the point of transition and passage between one environment to another.

The Tower of Bailén was designed in 1940 by the architect Manuel Galindez in order to replace the existing modest one-story height station for the railway connecting Bilbao to Portugalete. The project was located in a fringe zone between the Old Town, and the Ensanche, the newer dynamic city centre. This liminal condition was further emphasized by the Ría Nervión.
which was a direct limit of the site. The Tower expressed these space of transition through its verticality, showcasing the importance of this marginal area of the city, and in an attempt of urban regeneration. The train station lied underground, buried under a plaza. The public square, in connection to the bridge of the Arenal, faced both worlds as the ultimate expression of the rite of passage between Old Town and Ensanche.

In 1943, the architect Rafael Fontán was commissioned the building of a lift facilitating the connection between the Old Town with a surrounding neighborhood of Begoña, located at the top of a surrounding hill\textsuperscript{12}. The historic, ultra dense Old Town of Bilbao, with shops, commerce, and accommodation, clashed in character and form with the neighborhood of Begoña, where scattered buildings had born organically around a church, housing in the 20th century a residential neighborhood. The lift was the gate, and crossing the building the transition from one world to another.

The project *Border crossing* by Office Kersten Geers David van Severen\(^{13}\) shall serve here as analogy. The enclosed space is positioned on the border between Mexico and the US. It represents a space neither belonging to one country nor to the other, representing an in-between situation. The high walls define a no man's land, which interrupts the state border to become a point of passage.
Left: Athanasius Kircher in Topographia Paradisi Terrestris. Published in 1675.
Right: Recreation of the Villa of Bilbao in 1442. From drawing of Juan E. Delmas.
Right: Bilbao today, with the Casco Viejo in the centre.
Multi-tasking

The original House-Tower of Leguizamón, which has been chosen to be represented here\textsuperscript{14}, occupied the most relevant location within the medieval town of Bilbao. Not only it was directly connected to a gate, but it was in the immediate proximity to the church of the town, and most importantly, connected to the bridge of San Antón, first and only Southern access to the Villa of Bilbao. The original House-Tower was built in the 14th century. Through the engraving of 1623 of Daniel de Meinsmer\textsuperscript{15} we can trace some of its architectural features. In the 17th century it was demolished and rebuilt, only the family shield in the stone wall of the ground floor was maintained. A third demolition took place in the 1940s, in order to build within the same perimeter a higher building, maintaining some of its original stone wall.

Square in plan, the monolithic original House-Tower would not exceed 11 meters, matching maximum span of wood beams of endemic species, beech and oak. As the term tower implies, the efforts were invested in reaching a certain height, rather than in the robustness of

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\textsuperscript{14} Our drawings of the original House-Tower are based on the article by Agustín Azkarate Garai-Olaun and Ismael García Gómez, “Las casas-torre bajomedievales. Análisis sistémico de un proceso de reestructuración espacial/territorial” Arqueología de la Arquitectura 3 (2004), 7-37.

Most of the information collected about the Torre de Leguizamón come from the following source. Elías Más Serra, “La casa torre de Leguizamón”, Periódico Bilbao, (April 2009).

\textsuperscript{15} The engraving of Daniel de Meinsmer was published in Civitates Orbis Terrarum (1572-1617) in Frankfurt, Germany by Georg Braun y Franz Hogenberg. The book represents the first atlas with drawings of cities from a birds eye point of view. The engraving is also the first apparent drawing of the Villa of Bilbao. Until then, the image of the city has been recreated through written descriptions, and not visual imagery.

The location of the accommodation spaces of the Tower were also inherited from defensive needs. Building a stone House-Tower was expensive and only affordable by the nobility. They soon became the symbol and residence of the upper-class, the Basque landlords. As the symbol was inferred by its form, most of the defensive elements were kept without much modification for centuries, even when the defensive need was outdated. This is the case for the cadalso for example. Being in timber, it allowed extra openings, therefore maximising the field of vision from the top of the tower, and the angle of attack.

The habitable area started in the first floor. An external timber staircase, that could be burnt in case of invasion, was built to facilitate the access. Domestic spaces had no internal partitions, as per the medieval understanding of living, and the circulation was direct and simple, a single staircase for the entire tower.

Note that the definition of internal spaces comes from the article of Agustin Azkarate Garai-Olaun and Ismael Garcia Gomez, “Las casas-torre bajomedievales. Análisis sistémico de un proceso de reestructuración espacialterritorial” and correspond to the general definition for all Basque House-Towers. It is impossible to be precise on the specificity of the internal layout of the House-Tower of Leguizamón, as put forward by Elias Más Serra.

As defended by Juan Manuel Gonzalez Cebellin in Torre de las Encartaciones (Bilbao : Diputación Foral de Bizkaia, 2004), which states that all House-Towers built after the XIVth century were never used for defensive purpose, but just because of social convention, being the residences of the upper-class. All previous authors and researchers seem to have an outdated, “mythological” version of the House-Towers according to numerous sources such as Agustin Azkarate Garai-Olaun and Ismael Garcia Gomez, “Las casas-torre bajomedievales. Análisis sistémico de un proceso de reestructuración espacialterritorial” or Alberto Santana Ezquerra, “Reseña biográfica” Estudios Vascos 50 (2005), 500-502.
While the original House-Tower combines the domestic with the defensive, we can also observe contrasting programs in the two modern analogies. The program of the Tower of Bailén conversely consists of an office tower and an underground train station. The Lift of Begoña combines housing with the infrastructural purpose of the lift that connects two neighborhoods.
From left to right.

Ground floor and top floor plans of the House-Tower of Leguizamón (14th century), Tower of Bailén (1940) and Lift of Begoña (1943).
Verticality

The *axis mundi*, a term explored in Joseph Rykwert’s book *The Idea of a Town*\(^\text{18}\) is defined as a vertical element that breaks through the horizon line, typically denoting the centre, or the starting point, of subsequent urban growth around.

The tower of Guinigi in Lucca or the ones in the historic Italian town of San Gimignano, for example, are located within the urban fabric of the original settlement, reflecting the rivalry in-between the wealthy upper class internally. In the contrary, the verticality of the Basque House-Towers emerges from a desire of territorial control from the inside to the outside. The rivalry between the Basque nobility is dealt by their control of the threshold. The family that was able to secure the best location for their House-Tower had the advantage of being able to collect customs duties that were incurred when passing through the connected gate. The transition becomes a lucrative and symbolic business of class and power.

Tower of Guinigi in Lucca, Italy. From the 14th century.
House-Towers in Bilbao are self-contained, do not invite to further urbanisation around, but emphasize the moment of transition between two contrastive elements. Far from being monumental, they developed out of the typological success of the defensive towers. Nevertheless, its verticality reinforces the autonomy and specificity of the threshold, becoming a landmark through time.

Perhaps the most direct reference to the verticality of the House-Tower, is the project for the Tower of Bailén, which measures 43 meter high, and quickly adopted the popular surname of rascacielos of Bilbao, skyscraper in Spanish.

Another slender tower is the Lift of Begoña, which measures 46 meters high. Its extreme verticality was inevitable due to the height difference between the two neighborhoods it was connecting.
Section of House-Tower of Leguizamón (14th century).
Section of the tower of Bailén (1940). Architects Jose María Chapa y Manuel Ignacio Galindez.
Section of the lift of Begoña (1943). Architect Rafael Fontan.
Frontage

Beyond their slender form, the specificity of these elements is that the verticality is inhibited through the higher power of the horizontality of the row, or the frontage they create.

Being part of the wall, physical or imaginary, House-Towers and its modern references are the essential and unifying part of a system of complementary elements, that need to be understood as a whole rather than for their individual assets. This is even more drastically the case if we understand them as thresholds, as special elements that adopt some sort of autonomy from the two parts they separate.

Because of the exceptional marginal condition of these three examples, moments of programmatic complexity are created, of addition and contradiction, creating a frontage of fragments. For O.M. Ungers, “the theme of fragmentation, of dialectical contradiction, by no means needs to be romantic. Instead it adds to the awareness of a process that makes the individual object, or even the urban structure, stand out, freeing it from dependence on time or form formally rigid.
Here we have a principle that brings together, in a higher conception based on the unresolved contradiction, both creative contradiction and continuity, spontaneity and plan, chance as much as the established order.”

As such, the original House-Tower form a typology that is understood as an addition of systems: the gate, the bridge, the church, and also the mill, the ironworks and an accumulation of commercial spaces. These objects are located within the close surroundings of the Tower. The medieval wall of the Old Town was perforated in numerous occasions, and each perforation is accompanied by a House-Tower. They create a necklace of habitable and productive space along the wall, which becomes the physical boundary exemplifying the limit condition.

A similar situation is created in the project for the Tower of Bailén, which can be disassembled in three parts, or fragments, complementary to one another: the tower, the underground station, and the row of accommodation and retail programme, creating a double frontage facing street and water at this point.
Cadavre Exquis, by Andre Breton, Yves Tanguy and Jacqueline Lamba, 1938.
Like a Cadavre Exquis, a drawing technique inspired in the avant-garde of the 20th century, the juxtaposition of the buildings is the attempt of an architecture freed from stylistic unitary coherence, and created from a collective design effort. The technique of the Cadavre Exquis is applied by Rem Koolhaas, Elia Zenghelis and Zaha Hadid in the proposal for the extension of the Dutch Parliament where each architect fully resolves one part of the brief. The three fragments follow therefore totally independent principles and are just assembled in the end to be read as a single unique proposal. The Tower of Bailén, in its succession of contrastive projects along the frontage, resembles this method where distinctive parts liberate the whole from the rigidity of homogeneity.

The Lift of Begoña can be read in a similar way. It was an addition to an existing frontage addressing the Old Town which was already fragmentary and contradictory. The accumulation of programme: a church, a school, a sports centre (now demolished), the tube station, housing buildings and the lift is condensed in a line. Buildings stand next to each other without trace of rupture, added by need without pretension of
homogeneity. The lift represents the last addition to the row of buildings in which it is situated. The Lift of Begoña and the frontage in which it is integrated represents the summon of necessary additions and contradictions within the city. The frontage therefore conveys a language of permanence and atemporality.
Section of House-Tower of Leguizamón (14th century).

40m
Elevation of the tower of Bailén (1940). Architects Jose María Chapa y Manuel Ignacio Galindez.
Elevation of the lift of Begoña (1943). Architect Rafael Fontan.
Our three examples orbit around the Old Town. They represent at the same time the limits and the starting point of dialogue between three contrastive parts of Bilbao: the Old Town, Begoña and the Ensanche. These examples mark the transition between different areas and become the threshold and place in-between.

They are exceptional, they do not belong to any of the two systems they divide. They are marginal as well, placed in the fringe or limit.

They have been defined as an element of transition or passage which is emphasized by the strong conciseness of verticality. Being integrated within a composition of a horizontal elevation, these elements belong to a strong visual clear frontage. In the non-uniform character of both the programme and the architectural expression, one could see a symbol of the complexity of the city as a whole.

The threshold, embodied by the House Tower, represents the crucial moment that negotiates between the different parts of the city. They
represent the transition and the convergence of the parties, as different as they may be. As such, they have the potential to become a theme for themselves. The recognition of this transitional area within the city makes the dialectical city visible. To be precise, the thresholds can only exist because the city, in this case Bilbao, is fragmented in its nature, is made up of parts and is not uniform. Hence, if the city is dialectical, the threshold is exactly the point that defines the confluence or the convergence of opposites.
CORNERS
OR
THE THEME OF CONTRADICTION
“So then the city is a history of formation and transformation, from one type to another, a morphological continuum; a textbook of events representing ideas and thoughts, decisions and accidents, realities and disasters. It is not a uniform picture but a vivid ensemble of pieces and fragments, of types and countertypes, a juxtaposition of contradictions, a dialectical rather than a linear process.”22
It is Robert Venturi who begins his book *Complexity and Contradiction* with the assertion that “complex and contradictory architecture (is) based on the richness and ambiguity of modern experiences, including that experience which is inherent in art”\(^2^3\). The theme of Contradiction has only been acknowledged in the field of architecture in the last half of the 20th century.

However, as Venturi mentions it has been a topic widely discussed by artists. It shall be Sol Lewitt who serves us as an example. The matrix of incomplete open cubes, is a comment on the variation of form within a set of rules. The list achieves its alleged homogeneity through the individuality of its parts. The strictness of the rules reinforces the difference between the parts. It is this relationship between the whole and its parts that is interesting here.

A similar relationship between the *Ensanche* of Bilbao and its Corners will be discussed in this chapter. The contradiction between the uniforming homogenous urban plan and the speciality of the architecture within this system is the main driver for discussing this theme. The interest lies in the interface between unity and diversity and the complexity within the system.

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The unitary whole

In the end of the 19th century, as a reaction to the demographic expansion of the cities influenced by the industrial revolution, a new urban development based on a gridded plan was established. The *Ensanche*, which means widening in Spanish, is the construction of new neighborhoods, extending the city beyond their former limits. Influenced by Haussmann’s transformation of Paris in 1852, the *Ensanche* was first introduced in Barcelona by Ildefonso Cerdà.

The project for Barcelona attempts to rethink the living conditions within the city. The grid as a tool for urbanisation is meant to blur the class differences and solve the chaos of the medieval city. It is an attempt to think the city as rationally as possible and to distribute the infrastructure according to a scientific approach. Its most relevant characteristic is the absence of hierarchy, translated through the projection of a homogenous grid, with the exception of a larger avenue, the *Gran Vía*. The focus lies on uniformity, in an equal distribution of light and air. For Cerdà, the grammar of the
In Bilbao, the question of homogeneity in urban planning had always existed. Already the Villa of Bilbao followed this strict system of the 7x3 street grid. From the 14th to the 18th century, the medieval historic town had not massively expanded in size, but the number of inhabitants had increased considerably. The medieval town (the Villa of Bilbao) was too dense and unhealthy. The industrial boom of the city in the 19th century forced its expansion materialised in an Ensanche that annexed the Parish of Abando, located in the opposite side of the ría Nervión, the Estuary of Bilbao.

In 1876, plans were finalised for the Ensanche which tries to reach the visionary urban characteristics of previous models tested in Paris or Barcelona. The architect Severino Achúcarro and the Engineers Alzola and Hoffmeyer were appointed for the project, under many attempts of others.

In comparison to Cerdà’s plan, Bilbao’s Ensanche is less strict. The Eixample in Barcelona is...
formed by a succession of homogenous blocks, identical in size and form. Nevertheless, in Bilbao there is an elliptical sunken square in the middle, the *Plaza Moyua*, from which radiate eight streets which read more importantly in the hierarchy of the system. Four of these streets cut the square blocks diagonally, creating an alternative variation to the block, making already a first break in the homogeneity of the plan.

Under these circumstances, the Bilbao Corners represent the second assault to the homogeneity of the *Ensanche*. They were handled differently than their counterpart in Barcelona, making them specific to the city.
Left: Ensanche of Barcelona by Ildefons Cerdà i Sunyer, 1860.
Right: the Ensanche of Bilbao today.
The whole and its parts

It is not only in the 19th century that the urban plan has been conceived in a grid. Quite the opposite, this planning understanding dates back to the antiquity and is originated in multiple cultures. In the example of the Hippodamian plan we find a prototype of this model. Named after Hippodamus of Miletus, the city layout constitute an ancient greek model, where a series of straight streets intersect at right angles with others, creating a rigid gridded urban pattern. The plan adopted an extensive central area that has been kept uninhabited and has evolved over time into the centre of the city and society, the Agora.

Moving on ahead in history we find the Manhattan grid, which can be read as the ultimate example of modern times. The uniform grid was designed in 1811 to carry out the proper development and sale of land on Manhattan. The grid divides the large and at that time sparsely populated part of the island into long, narrow blocks, rectangular plots drawn east-west.
"The Grid’s two dimensional discipline also creates undreamt-of freedom for three dimensional anarchy. The Grid defines a new balance between control and de-control in which the city can be at the same time ordered and fluid, a Metropolis of rigid chaos."\textsuperscript{28}
In Delirious New York, Rem Koolhaas defines Manhattanism and the grid as “the progression and subsequent decline of Manhattan’s determination to remove its territory as far from the natural as possible”\footnote{Rem Koolhaas, \textit{Delirious New York}, (Aachen: Arch, 1999), 20.}. Nevertheless, far from reading the negative effects of this anti-natural element, Koolhaas sees its potential. The grid is by principle homogen, however each pixel offers great potential for individuality. In Manhattan, each block is independent from its neighbour, an autonomous object in a unified whole.

In the project for the \textit{City of the Captive Globe}, which Koolhaas designs in collaboration with Zoe Zenghelis\footnote{In 1972, Elia Zenghelis, former professor at the AA and Rem Koolhaas, his student, work closely in a team that would later become OMA. Madelon Vriesendorp, Koolhaas’ wife, and Zoe Zenghelis, Elia’s wife, will also contribute notably. Indeed, the City of the Captive Globe was made in collaboration between Koolhaas and Zoe Zenghelis, that did the drawing for which the project of the City of the Captive Globe is known. Madelon Vriesendorp is the responsible for the cover of Delirious New York. Roberto Gargiani, \textit{Projets métaphoriques d’Archizoom à Koolhaas} (lecture, EPFL, 2019)}\footnote{Roberto Gargiani, \textit{Projets métaphoriques d’Archizoom à Koolhaas} (lecture, EPFL, 2019)}, the uniform grid supports paradoxically the potential of contrastive qualities, of high dialect, complexity and contradiction between blocks -or parts- and the ultimate characteristic of metropolitan life.

The reference to the \textit{City of the Captive Globe} is of importance in this context, not for the collection of architectural objects (collection of architectural memories) but the understanding of the grid as the system that gives the freedom for infinite possibility of architecture.
"The aim of the City of the Captive Globe is to resolve the inevitable schism between the permanency of the urban system - the combination of horizontal and vertical elements circulation provided by the grid and the elevator - and the radical pluralism required by the metropolis represented by the eclectic skyline, where avant-garde archetypes of the city are "accepted" and reduced to iconic decor"³¹.
In this radical project, Koolhaas and Zenghelis deal with the possibility of diversity within the strictness of the grid. In the *City of exacerbated differences* the exception become the rule. The grid brings together the unequal within the isotropic network.32

Oswald M. Ungers also reads into the potential of the Manhattan grid. This will be shown by the example of the competition contribution of 1975, for the Roosevelt Island.33 Ungers proposed a simplified and downsized version of Manhattan adapted to the Roosevelt island. He suggests a city within a city, a Manhattan in miniature in which towers and urban villas become variations within the rules, the grid.

The reference is interesting in this context as the Manhattan grid becomes a formal generator of a type study. A morphological chart that shows possible variations within the common framework. Ungers proposes three types, ‘the loft type’, ‘the standard type’ and the ‘palazzo type’. He deals with the city or rather its components in an morphological way.34 He differentiates between "homology", the search for constant agreement and "morphology", the look at...
changes, comparison of facts that are similar but not the same. The morphological concept is "the study of formations and transformations, alike of thoughts, facts, objects or conditions"35.

Proposal for competition for Roosevelt Island Housing, Oswald M. Ungers, 1975.
Driving from both Koolhaas’ understanding of the potential of the homogenous Grid for “three-dimensional anarchy”, and Ungers’ vision of such anarchy in a collection of types with similar formal characteristics but potentially completely contrastive and unlimited stylistic variations, we define the Bilbao Corners.

As mentioned earlier, Bilbao Corners are located in the gridded context of the *Ensanche* of Bilbao. The gridded plan is based on the principle of streets running at regular intervals perpendicularly crossing each other. This principle is certainly forming four corner buildings that surround the intersection of two streets. In the case of Bilbao’s *Ensanche* the plots do not have a sharp pick in its corner, like in Manhattan for example. The geometry of the block is rather an octagonal shape, with blunted corners. This fact by itself is not a speciality to Bilbao, as we can find it also in Barcelona for example.

The particularity of the Bilbao Corner is the special accentuation of the street junction. More
precisely, the Bilbao Corners is defined by the voluminous three-dimensional superelevation of the corner and its architectural emphasis. The Corner thus becomes the most important façade of the block.

Like the Manhattan Grid which becomes a formal generator of a type study for Ungers, the Ensanche becomes the driver for a chart that shows possible variations within a common framework. Against this background, we deduce a classification in five corner types. This categorisation refers explicitly to the architectural treatment of the corner. Within the types there can be big differences in style, architectural expression and plan. At this point it has to be said that the classification is not always exclusive, which means that there are hydrides between the types. There are cases for which the assignation of the Corner to a category is not unequivocal.
Type 1

The Add-on type must stand at the beginning of the development of the corner phenomenon, as it is the least defined one. This type is defined by its crowning. This crowning can be formulated differently. Certainly the most common is an add-on that is designed as a kind of closed pulpit or tower top, which is added on the roof of the building. The type also includes one-dimensional stands that decorate the roof of a building and thus create a corner accentuation for the facade.

Type 2

The Tower type emphasis the corner over the entire height of the building. A protruding volume, which is then continued over the normal height of the building, forms a superelevation. This type can be seen as a more profound evolution of the type 1. It is the most common type and can therefore be regarded as the standard case.

Type 3

The third type represents both the exception and the climax of the rule. The corner is very strongly accentuated and formulated by sophisticated assemblage of volume. Since this type refers very strongly to the exception, the formal commonalities are limited. They can only be summed up by the fact that the voluminous and architectural design of the façade revolves around the theme of the corner.

Type 4

The Mute type occurs mainly in more recent buildings. It responds to the corner question with a negation by addressing a concave facade.

Type -1

The Anti-Corner is an antithesis to the Bilbao Corner. This type occurs only once in the Ensanche of Bilbao. The building is set back from the street and thus leaves the corner open. A tree occupies it instead. Another speciality of the building is that the blunted corner is avoided by the set back, so that it is the only building which got a sharp, pointed corner.
The Bilbao Corners are the manifestation of the exceptions within the rule. The fact that we curate a classification does not mean they are less extraordinary, for we read their exception in the contradiction with the homogenous attempts in the planning of the gridded *Ensanche* of Bilbao. Types are just required for clarity and are the real manifestation of the morphological character of the “three-dimensional” Corner anarchy.

The concept of morphology leads to a “plurality of solutions or the wide spectrum of the architectural interpretation of one and the same element”. What Ungers calls a “continuum-process”: “As far as it is possible the spectrum is conceived as a spectrum of interpretations which represent steps between two extremes. Implicit in this criterion is a catalogue of alternatives, in contrast to the usual attempts at an ideal solution”\(^{36}\).

The *Ensanche* of Bilbao was an evolutive process. Since the plan was adopted in 1876, it was gradually built from East to West\(^{37}\). Planning regulations privileged a homogenous
Urban planning privileged a three-partit repartition of building as per classical proportion guides: the ground floor as the socle, floors 1-5 as the body of the building, and the top floors stepped back from the street elevation. All buildings have a small, narrow internal courtyard. The guidance maximises usable area of the plot. The Basque architect Teodoro Anasagasti would complain about planning regulations that would push for homogenisation in his book *Hundimientos. Grandes estafas de la construcción*, (Madrid, Ed. M. Aguilar: 1931), 13.

The cultural and historical panorama of Spain at the time influences the lack of homogene language in architecture. While some Basque architects push for a rational style, influenced by the European modernism, others rest in the language of the autarchy, influenced by the Italian Novecento, and classical aspirations, the overall result is a patchwork of styles that read in the architecture of the Ensanche as defended by Kenneth Frampton and Elias Mas Serra in *50 Years of Basque Architecture*.

Through our types study, we see a refinement of the idea of the Bilbao Corners. In our Tower Type (type 2), the protuberance is clearly marking a break from the hierarchy, that the Add-On type (type 1) was doing more discreetly. As the ultimate expression of this rebellion, the corners we have drawn in detail, pertaining to the Ultimate Corner Type (type 3) where the plan and programmatic complexity of the brief is most striking and interesting.

The Garaje Indautxu (p.134) presents a mixed used programme which combines open-plan garage floors with residential facilities in the top. The industrial language reads into the elevation in the linear windows where the glass panels are broke in small rectangular pieces. The rational architectural language between buildings and the maximal usage of the plot. Nevertheless, we argue that the Bilbao Corner represented always the architectural moment of rebellion against this homogenising attempts of the Ensanche of Bilbao. The clarity in which the corner becomes a rebellious typology is more apparent for buildings closer to the 1940s and 1950s.
understanding of the plan also occurs for the Arbieto Office (p.136) and La Equitativa building (p.138). In both cases, the plan optimises the room repartition, light and internal circulation. La Equitativa multi-programmatic requirements create a highly complex Corner protuberation, where the distinct office space in the first floor meets the retail areas at ground level and residential facilities of remaining floors. All in all, the Corner is crowned with a rectangular extrusion with a clock, which reminds the bell towers in institutional public buildings. The Aviación y Comercio building (p.140) also presents mixed office and residential programme. Some areas are set back from the building outline in plan, which complexify the elevation. Internally, there are two flats per floor, and two cores to access them, distinguishing the owner’s entrance with the service’s one. Finally, the ultimate expression of the Corner for its not only a Corner but the buildings occupies the entire block itself, the Naviera Aznar (p.142). While the corner facade clearly emphasizes the crowning, the elevation that faces the Plaza Venezuela, remains classical in style, referring to the architecture of the Palazzo.
Garaje Indautxu. JM Sáinz Aguirre, 1940-45.
Arbito Office building. Rafael Fontán, 1930.
Aviación y Comercio building. Pedro Ispizua and Fernando Arzadun, 1944.

20m
Infinite exceptions

As the principle of the Grid is infinite continuation and expansion, one could imagine that each of the proposed Corner types could be displayed as examples of a catalogue of infinite possibilities on the theme.

In the *Ensanche* model for Barcelona, the homogenization is much more strongly drawn than in Bilbao. The Bilbao Corners, however, by their diversity, be it their handling of the corner or their eclectic style and architectural formulations, are at the end the building blocks that turn the strict grid into a kind of *Captive Globe*. Of course we have to consider here that the model of the *Captive Globe* refers to a completely different scale of Grid, the one of Manhattan. However, what we would like to work out is not a direct comparison but an analogy. It is about the possibility of diversity within a common framework.

Koolhaas is referring to each block in the Captive globe as islands or cities within the city, that can as such be seen individually. The corners in the system of the *Ensanche* of Bilbao are of
course part of a wider block and their freedom is restrained, though we can see them as self-sustained elements in relationship to the Bilbao Ensanche Grid.

“The principle of diversity was developed and used in a conscious way for the first time by Leon Battista Alberti. So in effect we shouldn’t even speak of principle, but rather of a fundamental doctrine of humanism. It contradicts the law of series in a fundamental way and of course assumes individuality. The doctrine of diversity contradicts standardization, which promises at most a limited multiplication and a simple concept of repetition, and functions as a stumbling block on the way to a purely functional and materials-oriented architectural technology”40.

It is the relationship between the whole and its parts or the rule and the exception that make the city. The Bilbao Corners are the essential for the Ensanche, the convergence of opposites here manifested.
The Great Kahn:
“I have also thought of a model city from which I deduce all the others”

Marco Polo:
“It is a city made only of exceptions, incongruities, contradictions, exclusions. If such a city is the most improbable, by reducing the number of abnormal elements, we increase the probability that the city really exists. So I have only to substract exceptions from my model, and in whatever directions I proceed, I will arrive at one of the cities which, always as an exception, exist. But I cannot force my operation to a certain limit: I would achieve cities too probable to be real.”41
The special geographical location of Bilbao, situated at the Estuary of the Nervión in the Bay of Biscay, has a great influence on the urban form of the city. The ría of Bilbao represents the historic spine of the city, today more relevant than ever. The ría and its framing, the left and right banks, can be read as a unit through its differences in relation to the remnants of the city. They form a structural strip where today resides the potential of the urban expansion and dynamism of Bilbao.

Referring to Italo Calvino's *Invisible Cities*, the frame wrapping the ría is a juxtaposition of “exceptions, incongruities, contradictions (and) exclusions” organized along the structural artery. The frame’s exceptions tend today towards the monument yet many architectural qualities that rest mutely along the river sides are waiting to be discovered. This theme delves around the possibility of a reconciliation between the monumental and the mundane along the water stream. In the negotiation between both antithetic worlds lies our understanding for the full activation of the central vertebral spine that is the Estuary of Bilbao.

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Ría is the specific Spanish word for a linear stream that makes the transition between river and sea. Like an estuary, it has a mix of salty and fresh water and it is influenced by marine tides. The specificity of the ría as opposed to the English word estuary is its specific elongated shape. The linearity of the ría as per the Spanish dictionary is caused by the valley condition in both sides of the water stream. This is the case for Bilbao which is framed by numerous hills.
The extent of the ría in Bilbao also defined the old boundaries of the city. Still today, the Harbour of Bilbao’s (public institution) water and land jurisdiction extends to the limits of the ría, meaning they own most of the sites along the water stream, also in very central locations of the city.
Ricardo Barcala, Personal meeting with the president of the Harbour of Bilbao, August 22, 2019.

43
Italo Calvino, *Invisible cities*.
Foundations of the exceptional

The superimposition of different concepts, design decisions and coincidences are very visible in the framing of the ría. Historically, it has developed into a strip that emphasizes the concept of the dialectic city.

Since the foundations of Bilbao, the ría was a tool for trade and commerce under which developed a strong shipyard and metal industry, constantly fed by raw materials extracted from the mines and forests in the surrounding mountains. The shield of the city draws the Estuary and outlines its definitive relevance in the foundations of the city.

Although always in use for industrial and commercial purposes in medieval and renaissance times, the inhabitants of the medieval town were connected to the ría through some leisure activities which took place: theatre, swimming, bullfighting and others. To some extent, until the 19th century, the activities of production, reproduction and leisure mingled without much separation near the water stream and in connection to the medieval town, creating
exceptional scenarios of intense and contrastive usage. 

The main public square in the 16th century once the medieval walls had fallen was directly facing the water as shown in the coloured engraving of Ritcher of the 18th century.\textsuperscript{45} Next to the square the productive medieval harbour was located. As Daniel Fullaondo argues, the architecture of the harbour and residence of fishermen and workers opposed strongly to the residence of the inhabitants of the medieval Villa of Bilbao, which underlines the specialty of the built developments along the spine.\textsuperscript{46}

\textsuperscript{45} The engraving was made by Francisco Antonio Ritcher in the second half of the 18th century and shows the progression of the medieval Villa of Bilbao into a dense town without the fortified wall, and extended radially around the Cathedral of Santiago (built between the 14th-15th century). Indeed, the fortified wall was partially destroyed in the 1550s after a great fire. Most of the buildings of the original Villa had to be reconstructed then. Iñaki Uriarte, “Bilbao, un lugar: plaza y mercado (III)” Periódico Bilbao (October 2010): 39.

\textsuperscript{46} Daniel Fullaondo, La Arquitectura Y El Urbanismo De La Región Y El Entorno De Bilbao, 328.
Vista de la muy Noble Villa de Bilbao, engraving of Bilbao by Francisco Antonio Rítcher, 18th century.
Surreal sceneries

This special frame of exceptions around Bilbao’s ría was further reinforced with the rise of industrial society. The interest in productivity and economic growth further reinforced its role as a booming and powerful productive spine. The left side\textsuperscript{47} was the most industrial one: an urban patchwork of heavy uses, residential areas, streets, roads and highways. They formed surreal sceneries of unplanned amalgamation of productive and reproductive usages, one could even compare to science fiction.\textsuperscript{48}

A distinguishable strip of land framing the river banks emerged. The strip spanned the distance between the Medieval Town to the ocean, the Bay of Biscay. It accommodated urban oddities, anomalies and exceptions, a layer that was essentially different from the rest of the city.

In analogy to New York’s Central Park and the buildings that surround it, the ría seems to be a magnet that triggers an urbanism that is as a basis unique and contrastive to the rest of the city. The water stream represents a spatial inhabitable void to which an alternative

\textsuperscript{47} The left side of the ría represents the areas of Zorroza, Baracaldo, Sestao, Portugalete and Santurce.

\textsuperscript{48} Daniel Fullaondo, La Arquitectura Y El Urbanismo De La Región Y El Entorno De Bilbao, 230.
urbanism grows around.

In New York, the Manhattan Grid has also reached the plots framing the park, yet the architectural resolution of the buildings responds to the specific language of the centrality and magnetism of the urban void, in contrast to the surrounding blocks. If the ría is a natural vertebral column dividing two sides of Bilbao, Central Park is the beating heart of Manhattan. Both untouchable, central, essential, they attract singular building development around them.

Nevertheless, in this amalgamation of usage along the ría, the industrial sites were secluding rather than welcoming. Heavy noises, pestilent smells, railway lines and industrial activity blocked the access to the ría. The activity of the spine was in its fullest on a productive side, but was disappearing at a social level, becoming a blind spot for its citizens even in central locations.

By the 1980s, the negative effects for the city’s social health and environment were heavily felt with the decline of the industrial activity and economic crisis. Back then, the
ría was a malfunctioning vertebral spine of the Bilbao metropoli formed of 30 municipalities with Bilbao as capital49. The need for each neighborhood of the metropoli to interact and share resources stressed the importance and need for a sustainable understanding of the ría, up to the point neglected.

It was about the same time that many of those industrial sites got emptied or abandoned, as industrial production shifted towards the sea coast. They became privileged sites within the city fabric. Mostly lying under public ground, the land framing the ría was ready to be re-interpreted and re-imagined, the potential of the tabula rasa scenario expressed.

In 1923, the Basque architect Ricardo Bastida states Bilbao can no longer be understood as the Old Town and the Ensanche, but as a metropoli, structured along the Estuary of Bilbao. The metropolitan status is recognised in 1943, with the creation of an urban plan for the metropolitan area named Plan Comarcal de 1943.

Today the metropoli is known under the name of the Greater Bilbao, in Basque Bilboa. It represents the fifth most populated metropolitan area of Spain (approximately 1 million inhabitants). It includes 30 municipalities structured along the Valley of the Low Nervión, the capital municipality is Bilbao.

Daniel Fullaondo, *La Arquitectura Y El Urbanismo De La Región Y El Entorno De Bilbao*, 221
Left: plan of Central Park, plan c.1870.
Right: the Ria of Bilbao today.
New beginnings

Karl Friedrich Schinkel, who was the city architect of Berlin in the first half of the 19th century, created the *Harvellandschaft*. The project was planned as a garden landscape along the river Havel, punctuated with a vast complex of pavilions and castles. Schinkel’s urban vision consisted of a series of singular architectural interventions. The architect was arguing for a dialectic urbanism rather than the homogenising suggestions of the great baroque urban plans.

One of the projects of the *Harvellandschaft*, the Glienicke Pavillon, was designed as a compound of architectural objects. The casino, the villa and the pavilion are placed in the garden without any axial reference, swimming freely in the garden and developing unexpected relationships with others around.

Oswald M. Ungers was influenced by Schinkel’s proposal in many levels. A clear direct reference to the *Havllelandschaft* would be his collage drawing for Berlin’s Spree highlighting the building objects along the water stream.
Plan of the “Harvellandschaft” by K.F. Schinkel and P.J. Lenne, 19th century.
The development of the site of Abandoibarra in Bilbao, internationally known for the location of the Guggenheim Museum, was conceived as a sequence of architectural interventions spread around the site, which follows the ría. Developed in the 1990s, buildings have diverse programmes.

There is a museum for the contemporary arts, a music hall, a public and a private library with auditorium space, an office tower, a hotel, a shopping centre and six residential blocks with retail and restaurant areas. Buildings are scattered around, stand-alone, autonomous, contrastive and self-sustained in relation to one another, and to the rest of the city.55 With the development, the city retrieved an essential river frontage, the Estuary gained visibility.

55 The think-tank Bilbao Metropoli 30 and Bilbao Ría 2000 were key organisations for the redevelopment of the site of Abandoibarra: the first one holding the vision of reconversion of an industrial city into an attractive touristic pole; the second one holding the power to organise public and private institutions for the funding and realisation of the project. The site lied under public ground, which was key for the feasibility of the project.

Carlos Alonso Padrones, Meeting interview in the Bilbao Metropoli 30 Headquarters, August 27, 2019
Ángel María Nieva, Meeting interview in the Bilbao Ría 2000 Headquarters, August 25, 2019
In an analogy to a necklace, we read a linear composition of different architectural events along the water strip, in which each pearl has an intrinsic nature. Currently, however, the pearl necklace is mainly characterized by architecture with monumental demands.

The Market Hall in La Rivera, the Arriaga Theatre, the Church of San Antón or Bilbao’s Town Hall, all located in the immediacies of the Old Town, are historical survivors of a sequence of buildings which stand alone along the water stream.

Frank Ghery, Federico Soriano and Dolores Palacios, Álvaro Siza, Robert Stern, Rafael Moneo, Cesar Pelli, Robert Krier and Carles Ferrater sign some of the projects of the Abandoibarra development. These objects along with the residential towers by Arata Isozaki and Calatrava’s Zubizuri Bridge create a succession of buildings placed along the Estuary that aspire to become living monuments of the city, which main feature is architectural excess.
“In recent years, structural complexity, formal redundancy, and image seem to have become the new Vitruvian triad embraced by the majority of contemporary architects. The result has been a figural excess in architecture, of which the city as Res Publica - the public and thus common thing par excellence - is the victim.”  

57
If we consider the words of P.V. Aureli, one could argue that the still predominant dissection between the city and its waters is due to this emphasis on the monumental character of the frame, an architecture where the priority lies in the stylistic ornate articulation of the object rather than the public ground that lies around them. This creates places where according to the semiotic triangle, the signifier, the name of the architect, becomes more important than the significant itself, the creation of place. In Bilbao, the dissection between ría and city is not yet fully bridged.
In 1756 Giovanni Battista Piranesi published the book *Le antichità romane*, a survey of the ancient city of Rome. Instead of drawing the monumental buildings, he focused on the city wall, tombs, aqueducts and on the foundation of large structures. He saw the ruins as the ultimate reduction of architectural form.\(^58\)

The unusual drawings of Piranesi suggest the rediscovery of Rome through the study of the remaining ruins, taking them as a starting point of speculation. The ruins become for him an imaginary selection of architectural artifacts that carry on the city’s history into a new one by creating potential spaces in between them.\(^59\)

Piranesi’s work can neither be classified as purely archaeological nor as a project for a new city.

“The result of this operation, which must be seen not only as the heart of the Campo Marzio but also as the summum of instauratio urbis, was an unprecedented interpretation of the architectural ruin not as something that has succumbed to the course of time, but something

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59 The blank space in between the ruins is crucial as it suggests the conceptual removal of the exponentially grown medieval city fabric. The emptiness indicates the potential of the reconstruction and evolution of the ancient city.
that has survived both time and the modern city. Through Piranesi these ruins are emancipated to become the latent beginning of a new city whose potential is not yet subsumed by any incipient urban order.\(^60\)

In an analogy to Piranesi’s ruins, we are seeking for segments along the water stream that can become the opening for a new narrative, for its strengthening and full activation. Such as his artefacts, our objects have the power of suggesting starting points for a new vision of the city. Against the melancholic and romantic idea of the ruins, we propose to reveal the mundane, a series of *objet-trouvés* along the ría that are unseen to many but essential to all.

In art, the idea of the *objet-trouvé* appears in the 20th century. It shifts the meaning of already existing objects by isolating them from their immediate context. Marcel Duchamp, one of the most representative figures, presents the object without manipulation or mediation or further additions. Through the selection of trivial objects and materials and their curation in a new context of meaning, the object is elevated to a work of art.\(^61\)
Diverting from the work of art, our objects are not elevated to become a sculpture exhibited in a white cube, but are revealed and have site-specific attributes that emanate from their everyday usage. The entrance to a car park, some public toilets, a small information hub, a lift and staircase, the waiting platform for the river service boats, this sequence and collection of *objet-trouvés* reflects a variety of uses and architectural qualities in themselves.
Left: La Vedute di Roma, G.B. Piranesi, 1747.
The monument and the mundane

Even though these *objet-trouvés* are invisible to the user, they shape the public space that surround them in a way that it is difficult to understand its dynamic without. To each object, a specific site is revealed. The search for these sites is a confrontation and a discovery of the existing. Lying in the frame directly next to the monumental by the *ría*, they are the opening line for the confrontation of parts along the central spine.

“The confrontation of parts can be achieved only based on common and existing aspects of the city, not ex nihilo creation of the new”\(^2\). By making our *objet-trouvés* visible not only we seek to reveal reminiscent qualities of mundane artefacts along the spine, but strengthening the symbolic and physical usage of the commons that lie around them, expressing the starting point of a truly activation and dialectic understanding of the *ría*.

The monument and the mundane are complementary and essential pieces for the water stream. Between the monumental and the mundane, the convergence of opposites takes place.
GHOSTWRITING
Being O.M. Ungers

The presented hypotheses on Bilbao must be seen against the background of an intensive study of the German architect Oswald Mathias Ungers. The elaborated approach can be understood as a personal interpretation and further development of his working and academic background. Although we put ourselves in the position of Ungers, we transfer his approach into our context and our time.

One could draw a parallel between this exercise and the film *Being John Malkovich*. In *Being John Malkovich*, the protagonist (a puppeteer who works in an unconventional office), his wife and a work colleague find a loophole in the wall to which access control of John Malkovich’s identity. The influence on Malkovich’s personality varies for each one of the three characters. While the puppeteer can fully impersonate and control the renowned actor, his wife by contrary is only able to be a passive visitor.

In the course of our thesis work, we constantly renegotiated our position in relationship to Ungers. So to say, we deal with how much we are engaging or disengaging with our role model. Taking up the analogy of the film again, our thesis has been an exercise on how strongly we are John Malkovich himself or how strongly the puppeteer dominates him.

One should understand Ungers (OMU) in a context that includes other architects. Karl Friedrich Schinkel, for example, was a great role model for Ungers himself. Rem Koolhaas, who named his office (OMA) in reference to Ungers, worked closely with the German architect in the University of Cornell in the US and in Berlin. The work of P.V. Aureli seems to parallel concepts of OMU and OMA, sometimes directly mentioning the architects. By studying Ungers, we are destined to follow this lineage of architects too.

City Metaphors

The starting point of the research was the book *Morphology: City Metaphors* from which some ideas concerning Ungers’ approach were extracted.

The book was published following the exhibition MAN transFORMS curated by Hans Hollein for
the opening of the Cooper-Hewitt Museum in New York in 1976. For the exhibition, Ungers used images to compare urban form with everyday objects. By making analogies between the “factual reality” (the urban form) and the “perceptual reality” (the common object), he aimed to extract an idea, what he called the “conceptual reality”65. Along with the images he wrote a small introduction. The text explained his approach in the curation of the exhibition. The work was not meant to be scientific but rather an understanding of diverse urban form through analogies, metaphors, models and signs, using imagination and perception rather than facts.

For Ungers, working with analogies represents an attempt to bridge the known and the unknown, the seen and the unseen. In his own words “the analogy establishes a similarity, or the existence of similar principles, between two events that are otherwise completely different. Kant consider the analogy something indispensable to extend the knowledge. In employing the method of analogy it should be possible to develop new concepts and to discover new relationships.”66

Barbara Stafford, who makes the link between analogies as the art of connecting in her book, further adds to the definition: "Fantasia permits the mind to connect disparate things in analogical form. Like the crisscross, in Wittgenstein’s Philosophical Investigation (1945), cross cultural knowledge demands imaginative jumps through space and time to discover continuities and discontinuities with current events. The leap of ingenium captures this intersecting process for going on, for continually approaching the same points afresh from different directions and vantages.”67

Imagination

Ungers does not examine the reality "as it is" but rather according to a "superordinate idea", according to "a general content, a coherent thought or an overall concept" that "binds all parts together"68.

It is this approach that interested us: the possibility of a tool to conceptualize and read architectonic phenomena away from facts, a tool largely based on speculations, assumptions and interpretations of a reality for the contemporary
If working with analogies bridges the gap between fact and speculation, the themes that emanate from our work tell the story of Bilbao through our personal reading and understanding of the contemporary city.

However, it should not be forgotten that direct quoting of Ungers is certainly not possible, as the present case study does not present the same conditions. The temporal and geographic context is clearly different. Our thesis does not take Unger’s literally, but rather uses his imaginative and perceptual approach to the study of a city, in this case Bilbao, from a contemporary perspective.

It is the way Ungers integrates form, of whatever kind, as a metaphor into a narrative relationship that mutually confirms both poles ratio and poetry on a new level, which constitutes the fascination for his work. He creates a selected kinship between references, which are not necessarily evident. All in all to convey an idea in a narrative line. Our work aims for storytelling in a similar way.
Ungers’ analogous approach has also its limits, as we have evidenced in the process of this work. As a rhetorical tool to better illustrate or explain an idea, the analogy is well suited. However, its limitations become clear when the phenomena is, through the representation by a single analogy, oversimplified.

In the process of this work, we had to realize that there are analogies that draw a very nice picture, but do not reflect reality quite as well. Furthermore, we observed that a phenomenon can not always be described under one unique concept, or idea, but has a compound of multi-layered evidence. This limitations do not mean the approach is invalid. Indeed, the approach provides the potential to speak about architecture using its own specific language.

“An architecture that does not derive its themes from itself is like a painting that tries to be nothing more than a photographic reproduction. The theme and the content of architecture can only be architecture itself. Just as painting makes use of its own language and poetics to give expression to images, or music is represented in tonal compositions, there is a possibility, or even a necessity, for architecture to make ideas visible and testable in the form of spatial compositions by the use of the language of architecture”\textsuperscript{72}.

“In this connection the need for themes in architecture should also be seen as an exquisitely human question, since it helps to transform the environment from pragmatic reality to the metaphysical world of ideas”\textsuperscript{73}.

When reality surpasses fiction

If architecture is treated as a theme, it is applicable to site specific scenarios. The metaphoric imagery used in *Morphology: City Metaphors* was selected from common objects, natural phenomena and daily activities.

A year later, Ungers’ metaphors will shift from ordinary events to architectural language. This is both the case for his proposal for the *Braunschweig Castle Park* published in March 1977 in *Lotus Magazine*\textsuperscript{74}, but most significantly for his manifesto for *Berlin, The City in the City, Berlin: a Green Archipelago*, published the same year.
The initial draft, a six-page typescript, is written by Rem Koolhaas when he visits Ungers in Berlin for his first Summer Academy of 1977. The fourth and final version of the manifesto, which Ungers completed to become a 48 page and 11 thesis booklet, would be then published at Cornell University in Ithaca later that year. During the Summer School, an exhibition was held, showing the graphics and design process that would lead to the manifesto, drawn by Ungers’ assistant, Peter Riemann.

Both projects, along with the Hefte, the small booklets containing Unger’s students work, are proof of alternative visions for diverse cities under the common language of speculation, analogies and imagination, where the reality as found is used as starting point for a visionary, sometimes radical, architecture project.

Another common thread to all this publications is the great effort put in images in order to convey the ideas. Similarly, this study of Bilbao aims to transcend facts and enters a metaphysical dimension. It pushes for an intimate and personal narration filled with evocative imagery, drawings and references.

“OMUOMA’s production, of both images and text, is often an extreme exercise in the aestheticization and radicalization of what is already there, pointing out that the reality surrounding us is perhaps more radical than we generally assume.”

OMFG evolves under similar pretensions.
Spike Jonze, *Being John Malkovich* (US: Gramercy Pictures Propaganda Films, 1999), Film


Ibid. 13

Ibid. 12

Barbara Maria Stafford, *Visual Analogy: Consciousness as the Art of Connecting* (Cambridge Mass: MIT, 2001), 9

Oswald M. Ungers, *Morphologie: City Metaphors*, 7

Barbara Maria Stafford, *Visual Analogy: Consciousness as the Art of Connecting*, 11

Jasper Cepel has written an intellectual biography on Ungers. He claims "when Ungers speaks of ‘City Metaphors’, he is more likely to call it the result of his approach" and not a methodology, a set of invariable steps to follow from A to Z.

Jasper Cepel. Oswald Mathias Ungers: Eine Intellektuelle Biographie (Köln: Verlag Der Buchhandlung Walther König, 2007), 339

OM Ungers, Architecture as Theme (Milano: Electa, 1982), 9

OM Ungers, "Project for the Braunschweig Castle Park" LOTUS International 14 (1977): 100-127

OM Ungers, Rem Koolhaas, Peter Riemann and Florian Hertweck. The City in the City: Berlin: A Green Archipelago, (Baden: Lars Müller, 2013)


Ido Avissar and Freek Persyn, “OMU OMA” San Rocco no. 7 (Summer 2013), 108
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All visual and lineweight drawings have been modelled and rendered by the authors of this work.

House-Tower or the theme of Transition

p16. Photography of the Old Town of Bilbao, coming from Mallona. Source: taken by the authors.


p48. Ground and top floor of an original House-Tower drawn by the authors. Source: drawings based on text and sketches of the article “Las casas-torre bajomedievales. Análisis sistémico de un proceso de reestructuración espacial/territorial” by A. Azkarate Garai-Olaun and I. Garcia Gomez.

p49. Ground and top of the of Tower of Bailen drawn by the authors. Source: traced from original plans available online. www.bilbaopedia.info

p49. Ground and top of the Lift of Begoña drawn by the authors. Source: traced from original plans available online. https://txuspo-poyo.com/portfolio-item/

p52. Tower of Guinigi in Lucca, Italy. Source: https://c1.staticflickr.com/

p56. Section of the House-Tower drawn by the authors. Source: ibid p48.

p58. Section of the Tower of Bailen drawn by the authors. Source: ibid p49.

p60. Section of the Lift of Begoña drawn by the authors. Source: ibid p49.
p74. Elevation of the House-Tower with medieval wall drawn by the authors. Source: ibid p48.
p76. Elevation of Tower of Bailen drawn by the authors. Source: ibid p49.
p78. Elevation of the Lift of Begoña drawn by the authors. Source: ibid p49.

Corners or the theme of Contradiction

p92. Photograph of corner of the Naviera Aznar. Source: taken by OMFG.
p104. Ensanche of Barcelona. Source: https://www.pinterest.co.uk/pin/414964553144650676/?lp=true
p126. Isometric of selected corners in Bilbao drawn by the authors. Source: Google Maps 3D
p134. Ground floor plan and isometric of Garaje Indautxu drawn by the authors. Source: Traced from original plans available online. www.bilbaopedia.info
p135. Typical floor plan and isometric of Arbieto Office drawn by the authors. Source: Traced from original plans found in Ellas Mas Serra and Kenneth Frampton’s 50 Años De Arquitectura En Euskadi.
p138. Residential floor plan and isometric of La Equitativa drawn by the authors. Source: Traced from original plans available online. www.bilbaopedia.info
p140. Residential floor plan and isometric of Aviacion y Comercio building drawn by the authors. Source: Traced from original plans available online. www.bilbaopedia.info
p142. Office floor plan and isometric of the Naviera Aznar building drawn by the authors. Source: Traced from original plans available online. https://www.instagram.com/modembasquecountry/

Ría or the theme of Framing

p158. Vista de la muy Noble Villa de Bilbao, engraving of Bilbao by Francisco Antonio Ritchter, 18th century. Source: https://4.bp.blogspot.com/
p194 to 205. Site plans and objet-trouves along the Ría of Bilbao drawn by the authors. Source: Isometric from Google Maps 3D and site plans from Bizkaia, Distribución Cartográfica. http://apps.bizkaia.net/GRIT/ml_GRIT_Marcos.jsp?IDIOMA=C
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Avisar, Ido and Freek Persyn. “OMU OMA.” San Rocco no. 7 (Summer 2013): 101-110.


Others


