

Lines of Site
Refracting Urban Barriers



A Study in Shifting Perspectives
Re-presenting the Urban Artifact

L I N E S O F S I T E

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Virginia Polytechnic Institute
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MASTER OF ARCHITECTURE

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“Lines of Site”

Refracting Urban Barriers

source: WWWWebsters Dictionary
<http://www.m-w.com/dictionary.htm>

line of sight

Date: 1559

1 : a line from an observer's eye to a specific point

sight

Pronunciation: 'sIt

Function: noun

Etymology: Middle English, from Old English gesiht faculty or act of sight, thing seen; akin to Old High German gisiht sight, Old English sEon to see

Date: before 12th century

1 : something that is seen : SPECTACLE

2 a : a thing regarded as worth seeing -- usually used in plural <the sights of the city> b : something ludicrous or disorderly in appearance <you look a sight>

re·fract

Pronunciation: ri-'frakt

Function: transitive verb

Etymology: Latin refractus, past participle of refringere to break open, break up, from re- + frangere to break -

Date: 1612

1 a : to subject (as a ray of light) to refraction b : to alter or distort as if by refraction <to refract that familiar world through the mind and heart of a romantic...>

site

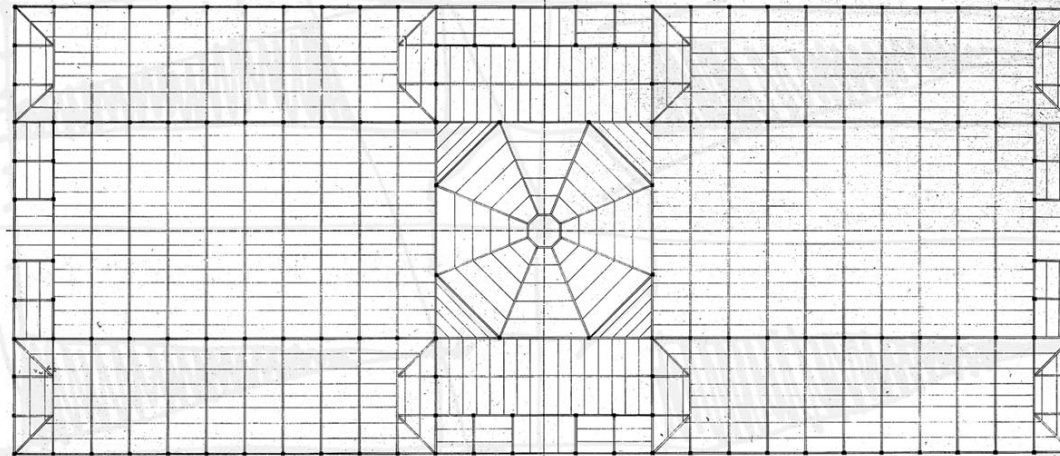
Pronunciation: 'sIt

Function: noun

Etymology: Middle English, place, position, from Middle French or Latin; Middle French, from Latin situs, from sinere to leave, allow

Date: 14th century

1 a : the spatial location of an actual or planned structure or set of structures (as a building, town, or monuments) b : a space of ground occupied or to be occupied by a building
2 : the place, scene, or point of something



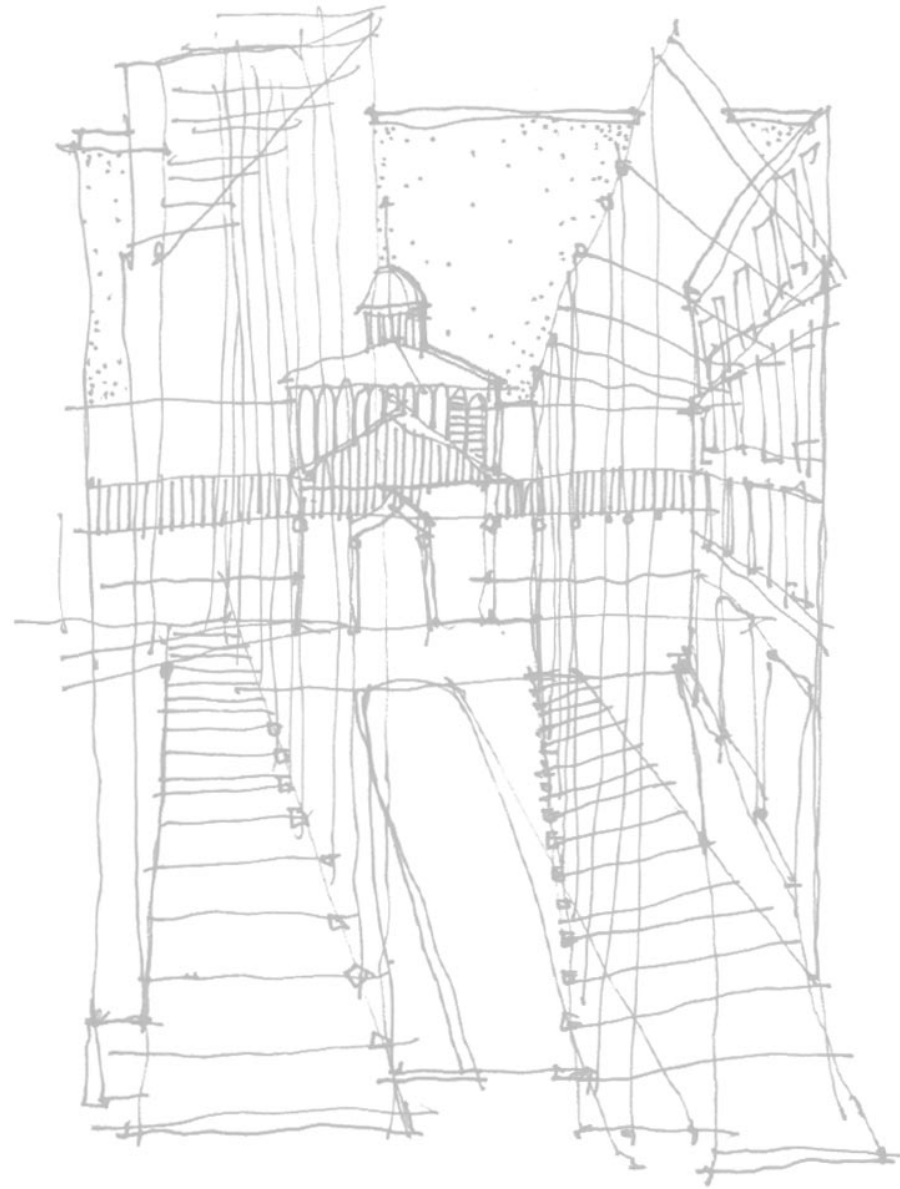


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INTRODUCTION

“... how can addition be obtained when the first addendum disappears as soon as the second enters into the sum? In order for a whole, or a whole series, to be conceivable in time ... it has to be possible, at least indirectly, to fix every moment without thereby losing the general character of time as transition and progress.

It is not only a question of establishing and ‘apprehending’ the moments of time, but of repeating and recreating them! The ‘synthesis of apprehension’ has to act as well, and by the same indivisible act of foundation as a ‘synthesis of reproduction.’ Only thus will it be possible to intertwine the present and past, to conserve the past in the present, and to conceive of them conjointly.”¹

1. from *Architecture, Criticism, Ideology*, Introduction to the essay “On Making History” by Thomas L. Lorenz (Ernst Cassirer, *Kant’s Life and Thought*)

Within the context of today’s urban environment, architecture appears through two related, albeit seemingly opposing approaches. The first being radical removal and re-building, the second being the re-formulation of the existing.

One must evaluate the condition at hand and react responsibly to the influences present. Removal can be advocated if no real value is seen in the existing substance. If something new is of higher value than what is existing, then

“radical removal” can be warranted. If *any* value can be found in what is existing then the architectural act begins with considering what to keep and for what reasons - be it historic, spatial or even nostalgic (just to mention a few).

Designing (generating) new urban forms on previously occupied sites in response to the reality of today’s life is an approach which can alter the urban fabric established by the build-up, or layering, of historically significant strata. This approach, which can be radical at

times, offers the possibility of establishing new urban characteristics but often disregards the urban artifacts that constitute the very essence of the city. This “slash and burn” approach often presents us with the predicament that “... attempts to make a new beginning [in the city] have only discredited the idea of a new beginning.”²

2. (Rem Koolhaas, “What Ever Happened to Urbanism” ANY. 9)

ABSTRACT

Architecture in today's urban environments exists through, and must respond to, the interaction of contemporary constructs occurring within the context of the urban fabric of the established city.

The opportunity residing between these concurrent systems of *past* and *present* offers the flexibility of countless modes of response to the ever-changing city. Concerns of today's architectural possibilities to the protection of the past, while enabling the evolution of the urban setting afford the designers of our cities a diversity of options in response to the needs and desires of modern society.

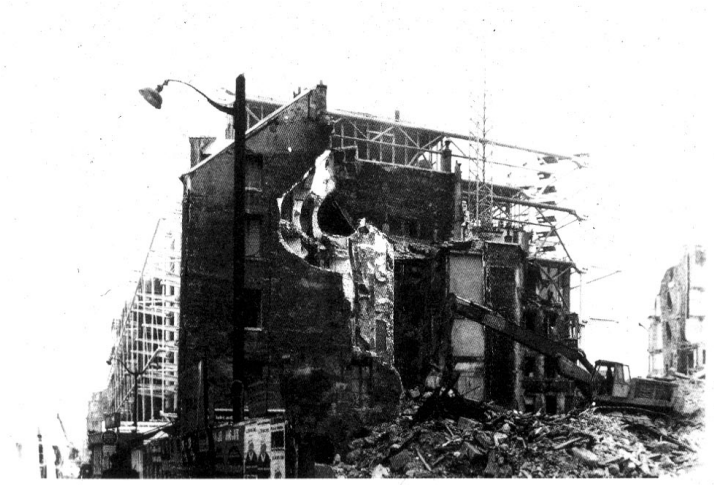
Through the thesis project; its processes of investigation, analysis and formulation, one instance of these

opportunities is addressed. The project is a development in response to a specific existing situation in the city of Barcelona, Spain.

The project aims to isolate and address an example of the intervention of contemporary architecture within an historically significant setting among the well-established structure of the city. The necessity of confronting tangible parameters, while dealing with a hypothetical project, affords the possibility of developing responses to the issues one is faced with when designing for any site.

Context is of primary concern, and must be addressed not only as the physical characteristics of the "site", but also as its material, historical and cultural composition.





1.



2.



3.

Although it would appear that the opportunity for architecture in today's urban environment exists primarily in two *distinct* ways, both the "tabula rasa" approach to the new urban element and the reconstructive approach deal directly with related contextual issues within the city. The reconstructive approach which, like a prosthesis, works as a device to rejuvenate the existing or replace a "missing part" has as much to do with the integration of one system with another, while the former approach seemingly removes itself from the site and establishes a new identity within a "void". These options are essentially varied iterations of a theme of connection and continuity within the built urban environment.

Although both "tactics" are concerned with continuity and

connection, the approach to this universal design issue can become manifest in several manners.

Placed upon the "clean slate" of a site, the "tabula rasa" initially severs and separates from the rest of the city. The challenge then lies within the connection to the surroundings and to the character of the city. The other approach, that which this project takes, is that of the evolutionary development of the city through an accumulation of artifacts. The unfolding of time, as expressed by these artifacts not only references a progression of history, but it represents a cultural development.

Rem Koolhaas, in his essay "Urbanism vs. Architecture" describes one inherent problem of today's cities' "lack of urbanism" as "the grafting of more and more substance on starving roots".

Conversely, the grounding of urban architecture in the historically *significant* artifact enables an accumulation of the "architectural (cultural) strata" to shape the image of the city as an enduring narrative.

The adaptation and amplification of existing salvageable urban elements into functioning components of the contemporary urban environment affords us with the opportunity to integrate that which formed the existing urban fabric with that which modern societal needs prescribe as necessary.

The evolution of the city as an ever-changing organism allows for these adaptations which, if done well, can establish a character that embodies the urban artifact as a culturally significant element contributing to the lineage of the [image of the] city.

1. Gordon Matta-Clark, 1974
"Conical Intersect"
Tangent to Pompidu Center Construction
Paris, France.
2. Demolition of existing buildings.
Site preparation for Centre Georges Pompidou
Piano & Rogers, 1977
Paris, France.
3. The Halles Centrales at Lille.
Reichen and Robert, Architects.
Lille, France.

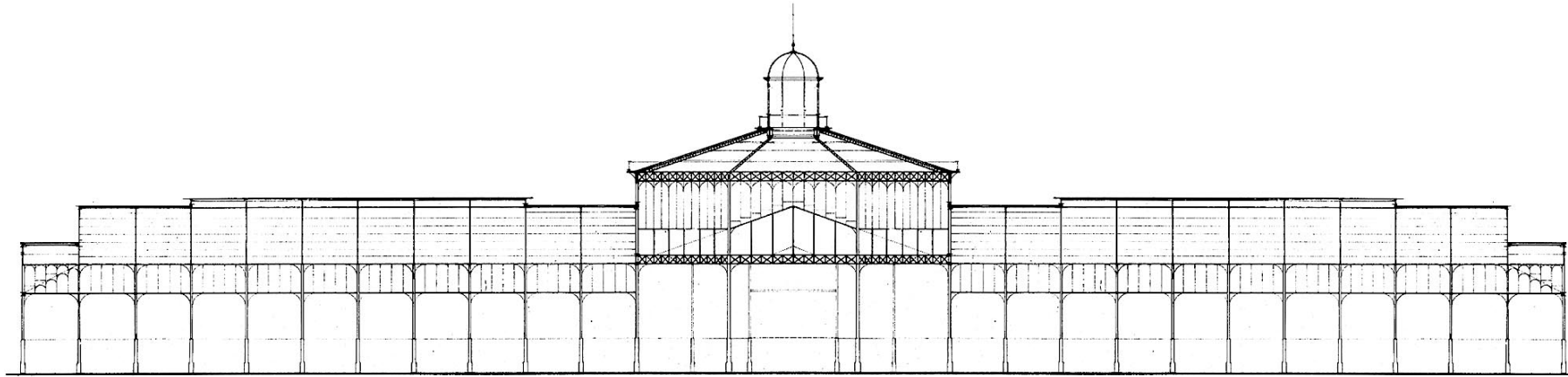
T H E S I T E



Barcelona

1 3

*Aerial view of Gothic Quarters
showing location of the Borne Market*



*Alfons Cerdà's Eixample (expansion) of 1858.
Joint condition of ordered grid and "organic"
growth pattern of the Gothic Quarters.*

Contrary to the "natural evolution" of the traditional urban marketplace, the Borne Market arose from a rather unique situation. Following the demolition of the city walls and the neighboring citadel in 1858, the city of Barcelona was presented with an expanse of land eventually organized by the ordering grid of the "Eixample". Seemingly limitless space was set to the plan of Alfons Cerdà, and the "medieval city" was linked with the gridded expansion of the 1880's.

Residual spaces which resulted from the gaps between old and new were filled in with various built forms. The Borne Market remained on the periphery of a dense neighborhood, situated between the dense "barrio de

Ribera" and the open expanse of the new "Park de la Ciutadella" on the site of the former citadel. Attempts at integrating the expansive "civic" space with the people it was to serve fell short to the urban planning schemes that segregated the market by the implementation of major and secondary automobile circulation paths.

The new scheme of the Borne Market structure is analogous to the Gothic Quarters of the City of Barcelona insofar as it represents the fragmentation of the whole into smaller-scale sections or districts as a developmental scheme. The existing structure, that of the past, is maintained while the newer fragments fracture out of the pre-

existing order. The cast-iron structure and the ceramic tile roof establish a dialogue with the buildings located directly around the market. The clear and simple rhythmic geometry of the covered market (1873-1876) follows the clarity of the surrounding apartment blocks of the Calle Princesa, Paseo de Picasso, etc. However, it is this geometry that was imposed upon the borders, or transitional zones, between the "Old City" and the new expansion of Cerdà's grid. The imposition (or overlaying) of this non-organic, ordering system created "left-over" spaces that were fit to the expansion scheme as best as possible without exerting too much thought and effort. In fact, many of these "border or fringe



*Medieval Barcelona
enclosed within ramparts.*

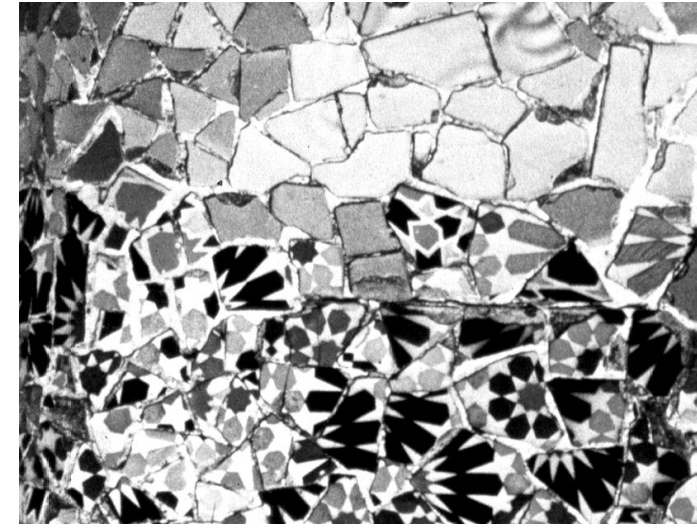
conditions" were simply an infill of gaps, or a "caulking with buildings" that filled those holes that were left over from the imposing grid.

The buildings of the adjacent neighborhood are those of the Gothic Quarters which grew out of an "organic development" rather than being fit to an ordering system such as that of the 1880's Eixample (Cerdà). Until the demolition of the circumference wall, the imposing fortification forced the inhabitants to conform their living to the limited space that was bound within those surrounding walls. This condition led to a capitalizing of usable space within the area enclosed. The narrow streets formed by the tall,

closely linked buildings grew like veins from the central focus of the city. Essentially following the gentle changes in the topography and prevailing geological conditions, early cities grew around a core and eventually developed outward into larger, more expansive settlements. Not following any other "ordering principal" than that which was most direct and most heavily traveled, the footpaths grew from their earlier roles into circulation in the form of streets and roadways. The "meandering" effect of this sort of development led to the intricate network of streets, intermingled with sporadic occasional plazas and squares. These gathering points

were normally the residual spaces that resulted from the elimination of a building, or the larger intersection of two or more streets. These plazas afforded the people of the city a gathering place, an open-air urban space that served the many needs of the people of the neighborhood. These gathering spots were intersections in the paths of the individuals of the city. The plaza served as a resting place, a meeting place, a place to gather and to share thoughts, ideas and just to pass the time.

The city square, usually containing a church, a civic space as well as government buildings was the starting point, or heart of the city.



*"Fracturing" detail.
Gaudi mosaic.*

From there, these veins radiated outward throughout the surrounding city it supported. Eventually, as the city grew larger, the surrounding areas developed into neighborhoods or districts with their own nuclei. Links between these neighborhoods were established as arteries that connected the main lifelines between the districts. The narrow streets of these neighborhoods became the veins and capillaries that transported the inhabitants to and fro during their daily lives within these cities.

Through the modernization of the medieval city, moreover since the industrialization and development of mechanized infrastructures,

there has resulted the implementation of wider avenues, often times "sliced" through the formerly compact and densely organized districts of the older city.



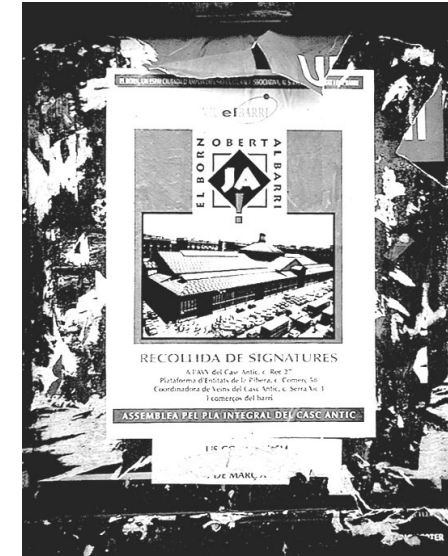
1.

The Borne Market was designed by Josep Fontserè i Mestres and constructed from 1873 to 1876. The original structure enclosed the public market that had, at one time served the population of the surrounding neighborhoods. The unique location of the market plays a significant role in the history of the Borne, as well as the project that is presented in this thesis.

After an international competition for the re-design of the Borne, the market underwent a renovation in the early 1980's to

restore it "as economically as possible to its original state"³. Since its restoration, the market has seldom been used and stands today with its doors locked to the public it once served. Presently there is a movement among the citizens of the surrounding neighborhood to "give the building back" to the people. Recent discussions for the future of the market have included options from permanent "book storage facilities" for the city's libraries, to an arts facility to demolition.

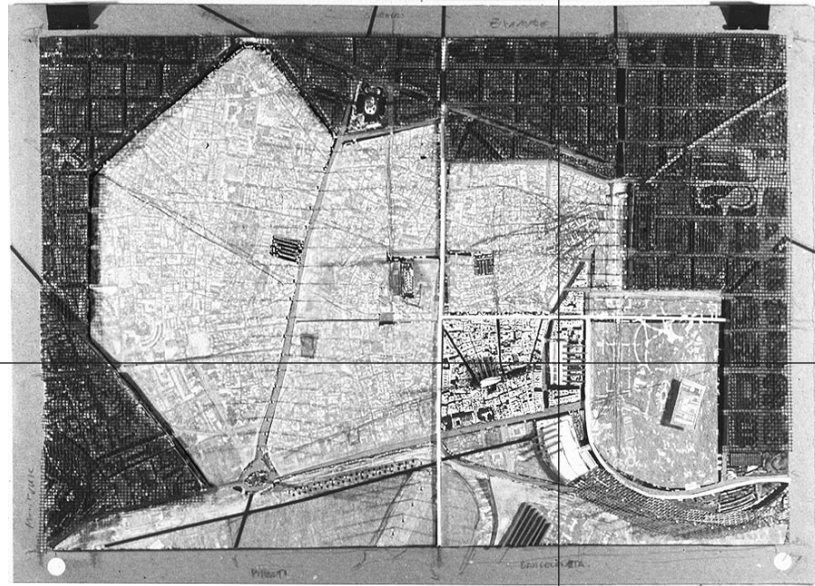
3. *(Ianus vol. 0, num. 0, may-jun 1980 p.39)*



2.

1. photograph of Borne Market from atop a neighboring apartment building (circa 1974)

2. Poster, neighborhood campaign to collect signatures "Open the Borne to the neighborhood now!"



site analysis
study model

Borne Market
1873-1876

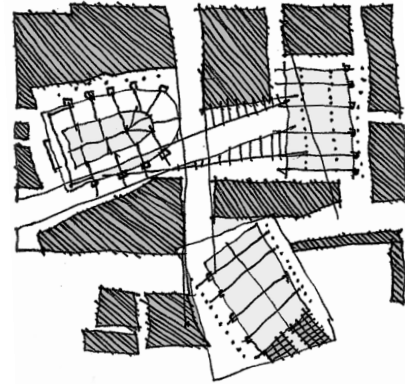
Sta. Maria del Mar
14th century

Estacion de Francia
orig. 1848



trinity of landmarks

"... A workable image requires first the identification of an object, which implies its distinction from other things, its recognition as a separable entity. This is called identity, not in the sense of equality with something else, but with the meaning of individuality or oneness."
-Kevin Lynch, *The Image of the City*



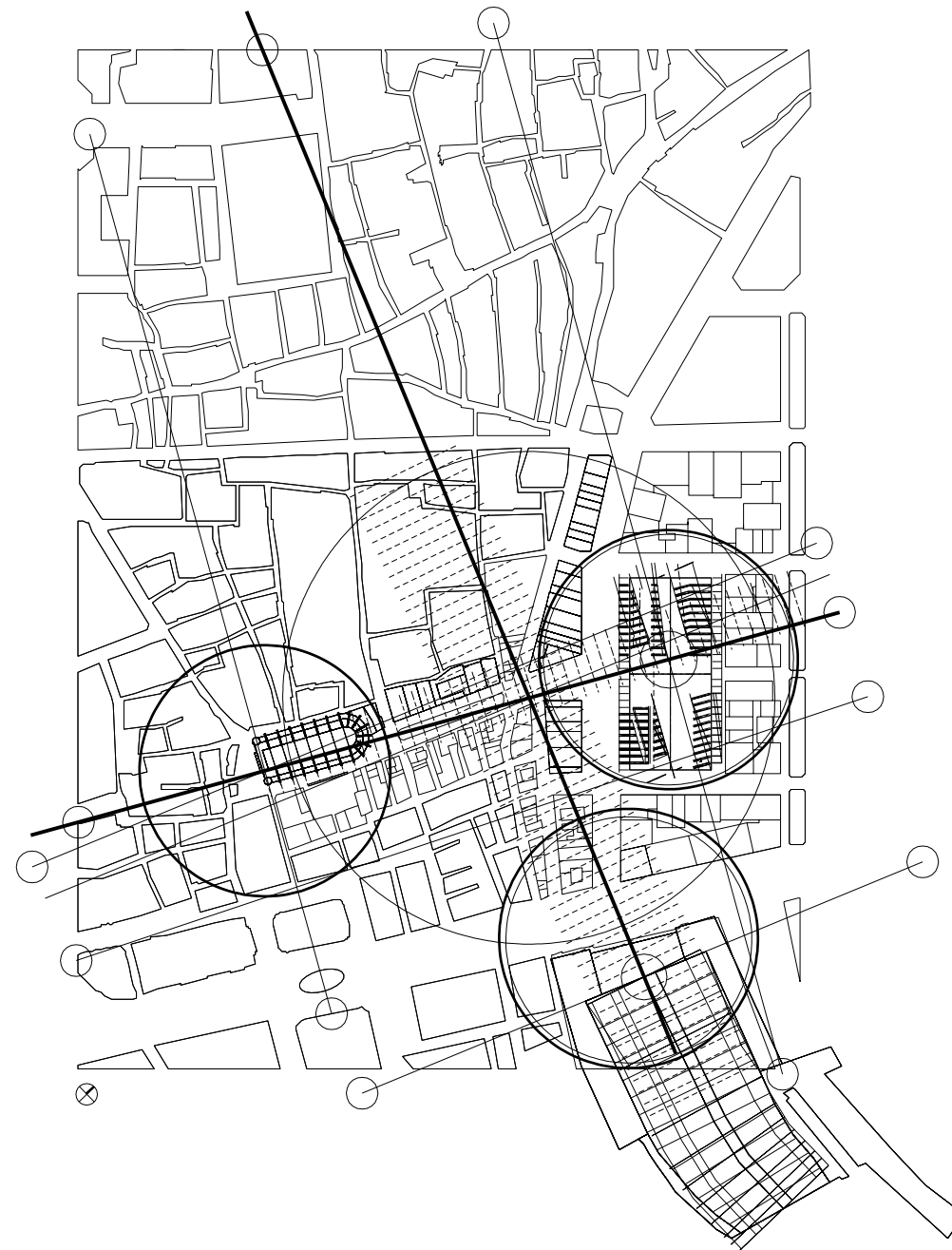
The location of the market in relation to its surroundings strongly supports the opportunity of this project to re-establish the urban links that would reconnect this element to the city. The *trinity of artifacts*: the Borne Market, the train station "Estacion de Francia" and the 14th century Gothic church Santa Maria del Mar orients the organization of the surrounding area into an identifiable "node". Just as the interaction of these three elements generated some of the decision-making factors of the re-organization of the Borne's interior, those same lines extend among and between these three primary elements and establish relationships in conjunction with the outreaching ideas of the scheme.

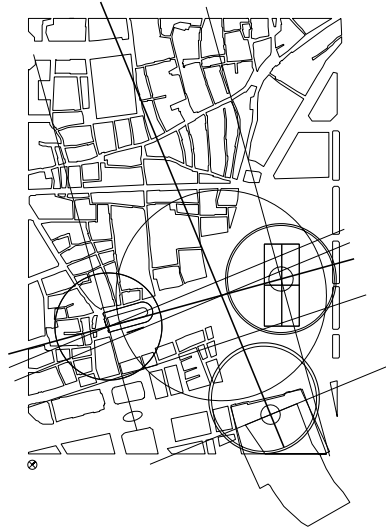
Eventually, the *overflowing* of this scheme beyond the former limits of the market would ideally be-

gin to infuse the neighborhood with the same vitality that initially recharges the market itself. Reactions within the surrounding urban fabric would respond to the issues generated from within the Borne. Scale, linear direction, fragmentation, framing and obscuring of elements would all play an essential role in the energizing of the evolving urban environment.

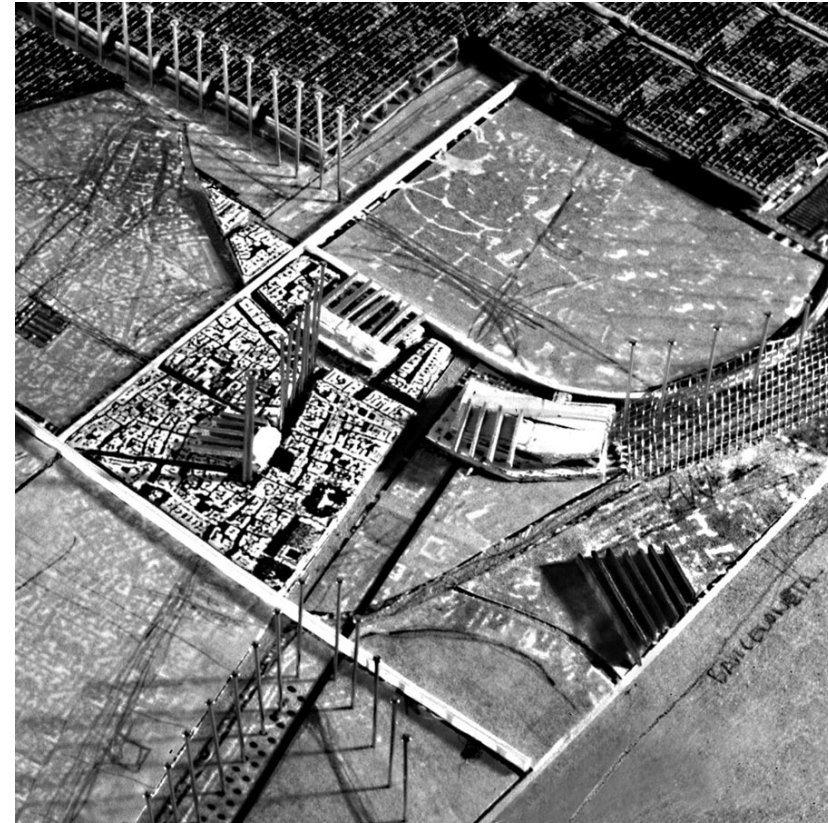


interior platform, Estacion de Francia





site analyses,
model / diagram



The “Trinity of Landmarks” establishes an identity from which the development of the project can evolve. The organization and emphasis on the built surroundings of this “zone” help to identify those elements essential to the legibility of the [image of the] city. The perceptible physical elements of this area serve as markers, not only for an understanding of the built surroundings, but also as a generator of the new interventions which work to relate and re-integrate the disparate parts into a more cohesive whole.

from *The Image of the City*,
by Kevin Lynch.

"...An environmental image may be analyzed into three components: identity, structure, and meaning. It is useful to abstract these for analysis, if it is remembered that in reality they always appear together. A workable image requires first the identification of an object, which implies its distinction from other things, its recognition as a separable entity. This is called identity, not in the sense of equality with something else, but with the meaning of individuality or oneness. Second, the image must include the spatial or pattern relation of the object to the observer and to other objects. Finally, this object must have some meaning for the observer, whether practical or emotional. Meaning is also a relation, but quite a different one from spatial or pattern relation.

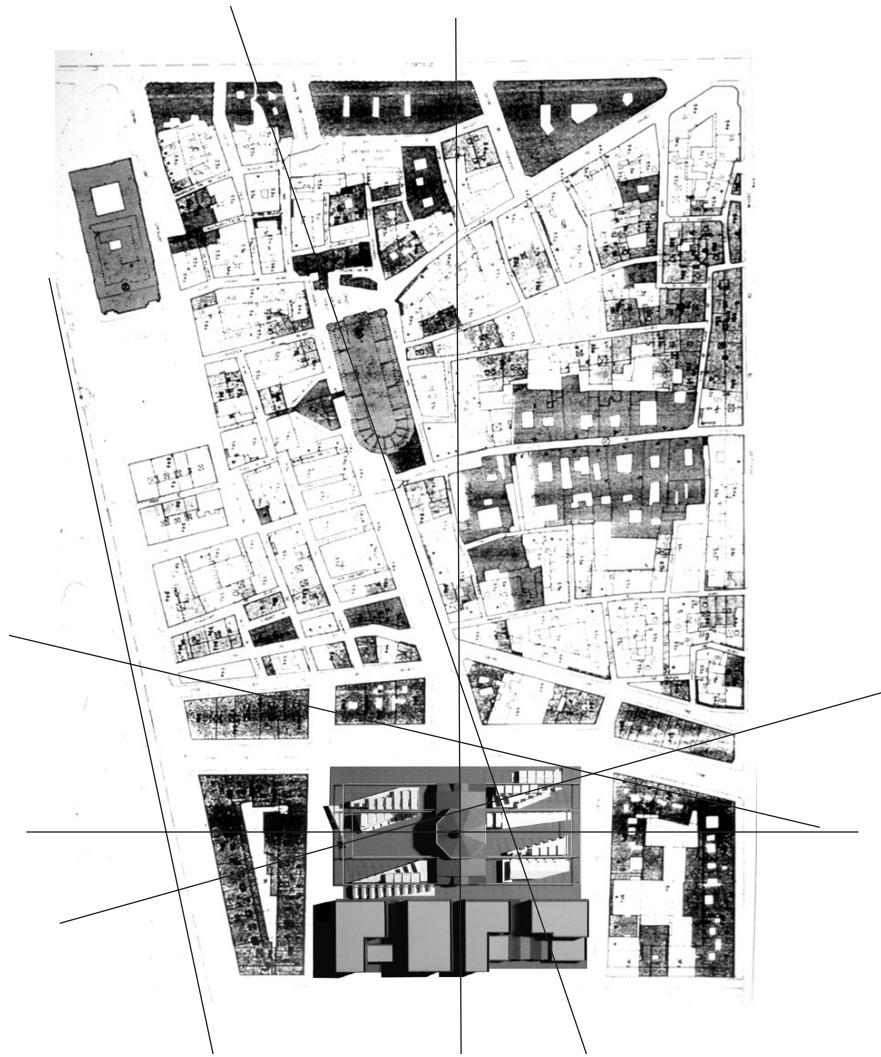
There seems to be a public image of any given city which is the overlap of many individual images ... This analysis limits itself to the effects of physical, perceptible objects. There are other influences on imageability, such as the social meaning of an area, its function, its history, or even its name ...

The contents of the city images ... which are referable to physical forms, can conveniently be classified into five types of elements: paths, edges, districts, nodes, and landmarks ... Nodes are points, the strategic spots in a city into which an observer can enter, and which are the intensive foci to and from which

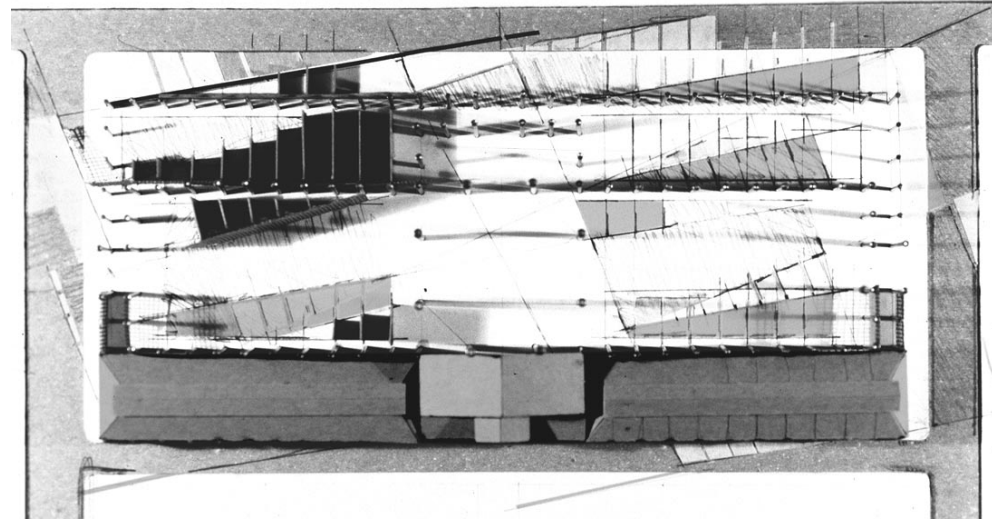
he is traveling. They may be primarily junctions, places of a break in transportation, a crossing or convergence of paths, moments of shift from one structure to another. Or the nodes may be simply concentrations, which gain their importance from being the condensation of some use or physical character, as a street-corner hangout or an enclosed square. Some of these concentration nodes are the focus and epitome of a district, over which their influence radiates and of which they stand as a symbol. They may be called cores. Many nodes, of course, partake of the nature of both junctions and concentrations. The concept of node is related to the concept of path, since junctions are typically the convergence of paths, events on the journey. It is similarly related to the concept of district since cores are typically the intensive foci of districts, their polarizing center. In any event, some nodal points are to be found in almost every image, and in certain cases they may be the dominant feature ... Districts are structured with nodes, defined by edges, penetrated by paths and sprinkled with landmarks. Elements regularly overlap and pierce one another. If this analysis begins with the differentiation of the data into categories, it must end with their reintegration into the whole image."⁴

4. "Structure and Identity" (p.8)
Kevin Lynch, *The Image of the City*





By investigating the generative power of a "Trinity of Landmarks" within the history of the site and its physical surroundings, a connectivity among and between these significant architectural elements is clarified within the urban fabric of the area.

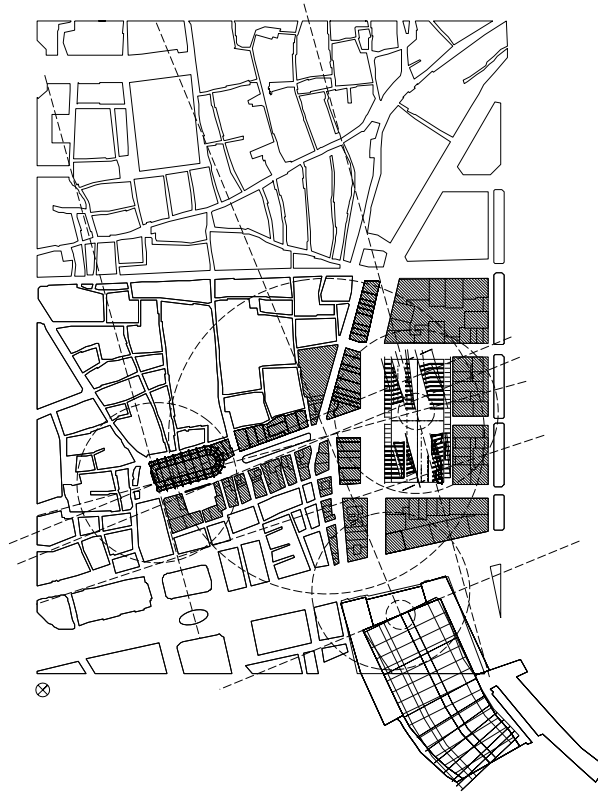
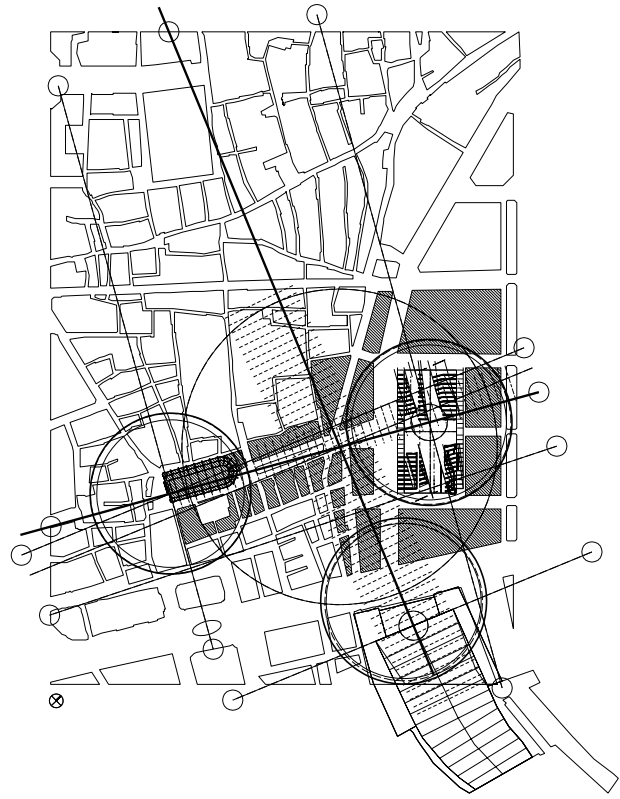


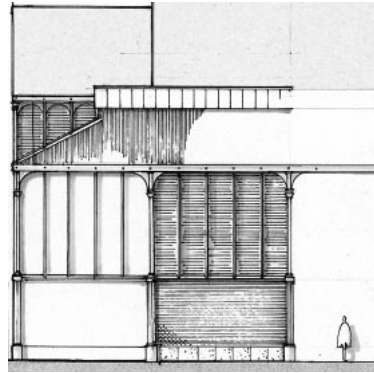
The location of the market in relation to its surroundings strongly supports the opportunity of this project to re-establish the urban links that would reconnect this element to the city. The trinity of landmarks: the Borne Market, the train station (Estacion de Francia) and the 14th century Gothic church (Santa María del Mar) orients the organization of the surrounding area into an identifiable "node" *(see K. Lynch The Image of the City pp.47-48).

The "triangle" of these significant places within the neighborhood generated some of the regulating lines ("lines of force": path of train,

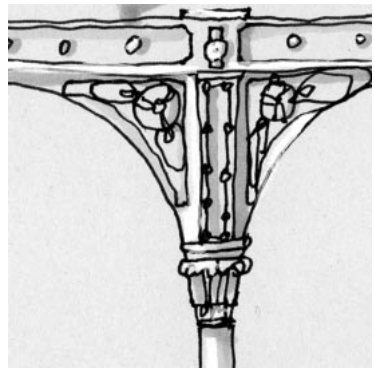
structural elements of church, pedestrian street, etc.) for the re-organization of the market's interior.

These lines extend beyond the perimeter of the market, and orient themselves among the three buildings and their surroundings. Through their geometry, they establish a generative structure to support an outward development from within the incipient core of the market and this project. Hence, this proposal extends the former limits of the market and the spatial condition changes thus infusing the neighborhood with the desired vitality that can sustain the life of the building.

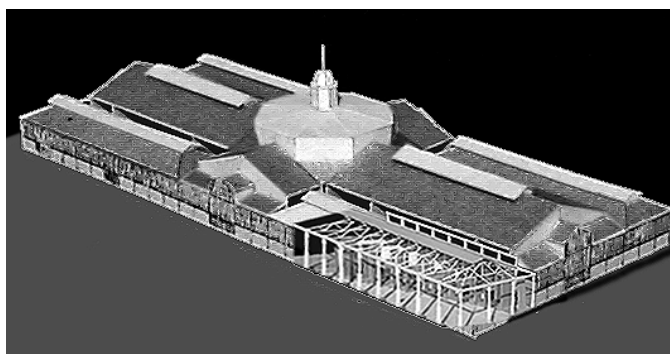
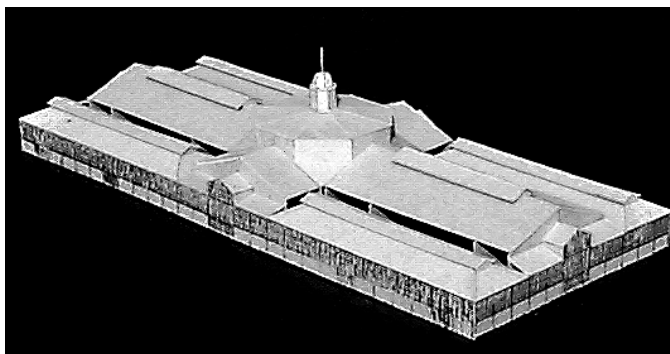




The manifestation of "city" is the of the re-assembly of (essentially) the same parts throughout history. The adaptation and manipulation of the space and "building blocks" of the city is what lends itself to the "urban dynamic". The people change over time, as do their needs and lives, and the city responds to these variations in societal norms by adopting the attitudes and interests of a contemporary population. The markers left by these generations are the signs of a development of a culture. These cycles of change are the "proving grounds" for the significant or time-enduring artifacts versus the dispensable sediment of the urban environment.

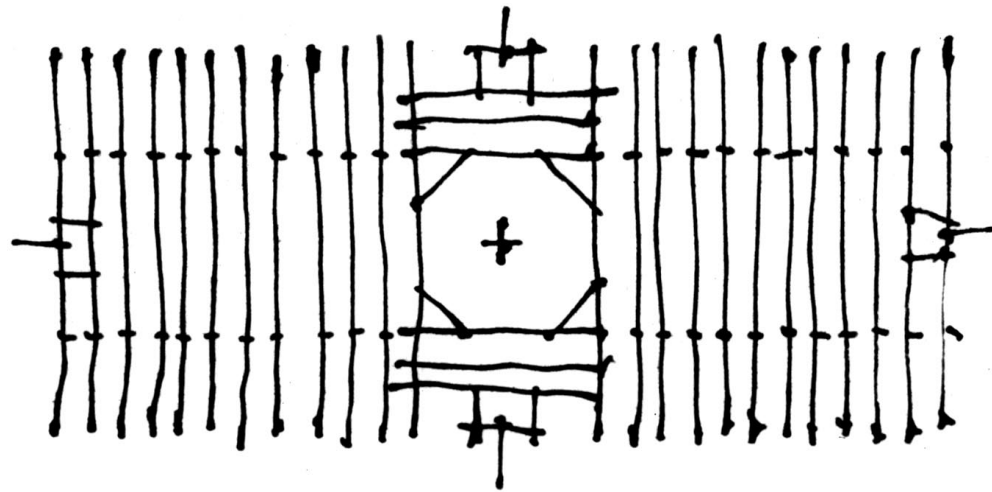


*south entrance of market
viewed from "Passeig del Born"*



The opportunity the physical assembly of parts presents, in conjunction with the notion of transforming and “re”formulating its spatial order, led to the decision to preserve the existing building almost in its entirety.

Prior to any interjection, the spatial order is very clearly composed of a central nave flanked by symmetrical “side wings”. By challenging this formal clarity through the subtleties of “keeping or removing”, “obscuring or framing” the physical parts, *new space* is given back through manipulating the existing spaces.



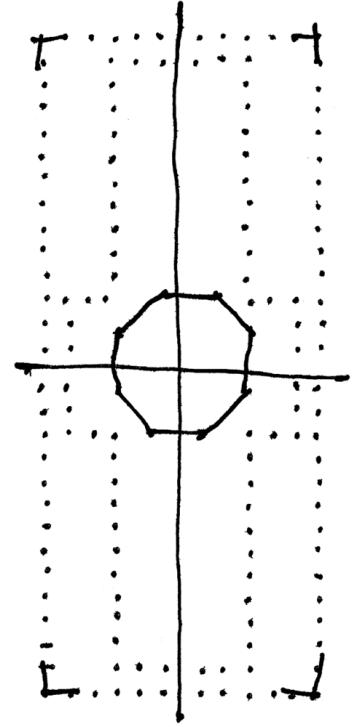
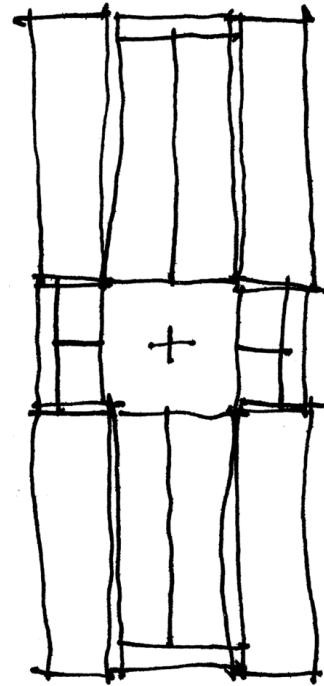
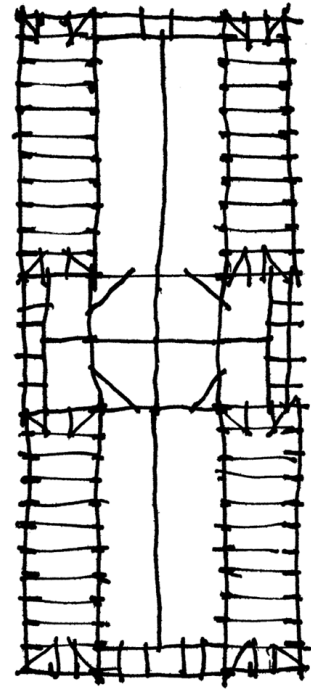
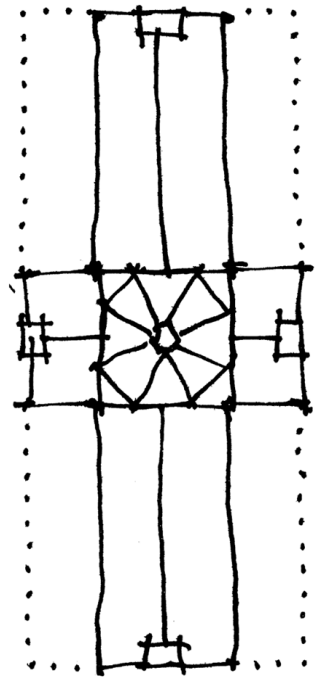
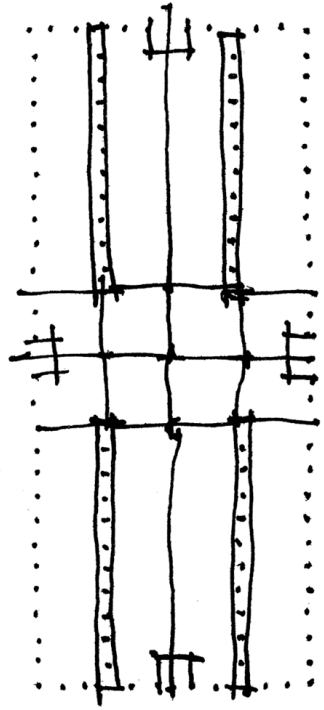
The Borne Market building can be broken down into the tectonic expression of the cast iron columns working in conjunction with the wrought iron trusses to support the ceramic roofing tile system. The strict ordering of the columns and trusses establish a systematic rhythm that absorbs the columns into the vast entirety of the building. However, when viewed individually or framed as an element, the column not only expresses the structural role it plays within the building, but it also expresses the technological achievement of its construction. Through that, it is a very clear conveyance of a specific historic dimension. In that way, architecture captures and discloses the significance of



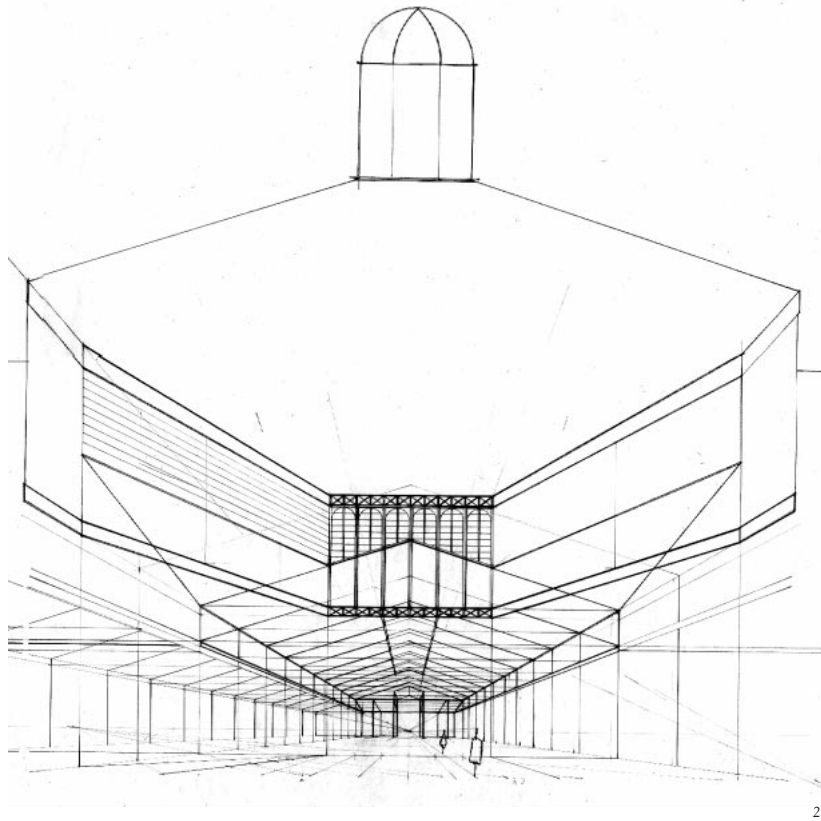
a specific moment in history and exploits it throughout the fabric of the city in the built forms that endure time. The Borne Market is one element among the countless that comprise the historic aggregate which, in fact, defines what "city" is: an accumulation of these artifacts over time.

Among music, art and everything else a culture produces, these artifacts, or culturally charged elements, such as the Borne are pre-requisites for the legibility of culture. In Koollhass' terms, it is the "encoding of civilization on its territory – the subject of urbanism."⁵

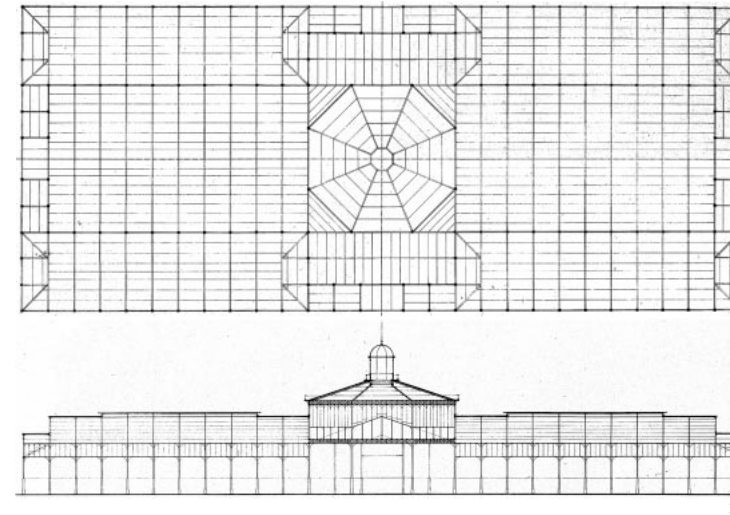
⁵ (Rem Koollhass, "What Ever Happened to Urbanism" ANY, no. 9)



“ ...the notion of a large volume today is not enough to be, in itself, an attraction ...”



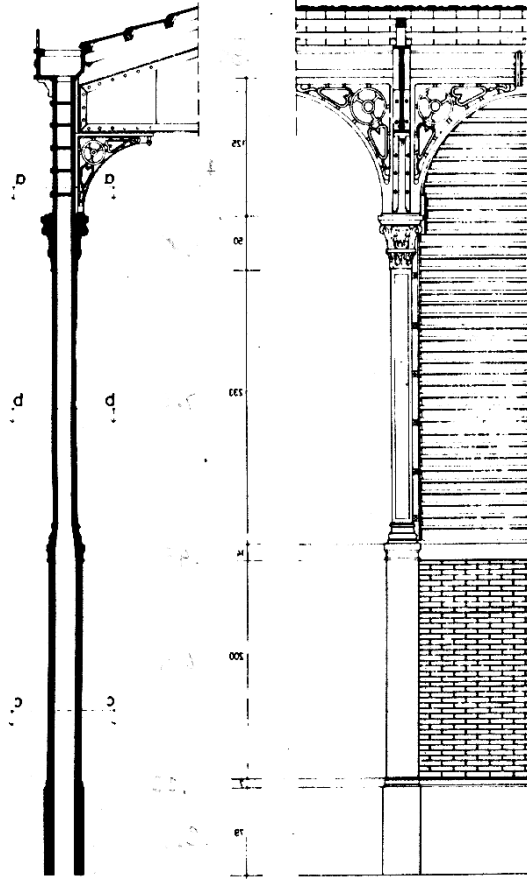
2.



1.

The market stands now as an unrelated curiosity. The notion of a large volume today is not enough to be, in itself, an attraction. For whatever reason, the market no longer performs its role. Regardless of the magnificence of the volume, it is not enough to give this artifact back to the city ... simply as an artifact. So, through seeking secondary ties *and* not critically destroying the volume, there is an attempt at building upon the possibility of re-integrating it with the surrounding environment.

1. renovation documents of the Borne Market.
Cuaderns de Arquitectura i Urbanism
1974.
2. Perspective. Study drawing of building interior.

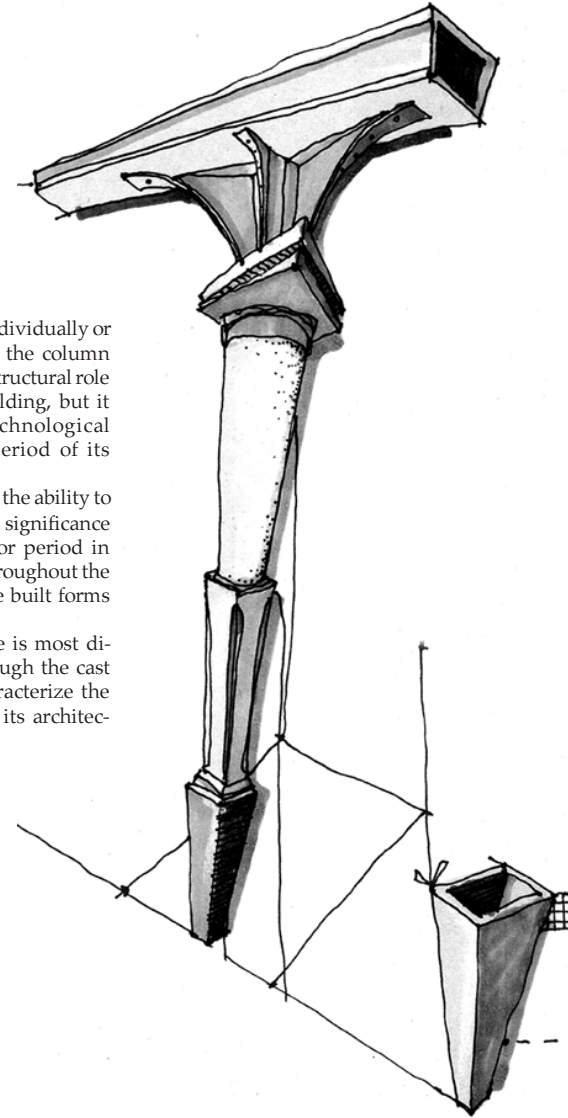


*Ianus: Old & New International Architecture.
column details / existing conditions.*

When viewed individually or framed as an element, the column not only expresses the structural role it plays within the building, but it also expresses the technological achievement of the period of its construction.

Architecture has the ability to capture and convey the significance of a specific moment or period in history and exploit it throughout the fabric of the city in the built forms that endure time.

This significance is most directly represented through the cast iron columns that characterize the Borne and distinguish its architecture from the ordinary.

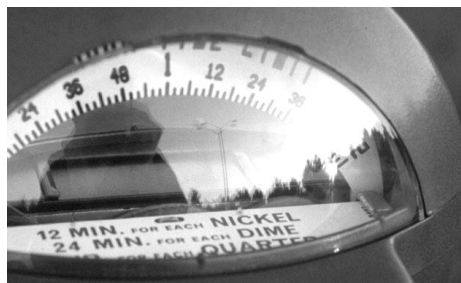
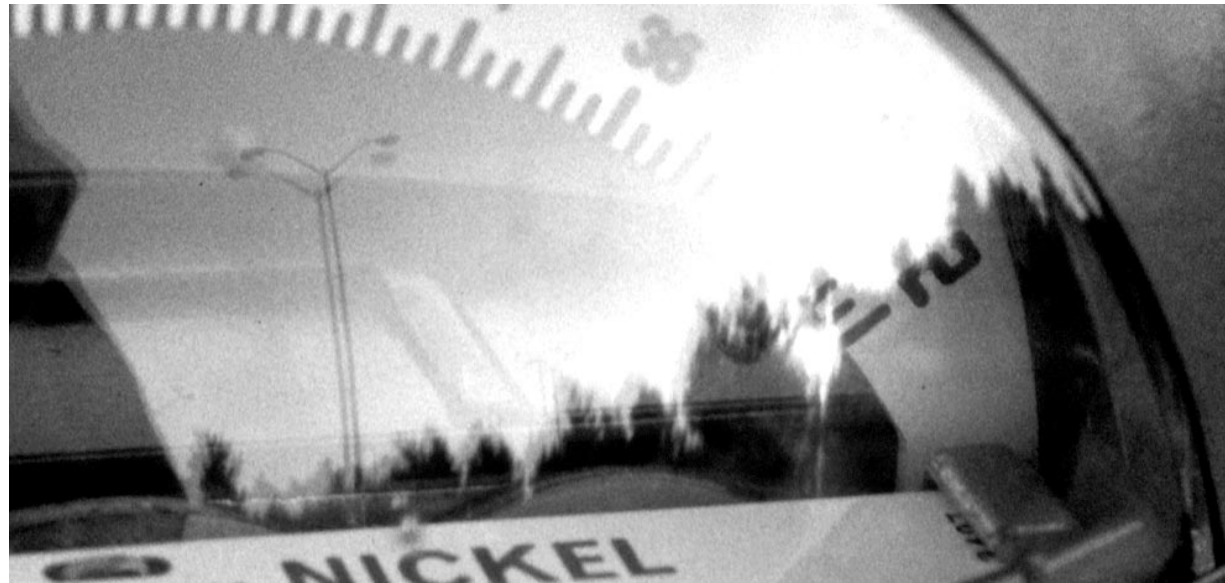




The new interference establishes a variety of individual experiences potentially inherent in the market but previously obscured through a “redundancy of homogeneity”. By staging interaction of the individual elements through “framing and obscuring”, the possibility of experience is drawn from its latent state to a more active role within the project. This act, which aims at the exposure of something seen but not appreciated, is a deliberate gesture towards the power of enhancing the commonplace in order to provoke a response.

The awareness of the environment in which we live can lead to the appreciation of one’s surroundings and the recognition of the need for substantial (meaningful) architecture.





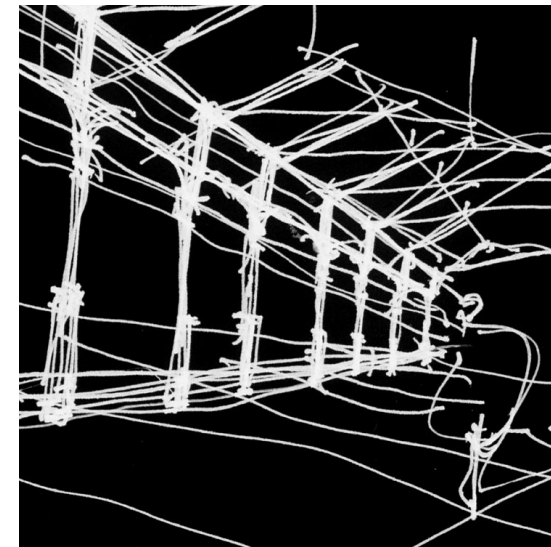
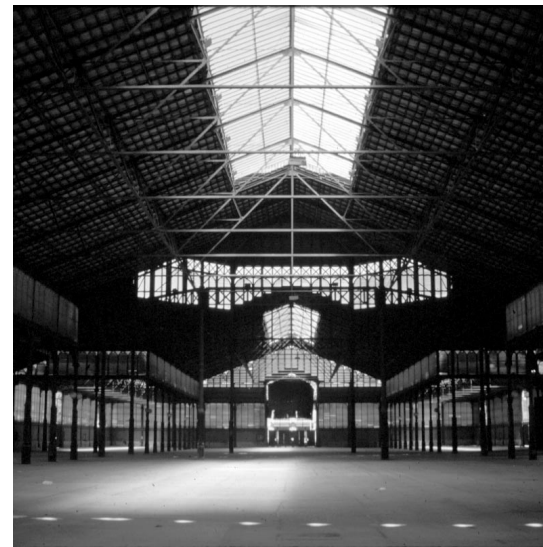
Charles Eames was quoted once as saying that architecture has the power to expose the “uncommon beauty of common things”. Similarly, Gordon Matta-Clark viewed his work as “opening up views through the invisible”.

These “views” essentially, are the exposure of the existing through the unveiling of that which surrounds us - without our never having realized it. Although his work is viewed by most as radical, the emotion invoked by Matta-Clark’s work accompanies a perception of the reality of our surroundings. The result, a heightened sense of awareness, can play a prominent role in the lasting effect of one of our responsibilities as designers of our environment.

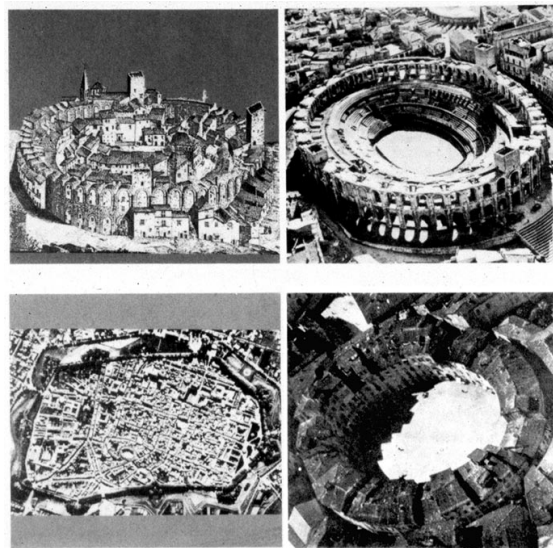
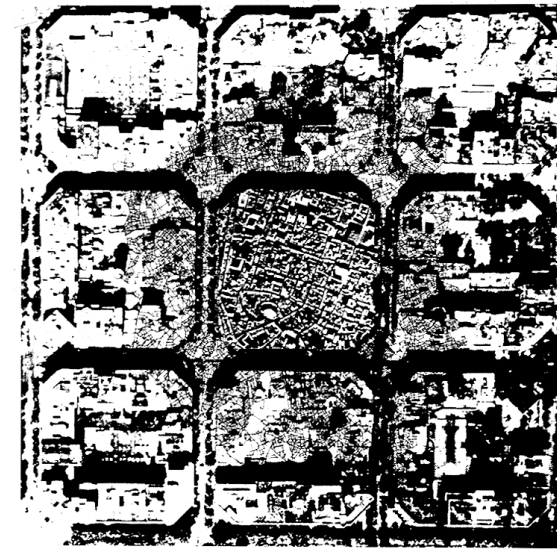


Because of its architectural significance; the highly refined columns, the material expression of construction technique, the careful assembly of its parts, the well proportioned spatial order - the Borne Market has the potential to offer the surrounding neighborhoods the possibility of being re-established as a functioning component of the urban fabric.

Because there is value in the architectonic dimension of the market, it supports the potential to "re"-form a focal point for civic activity, i.e. ... the *function* of the market.



graphic study.
"Urban Layering"



...“city” is an accumulation of these artifacts over time. Among music, art and everything else a culture produces, these artifacts, or culturally charged elements, such as the Borne are pre-requisites for the legibility of culture. In Koolhaas’s terms, it is the “encoding of civilization on its territory – the subject of urbanism.”⁶

6. (Rem Koolhaas, “What Ever Happened to Urbanism” ANY 9)

the TECTONIC

Once the artifact has been established as being significant, and the initial evaluative process is complete, the design development now shifts toward the concerns of the existing environment. The task then focuses on addressing the “significant element” as an artifact.

The analysis of the tectonic nature of the Borne exposes an historical standpoint on building and the development of an architecture through its structure. The direct expression of the assembly of the market conveys the ideas behind the design of this expansive volume. In this case, the tectonics of the structure serve as a metaphor of the physical accomplishments of the design. Architecture, unlike nature, has the ability to convey meaning through analogy. Expression of values and ideals enhance the significance of an historically charged artifact like the Borne. Now, the revealing of this meaning is addressed through the introduction of the “new tectonic” *in relation to* the existing.

The intervention aims at a “re”-presentation of history and meaning through the tectonic.

In his essay "The Case for the Tectonic", Kenneth Frampton states that the question of a grounds for architecture resides in the understanding of both "structural and constructional form". This investigation into construction as a representation of an architectural significance or meaning can be equated to Frampton's notion as "... an attempt to evaluate architecture in terms of continuity and inflection rather than in terms of originality." The intervening design, therefore is an attempt at exposing the original architectural act as one of "making and revealing" while, at the same time, reinforcing its own architectural value.

"... the 're-presentation' of history through the tectonic ..."



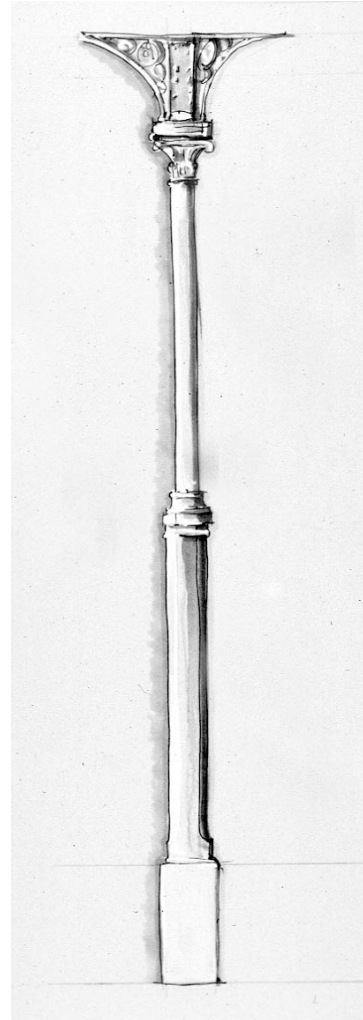
A system of controls when enforced and applied in conjunction with the existing conditions of the market and its surroundings, establish a structure that responds to the performance of the two systems working in a reciprocal and complementary fashion. The new system creates a dynamic tension with the established order of the *site* and sets up an opportunity to re-activate the market and its surroundings through the new dialogue that not only exalts the historic, but at times virtually establishes an independence within its counterpart (complement). The “give and take” between these two systems is the fundamental characteristic of this project.

Within the project, there is a constant fluctuation of hierarchies that establishes a balance between the two systems and enables them to enhance each other through their symbiotic relationship. The dynamism of these two interactive systems derives mainly from the use of three related phenomena; *perspective*, *parallax* and *point of view*.

Perspective is the appearance to the eye of objects in respect to their relative distance and position. The understanding of perspective was developed around the year 1000 A.D. by the mathematician Alhazen. Alhazen recognized that we see an object as each point of it directs and reflects light into the eye. The angle at which this “ray of light” enters the eye accounts for the apparent change in size of the object we are viewing and affords us with the ability to perceive spatial depth. The further away the object is from our eye, the more acute the angle is as it enters our eye. Conversely, objects which are closer to us reflect light into our eye at a wider angle and subsequently appear larger than those at a lesser angle. When thought of in a “cone of rays”, the object which is further away creates a more narrow cone while the closer object reflects a cone into our eye which is much wider and therefore the viewed object appears larger.

Perspective within the repetitive order of the existing Borne Market plays a very prominent role in the perception of the building and the space that it encloses. The rhythm of the structural elements that determine the enclosure of this immense volume occurs at such methodical intervals that the space is very clearly delineated and discernible. The regularity and symmetry afford a direct understanding of the entirety of the market as it stands today. The effect of *perspective* within the market dominates the character of the Borne and remains the foremost phenomenological aspect of the building. The trusses and columns that exemplify the character of this structure create an effect of perspective that accentuate the vast volume enveloped by the shell of the market.

Parallax is defined by Webster’s as: “the apparent displacement or the difference in apparent direction of an object as seen from two different points not on a straight line with the object; especially: the angular difference



in direction of a celestial body as measured from two points on the earth's orbit” while Peter Collins discusses *parallax* in his book Changing Ideals in Modern Architecture 1750-1950 “whereby an apparent displacement of objects occurs when the point of observation changes”.

Collins goes on to add: “The phenomenon of *parallax* ... a device for astronomical measurement, ... has been an important element of architectural composition, and has been manifest in architecture ever since the first hypostyle hall was constructed. It occurs in every large space containing rows of free-standing columns, and must have produced particularly striking effects in the great mediaeval churches and halls when these were also subdivided by low screens ...”

Similar to these *hypostyle halls* the Borne Market derives much of its dynamic presence from the manipulation of the free-standing columns. As we move among these rows of columns, we are subject to the effects of *parallax*. Views change from a seemingly solid wall of cast iron to an opening array of columns, then just as the previous row becomes a repetition of equally-spaced columns, nearly seventeen feet on center, a perpendicular row of similar columns begins its variations on a different axis within the market. The enormous volume which is interspersed with 152 of these space-defining columns is a constantly-changing dynamic space that is energized by the interplay of the phenomena of *parallax* and *perspective*.

Point of view is introduced through the project as an intervention that behaves as a constantly-changing variable within the context of the two more uniform variables of *perspective* and *parallax*. It can be viewed as a control that interposes a third variable into the formula, thus enhancing the effects of the two pre-existing phenomena. At each point of intersection of these three variables the project manifests itself in its true essence. The interaction of the pre-existing phenomena, and the interjection of a new system opens the opportunity for the existing architecture to become enhanced by, while simultaneously furnishing an essential element to, the new architectural system. The new and old thus become one and remain dependent upon the other’s presence for support and validation.

These three interdependent aspects of the Borne Market function as reciprocal supports. Whereas *perspective* is dependent upon the viewer’s point of view, it is fundamentally the variation in the point of view which, in turn, controls the effects of *parallax* (as well as *perspective*). There is a dynamism which is in constant flux within the new environment of the Borne Market, and just as the *internal* composition of the market is activated by this interaction, the nature of the project allows these “functions” to spill over into the immediate surroundings and to influence those pre-existing conditions which can draw off of the new organization of the market.

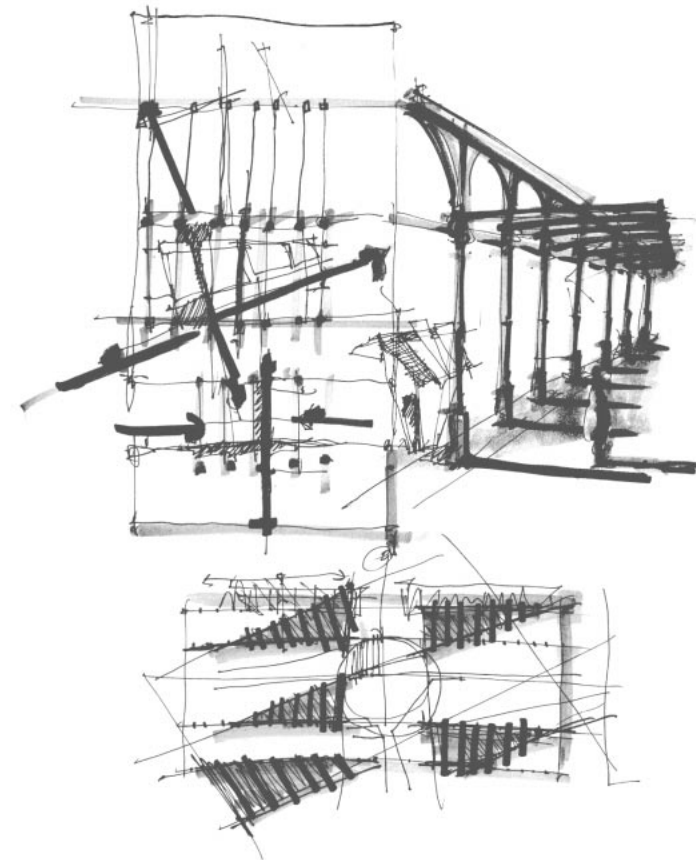
Urban architecture can be strongly expressed and accentuated in the articulation of the tensions of the “*in-between*”. The *in-between* can be addressed on several levels or scales of two or more strongly dependent urban conventions or entities. This expression can reside in the development of the dialogue between the materialized edges of adjacent elements or in the relationship expressed through the response of *boundary* conditions and how they are dealt with. Independent elements are all factors that formulate the dynamism of the urban environment, and established orders and pre-existing architectural elements can be often be utilized as a means to establish a new expression of contemporary urban conditions.

Proximity to, and the juxtaposition of contrasting and/or complementing elements can underline the relationship of new and old and therefore can help to establish this relationship which is expressive of these new urban conditions. In order to take advantage of that which is relevant in the existing urban fabric, a high level of attention must be paid to the treatment of the relationships established between that which defines the city’s present conditions, and that which we can add to further the richness of the urban texture and experience of our cities.

The relationship of the existing order of the market building and the structure of the intervening forms establish the foundation of the dialogue that is this thesis. There is a recognition of the artifact, and subsequently the manifestation of the artifact’s resistance. This

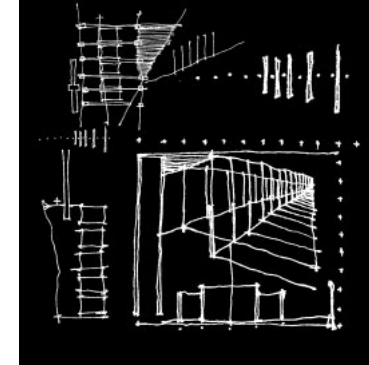
manifestation is the embodiment of the time-enduring qualities of the market; an historical reference (and reverence) to the culturally significant urban element.

Within the Borne Market project, there arises the opportunity for the issues of urban, architectural, visual and physical *thresholds* to articulate the edge of the “*in-between*”. Transitional spaces, or interstices, are thoroughly dynamic elements in such situations. Within the scope of this project, thresholds exist between the Estacion de Francia and the city blocks of the Borne Market, between the Church of Sta. Maria del Mar and the market with its immediate surrounding zones. *Permeability* as an issue is dealt with and addressed most directly through the smaller scales, but accepted as a *design generator* applicable to scales far beyond the direct scale of investigation. Transitions are investigated and addressed most directly in the change from the street into the market and vice-versa. In this respect, the issue of the extent of the site is critical. Within this phase of the project’s development, only a limited “range of inquiry” could be addressed in depth. Obviously, these issues, with time, would be addressed on a more extensive scale. Subsequently, this project is presented as a resolution of a valid and sensible structuring system presented through *some* of the resultant possibilities of working within these constructs. This system is developed in direct response to those issues found to be prevalent within the parameters of the chosen site and its viable possibilities as a design project.



The new construct functions within a symbiotic relationship with the existing. Varying degrees of interaction between the two systems add to a multiplicity of experience. The new elements function in connection with, in contrast to and including independent of the pre-established order of the Borne Market.

PROGRAM / INTERVENTION



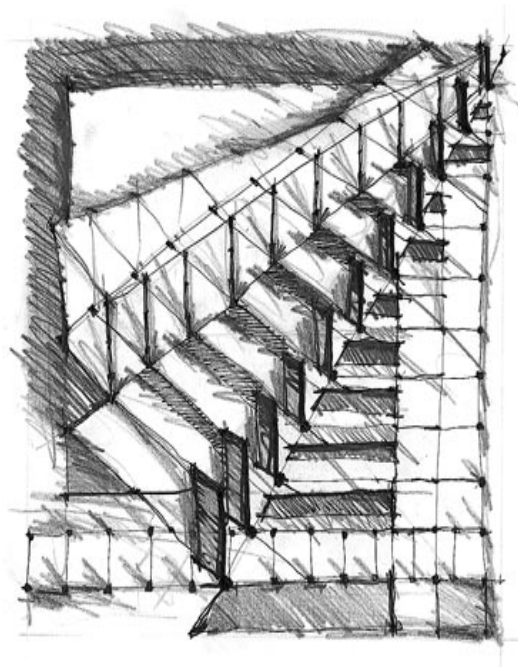
Throughout the entire project, there is an experiential progression, and sense of connectivity that ties the viewer to the surroundings. The interaction with the building(s) leads to the exposure of the essence of the parts. Offered through variable sequences set forth through a construct, the experience of the individual is interpreted and shaped to the particular moment.

There are specific parameters that, while supporting the possibility of multiple interpretations, become secondary to the individual experiences of each person. The physical dimensions, the notion of lines of movement and the fields of possibility comprise a constantly changing set of variables that transforms through the act of approaching from different "angles". Each "shift of perspective" establishes different relationships or connections among the elements of the new market.

Along with the effects of perspective, both parallax and point of view play leading roles that enhance the experiential multiplicity of the Borne.

The Sonsbeek Pavilion by Aldo van Eyck and the work of Richard Serra are worthy examples of paths of connectivity and the notions of directing experience. There is a connection through "directing layers" that informs the individual in his interaction with the project. The act of directing plays a prominent role, whether it be physically directing the individual through the volumes of a built space, directing the senses through an experience, or even the directing of memory through a sequence of unfolding events.

These various notions of progression, sequence and memory are crucial to the understanding, not only of the project, but also of our daily experience within world we live.



The goal is not to try to *justify* the *construct*, but rather to explore the possibilities of the application of a new structure to an existing system. The interjection explores the options that are brought forth through the implementation of a *complementary* ordering construct.

Subsequently, there is an expression of the two systems working in conjunction. By establishing a dialogue between themselves, they work to emphasize and reinforce the significance of their two distinct, yet complementary systems.

"People in their movements are influenced and directed by three-dimensional confines and by the *structural lines of such confines*; in other words, the general tension becomes a specifically "directed" dynamic tension. If these confines are architectural structures, their volumes and their scale exert pressure and resistance and stimulate and direct our reaction to the space around us..."

"Space is perceived by the visualization of its limits and by *kinesthetic experience*, i.e. by the sensation of our movements. In the state of "visual tension", *kinesthetic sensation* and visual perception fuse most intensely and the conscious enjoyment of townscapes as artistic experience produces just this visual tension."

7. Paul Zucker. *Town and Square* (p.6)

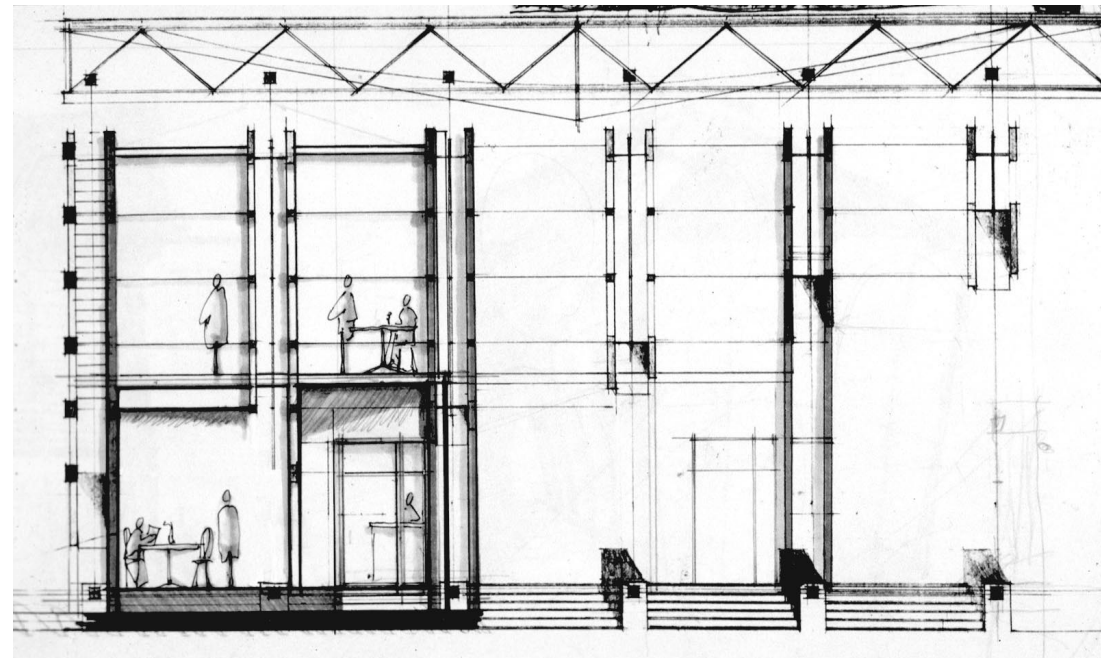


*Kulturmagasinet.
adaptive re-use project.
Sundsvall, Sweden.*

The dialogue between that which occupies space and the volumes defined by the built forms themselves effect a dynamic tension. These influences direct our reaction through the pressures and resistances which define the kinesthetic experience of the place. Function is secondary to phenomenon.

The wall, the floor and the ceiling are the elements which direct the individual toward that experience .

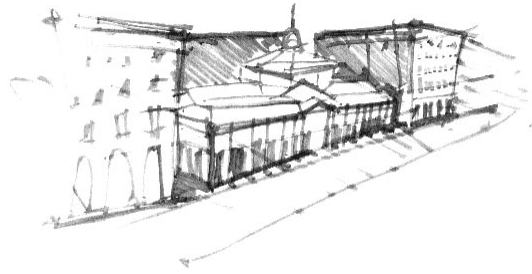
A stimulus.
An intervention.
Interference and confrontation.
The staging of possibility.



p e r m e a b i l i t y

"... meaning may be thus encoded through the interplay between 'joint' and 'break' and in this regard rupture may have just as much meaning as connection ... architecture is interested in ... putting together, spaces and materials in a meaningful manner ..."

-Marco Frascari

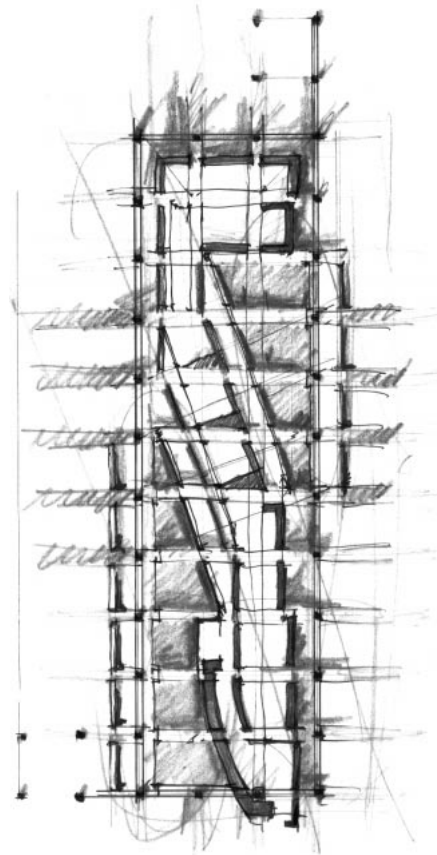


The task is to reclaim the Borne Market for the city and to re-incorporate it into the complex urban fabric through the interpretation of the current conditions which influence the setting, role and the future development of the neighborhood.

The perimeter condition of the Borne Market and its surrounding city blocks lies at the root of the downfall of this potential urban core. The increase in vehicular traffic and the establishing of circulation paths within the restrictive confines of the Gothic Quarters has essentially severed the market from the neighborhood it once served. The perimeter walls of the market contribute to the impenetrable nature of the Borne as it now stands. Immediately beyond the roadway of "Calle Comercial", on the north side of the street, the

brick wall and repetitive columns of the market form a backdrop to nothing other than passing cars and an occasional pedestrian. Prior to the organization of the current traffic patterns, the surrounding street served as a gathering place not only to those who went to the Borne, but also to those who lived around the market. The interstitial space, which is now the street, served as a transition between city and market, house and street, public and private. It contributed to the functionality of the market building and the accessibility it offered to its users.

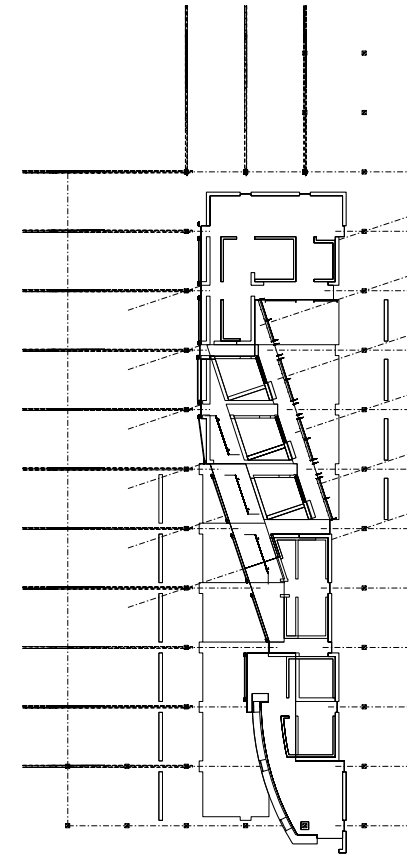
Today we are confronted with the fact that the automobile is a dominant element in our lives and our urban landscapes. Without drastically altering the infrastructure of the city's circulation, and returning the street to the



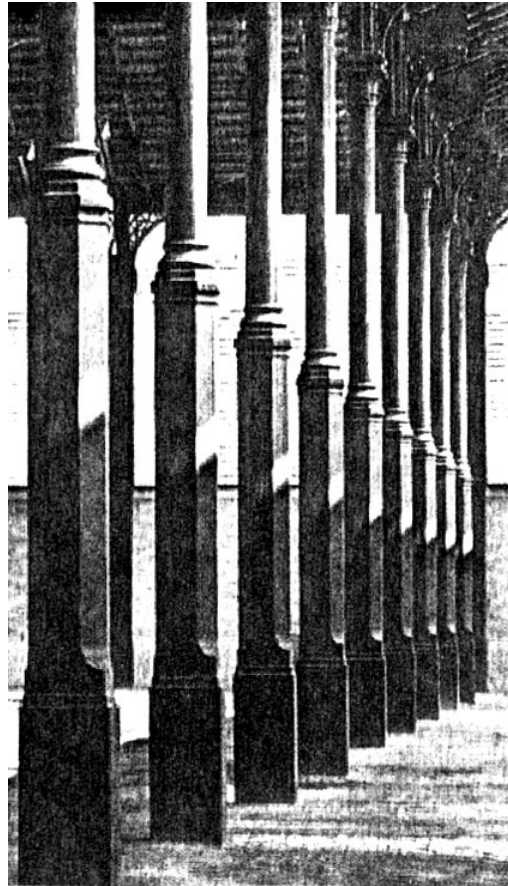
pedestrian, this project aims at bringing the pedestrian street into the market.

By opening up the perimeter walls, the Borne is susceptible to the infiltration of the people of the city and begins to bring life back into a dead space that stagnates within walls that act to impede and

obstruct rather than enclose. Once opened, the "flow" of space moves well beyond the limits of physical boundaries and begins to unite with the pedestrian streets of "Calle del Borne" and "Calle Montcada" rejuvenating a link between the three elements: the Borne Market, the Estacion de Francia and the Church



of Sta. Maria del Mar (and its surrounding neighborhood i.e. Picasso Museum, etc.). This permeability becomes essential to the revitalization of the Borne Market, and establishes one of the underlying themes of the entire project.



interior columns, Borne Market

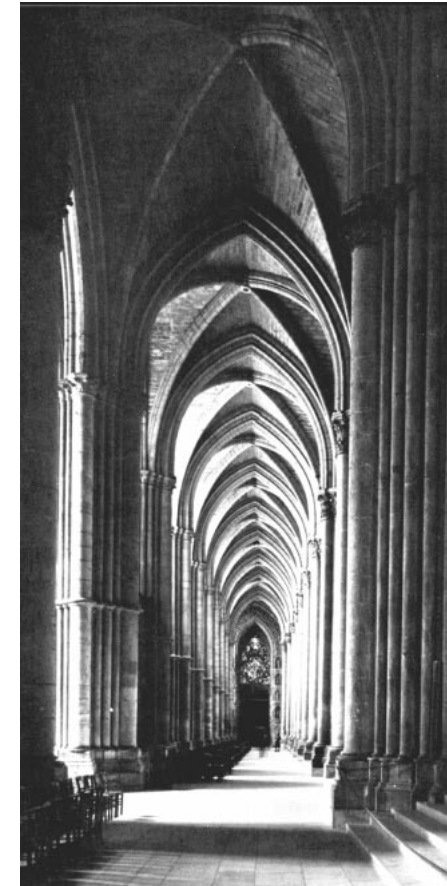
“It would be wrong to assume, as some writers have assumed, that Classical volumes were spatially dull. Even the most symmetrically arranged box-like room could, when richly adorned, give different visual and emotional sensations as one moved around in it, and perceived its walls from different angles. Moreover, large rooms subdivided by columns produced even more exciting impressions as a result of parallax. But whatever the extent of this variety, its nature was still essentially the same as that produced since remote antiquity by the walls, porticoes and hypostyle halls of the monumental buildings of the past, and the new attitude towards space inevitably depended on changes of a more radical kind.

The change which occurred in the mid-eighteenth century concerned new devices for achieving parallax. Parallax is defined by the dictionary as ‘the apparent displacement of objects caused by an actual change in the point of observation’ ... In architecture, it means that as one moves through or past a colonnade, the columns not only appear to change position relative to one

another, but also appear to change position relative to whatever is perceived through them or behind them.

The multiplication of real (as opposed to illusionistic) effects of parallax was to prove impossible until developments in steel and reinforced concrete construction made every large building essentially a sequence of free-standing columns, and until the manufacture of large sheets of plate glass and the invention of modern heating equipment made buildings of every sort capable of becoming vast glazed hypostyle halls. But already in the middle of the eighteenth century we find an increase in the number of artificial effects of parallax, and also a new and sudden interest awakened in the aesthetic implications of the phenomenon itself, though only in general terms ... in the cathedral of Notre-Dame, ‘the spectator, as he advances and as he moves away, distinguishes in the distance a thousand objects, at one moment found, at another lost again, offering him delightful spectacles ... while the visitor moves forward, the cluster of columns seems to move too, opening up constantly changing views’.”⁸

8. *Changing Ideals in Modern Architecture, 1750-1950* (pp 26-27) Collins, Peter 1965.

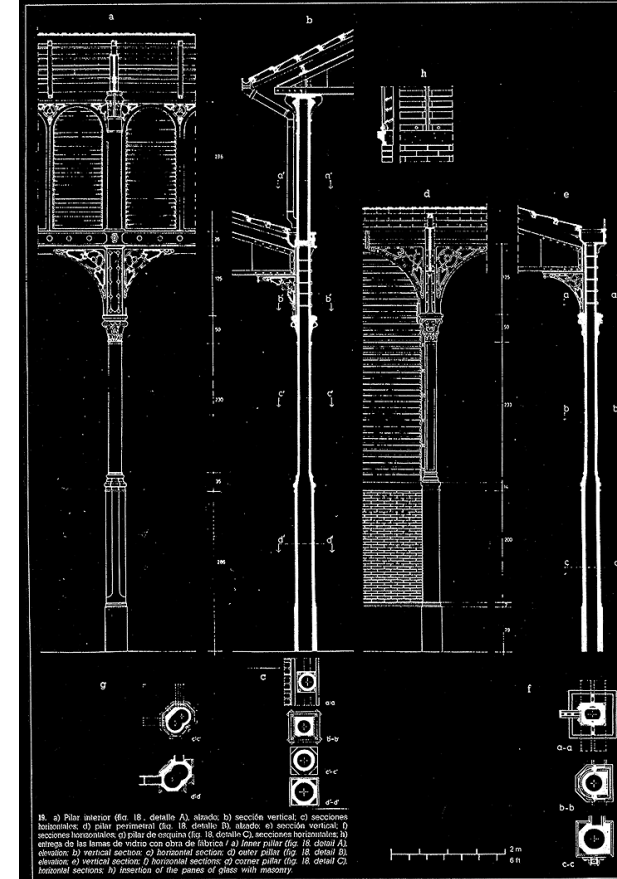
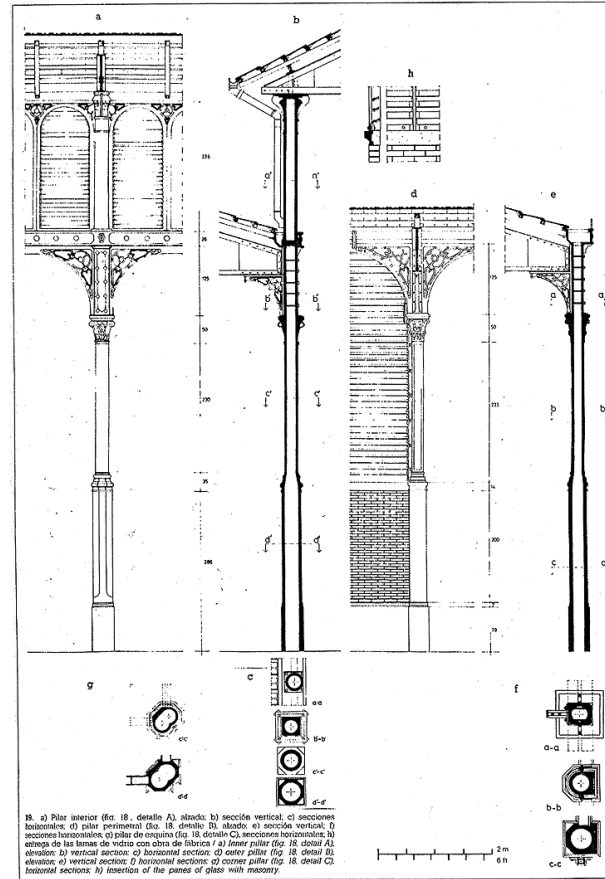
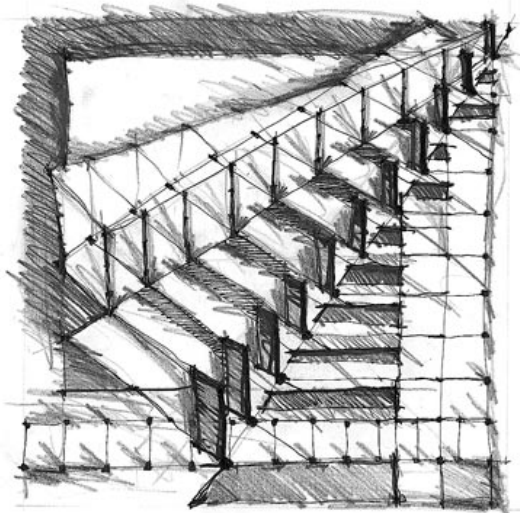


aisle, Rheims Cathedral

“... the phenomenon of parallax whereby an apparent displacement of objects occurs when the point of observation changes ...”

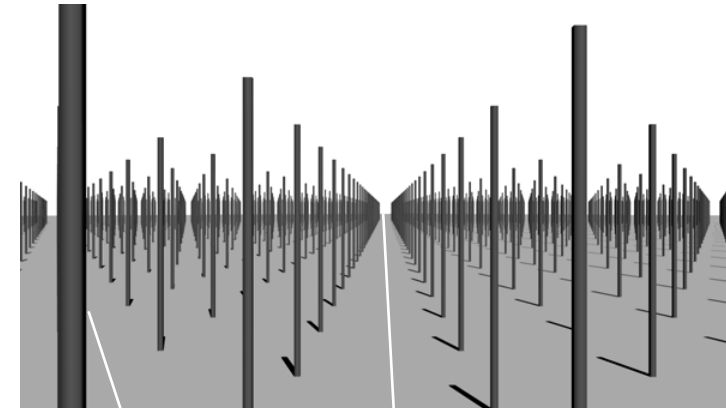
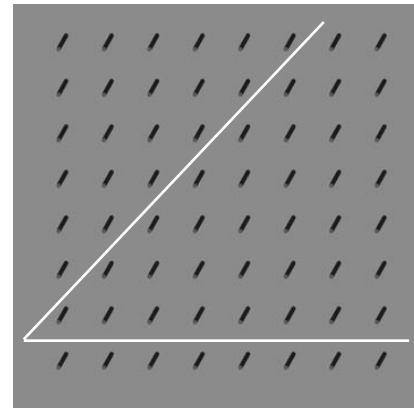
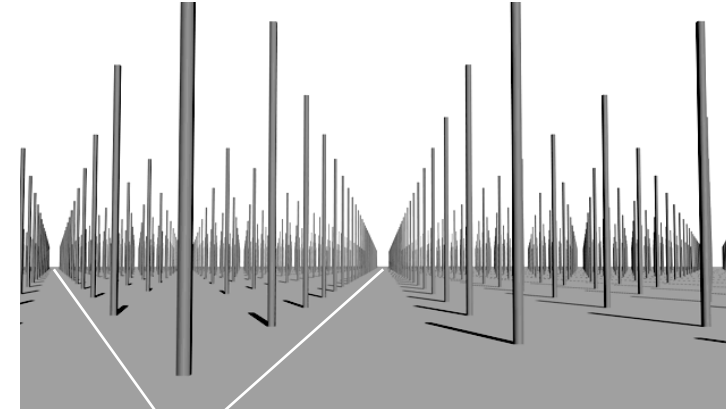
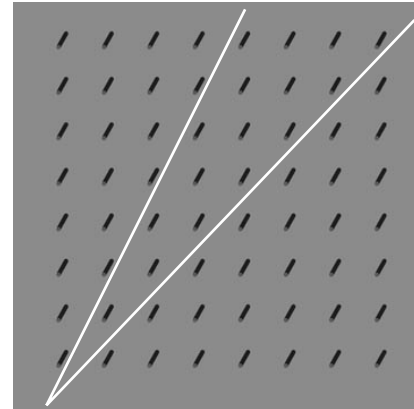
p a r a l l a x

Similar to the effects employed within the first *hypostyle halls*, the Borne Market derives much of its dynamic presence from the manipulation of the free-standing columns. As we move among these rows of columns, we are subject to the effects of parallax. Views change from a seemingly solid wall of cast iron to an opening array of columns, then just as the previous row becomes a repetition of equally-spaced columns nearly seventeen feet on center, a perpendicular row of similar columns begins its variations on a different axis within the market. The enormous volume which is interspersed with 152 of these space-defining columns is a constantly-changing dynamic space that is energized by the interplay of the phenomena of parallax and perspective.



“... In architecture, it means that as one moves through or past a colonnade, the columns not only appear to change position relative to one another, but also appear to change position relative to whatever is perceived through them or behind them...”

The effects of parallax were addressed as one generative idea for the project. The interaction of the new building with the existing order of the Borne presented the opportunity to manipulate the two and accentuate these natural effects. As a means to amplify the “artifact”, and as an approach to the organization of the new, parallax was viewed as a dynamic phenomenon that complemented the nature of the overall project.

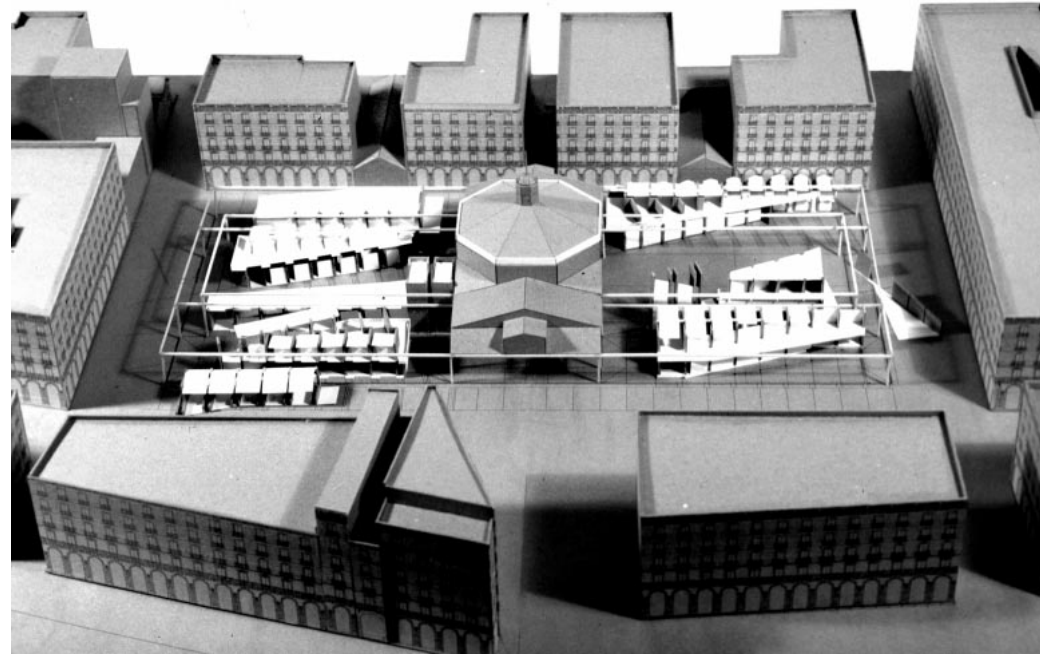
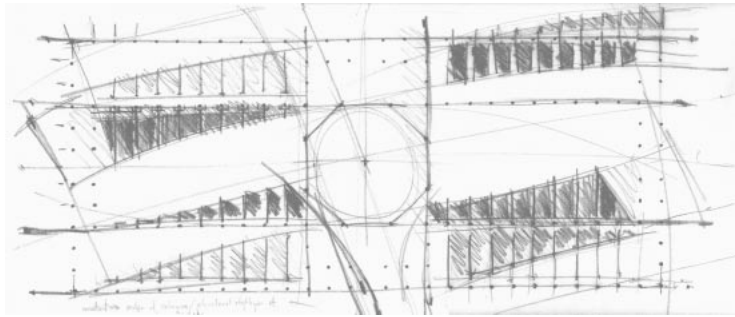


parallax study

urban topography

"... the quality of instability allows it to take different forms within the interior ... to be transformed into a landscape. The independence of the work, when used almost as a decision-making method, brings precision to the definition of a place, forming a framework for the figure to fit into."

-Enric Miralles



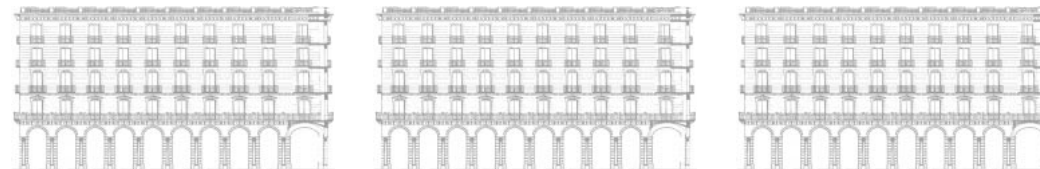
The adaptation and amplification of existing salvageable urban elements into functioning components of the contemporary urban environment affords us with the opportunity to integrate that which formed the urban fabric with the contemporary conditions of our cities.

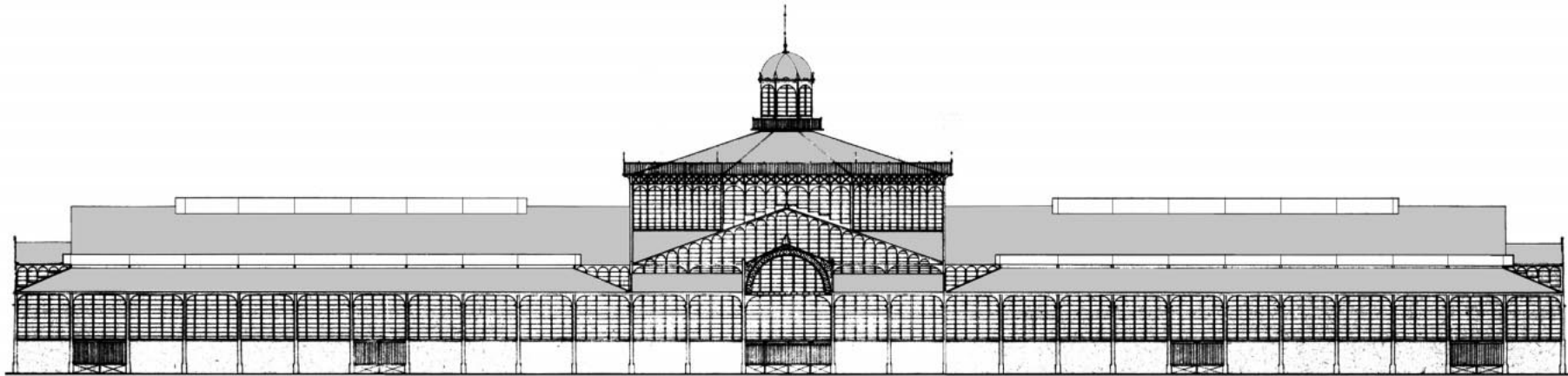
The evolution of the city as an organism allows for these adaptations and interpretations through a manner in which, if done well, can establish a character that embodies the urban artifact as a culturally significant element contributing to the entirety of the [image of the] city.

The intersection of the resultant forms is a manifestation

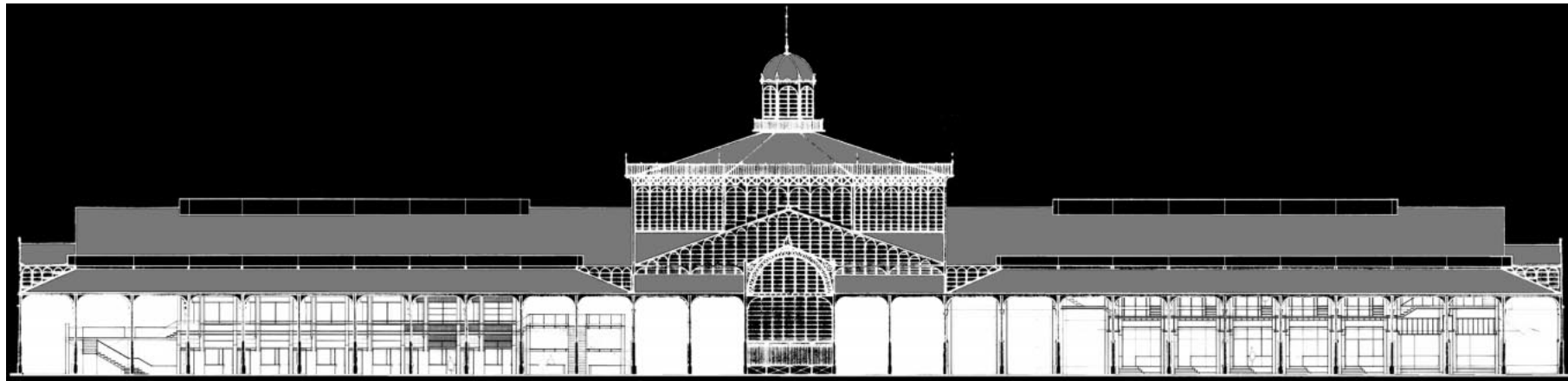
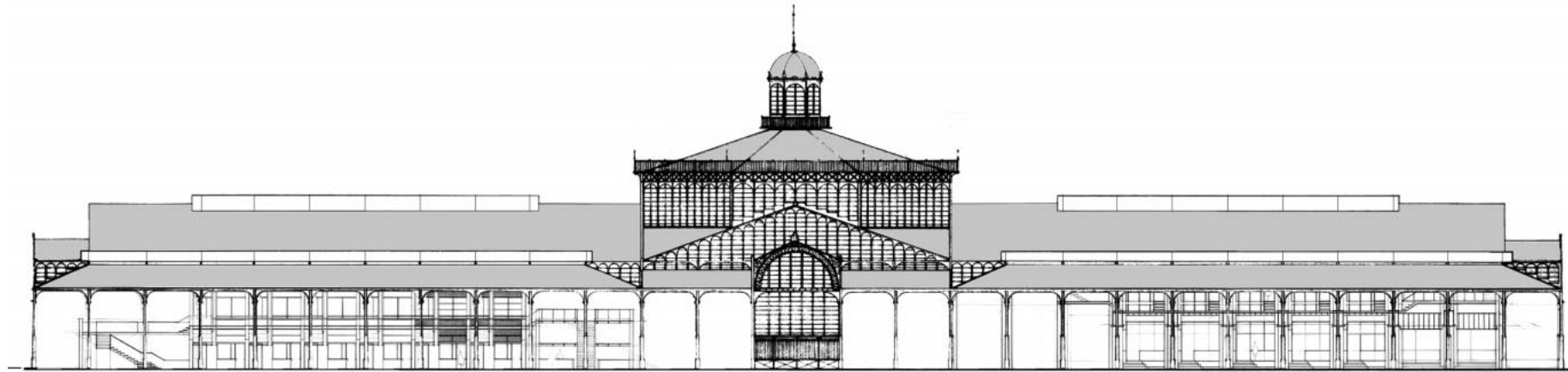
of the progression of time. A mark is left by the past, at times more prevalent than at others, but each of these marks contributes to the understanding of the current settings. Italian architect Vittorio Gregotti states that "geography is the description of how the signs of history have become forms, therefore the architectural project is charged with the task of revealing the essence of the geo-environmental context through the transformation of form."

"Urban geography" hence serves as an historically charged indicator or communicator of residuals of the city's evolution; a connection or joint between the past and the present.





The homogeneity of the perimeter wall of the market established a separation between inside and outside. This enclosure now works to create a domain far too rigid to support either a variability of the interior, or a connection to the surrounding environment. The need for such a division of space is no longer present, hence the perforation of the building's shell, and the subsequent insertion of the intervention.



By removing the separating wall that stands between the interior of the market and its surroundings, the first act toward integrating the space is achieved. By dissolving the barriers and irrigating the space with possibility, a multiplicity of interpretation is set forth and works to enhance the urban nature of the market and its environs.



By pulling away the perimeter wall and introducing the "intervention", the syntax of the new finds its place among the order of the existing.

The accumulation of artifacts leads directly to the legible evolution of the urban environment. There is a direct expression of the uncovering of the past while exposing the layering of time. The process of change is articulated through the *image* conveyed by the accumulation and subsequent assembly of parts.

As an ever-changing "organism", the development of the city is a progression, manifest through a collection of parts working in a state of balance and synergy. By accepting this as inherent to the city, the project is able to aim at conveying a *truthfulness* that uncovers the nature of urbanism.

Thus, the encoding of progress on the new market as artifact infuses the built environment with charged indicators that facilitate the reading of history as context.



“ ... detect certain qualities ...”



“La Boqueria” Market
Las Ramblas facade
Barcelona, Spain

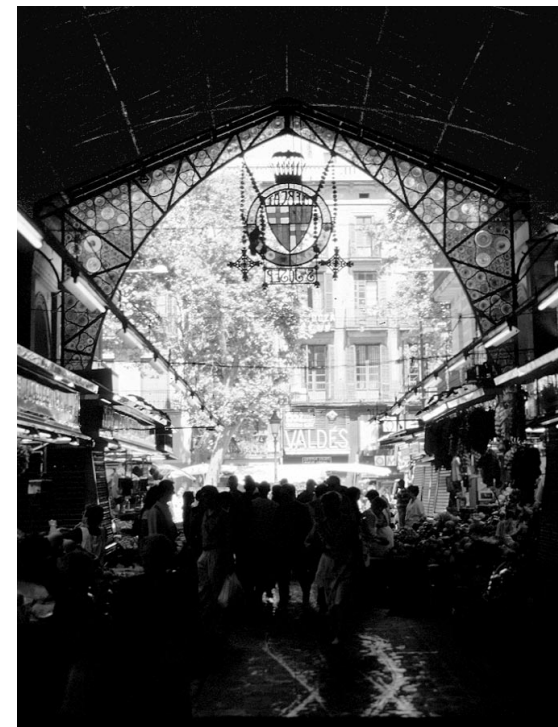
From an analysis of attitudes on an historic standpoint, the project now shifts into the specifics of the market building as a significant element. The objective is focussed in response to the historical context as continuity and aims to infuse the artifact with new vitality as a responsible reaction to the resistance of the significant architectural artifact.

The responsibility of the architect is to *detect certain qualities*, and articulate them in a manner which illuminates their existence and reinforces their value as a thread in the urban (and cultural) fabric.

The act of revitalizing the urban artifact, in this case the Borne Market, is the direct response to the concern of re-forming the functionality of an existing structure to coincide with today’s settings.

Through directly addressing the building and its explicit qualities, this approach aims to exploit those conspicuous attributes in attempt to support the “certain”, albeit *implicit* properties.

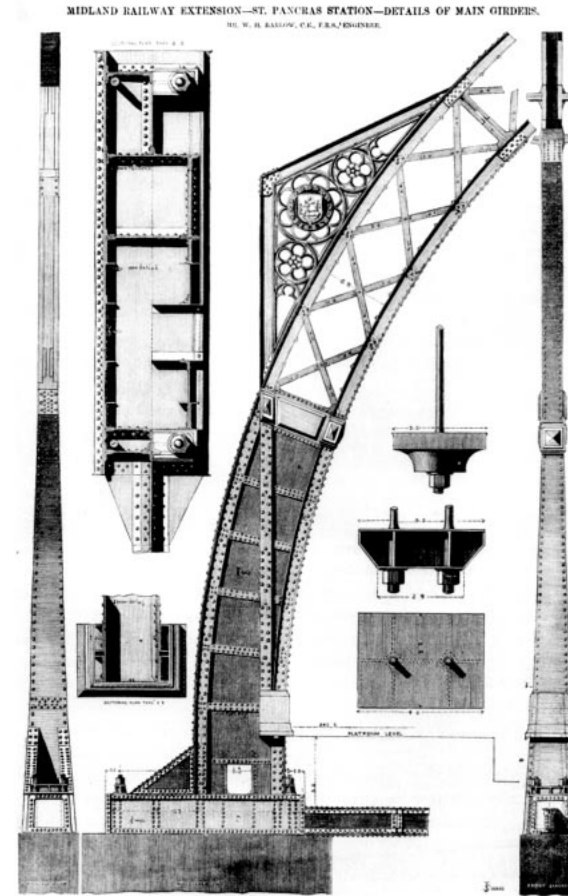
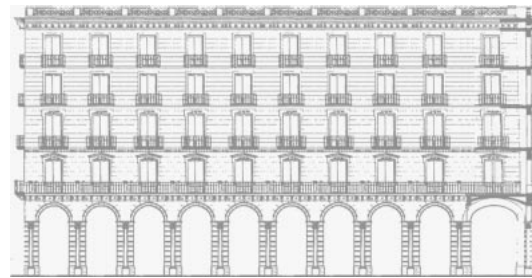
DETECT: to discover the true character of, to uncover
CERTAIN: dependable, reliable :known or proved to be true:
Indisputable <it is certain that we exist>
Inevitable: incapable of failing



“La Boqueria”
roofed in 1870
wrought/cast iron



*the Born Market
early 1900's*



*details. St. Pancras Station, London 1866.
(Engineer, 7 June 1867)*

A mark is left by the past, at times more prevalent than at others, but each of these marks contributes to the understanding of the current settings and the "legibility of culture".

Throughout the cities of the world, adaptation tactics have been employed through the full range of intensities. Overlapping these schemes can, in fact, lend a multiplicity of approaches to issues that confront our developing urban landscapes.

function vs. use



interior photograph of the Borne Market
Barcelona, Spain, ca 1997.

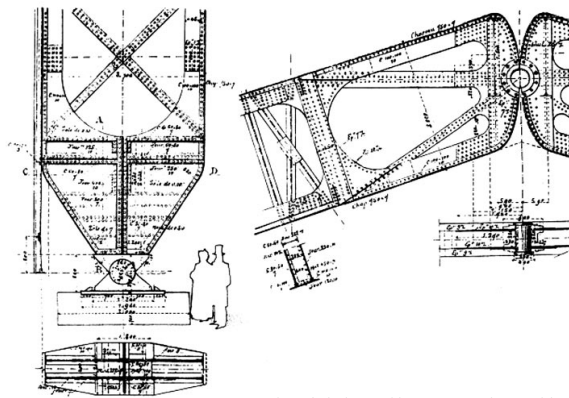
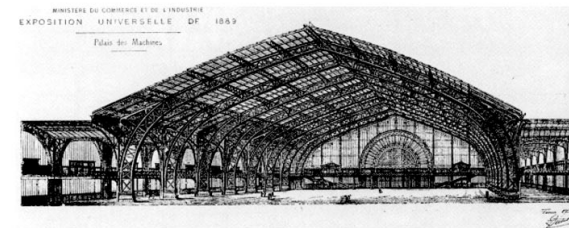
The act of revitalizing the urban artifact, in this case the Borne Market, is the direct response to the concern of reforming the functionality of an existing structure to coincide with its contemporary settings.

Function: A public space. The market, tied directly to the neighborhood, served not only as a place to purchase daily needs, but also as a gathering and meeting place which helped form the identity of the neighborhood.

Use: programme - The open market. The market, in the direct sense of the word has become obsolete. The neighborhood no longer generates a need for a market in the traditional sense.

The construction technique enabled the space to be covered with an expansive roof supported by cast iron columns. Open space,

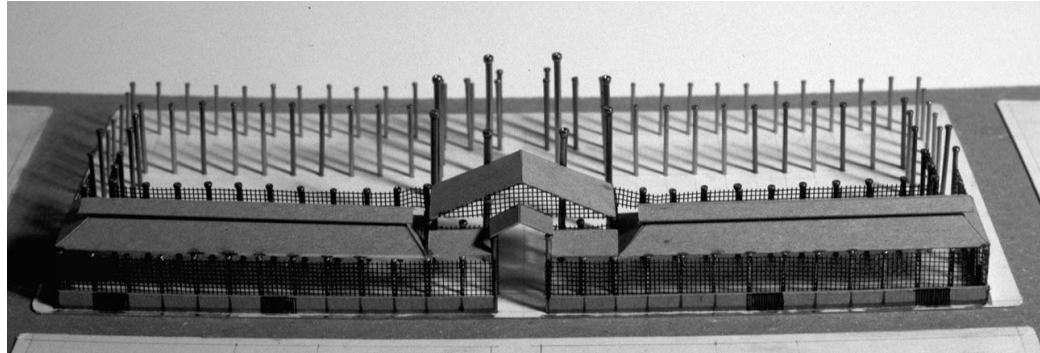
for the use of being filled with mobile stands and carts from which to sell goods, was the focus of the original design of the market. The construction technique was employed to celebrate the open space with a wide span. Thus, there was an enjoyment to move freely about the open space that was generous enough and adequately ventilated so as not to be restrictive or unfavorable to the individuals working or shopping. At that time, the focus and function revolved around the idea of an immense volume that turned inward towards itself in recognition of its role in the daily lives of the people of Barcelona. Today, however the former role of the Borne has become obsolete. Instead of the abundant interior volume to support the functions of the market, this vast urban room now stands as a void in the urban density that encompasses it.



The Galerie des Machines. 1889 Paris Exposition.
Perspective drawing and construction details
(Construction Moderne, 6 August 1887)

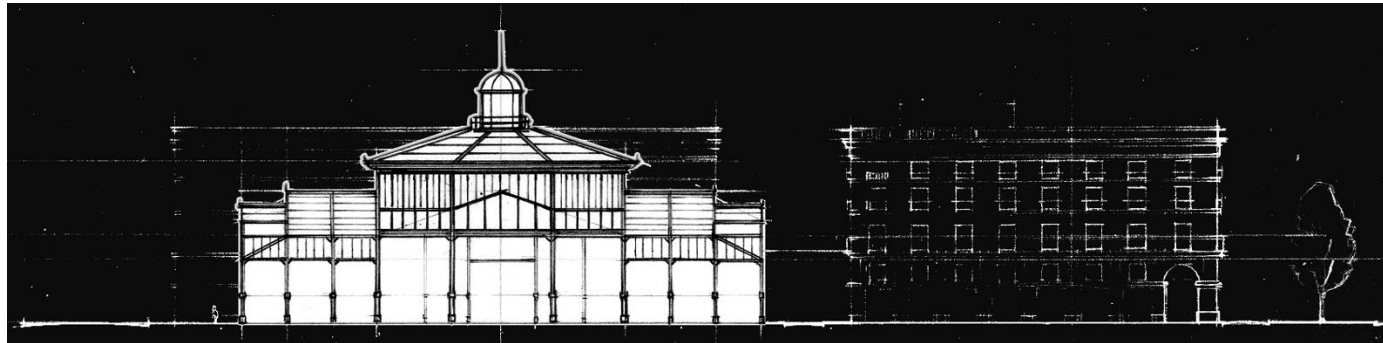
interior of Borne Market
circa 1900
(lanus 0,0, June 1981)





Varying degrees of change are typical in the development of the city, and the implementation of these approaches with different intensities of application allows cities to evolve while maintaining that which is most important to the historical “thread” of its built form.

Both the “radical” as well as the “reconstructive” approach are viable options that generate historic continuity. The manifestation of our beliefs as historic beings cannot deny the fact that we do not start “from new”, but within the two approaches, while not denying the feasibility of establishing a continuity through the “radical” approach (Centre Pompidou ... an amplification of the historic surrounding through juxtaposition), however an historic continuity via the tangible pieces (or artifacts) is the means in which this project was approached. Clearly, the physical presence is capable of generating an historic continuity through cultural “residuals”.





Centre Georges Pompidou
Paris, France



Faneuil Hall Marketplace
Boston, Massachusetts

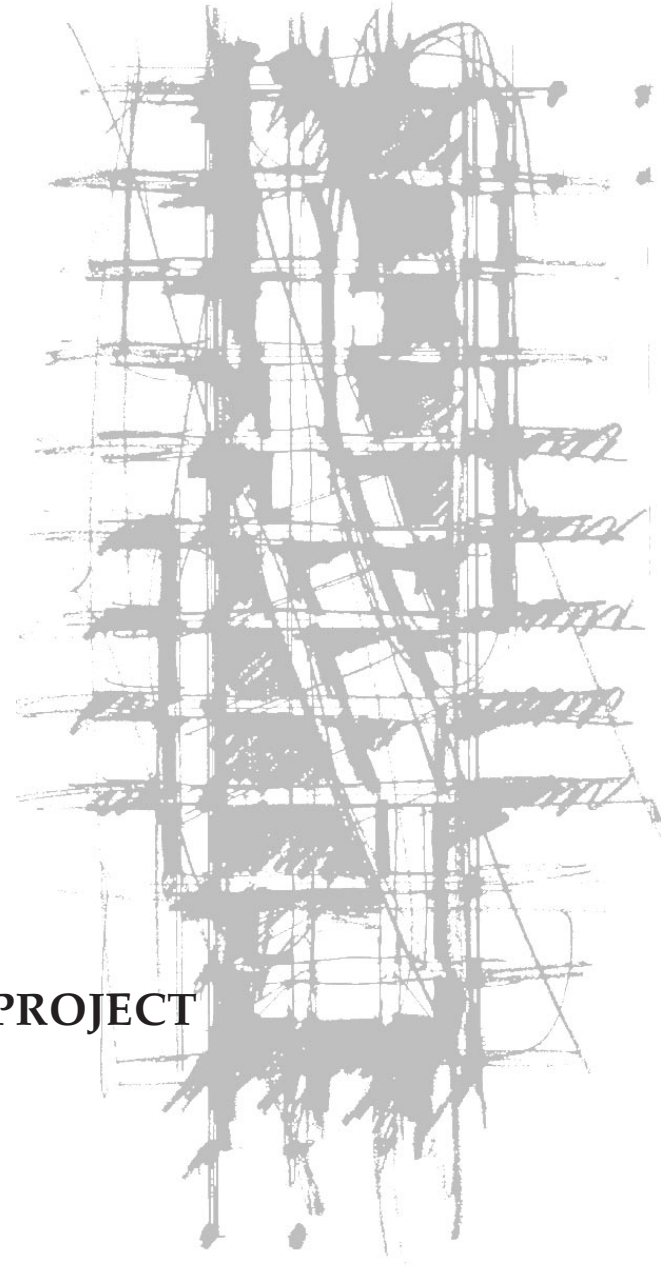
The *function* of the building encompasses the building as an artifact; as an aesthetic object, its role within an urban fabric

Beyond simply renovating an "old" building, this project aims at re-defining and re-assigning the use of the market structure as something more than the shade/rain cover that was implemented to improve the conditions of the public market on the lot where the Borne now stands. The intention is to return the role of the market as an active element within the context of the agglomeration of urban artifacts by weaving the threads of the urban fabric into a more cohesive entirety.

In order to relate to the current state of the surrounding conditions, there needs to be a scaling down of the whole into something more recognizable.



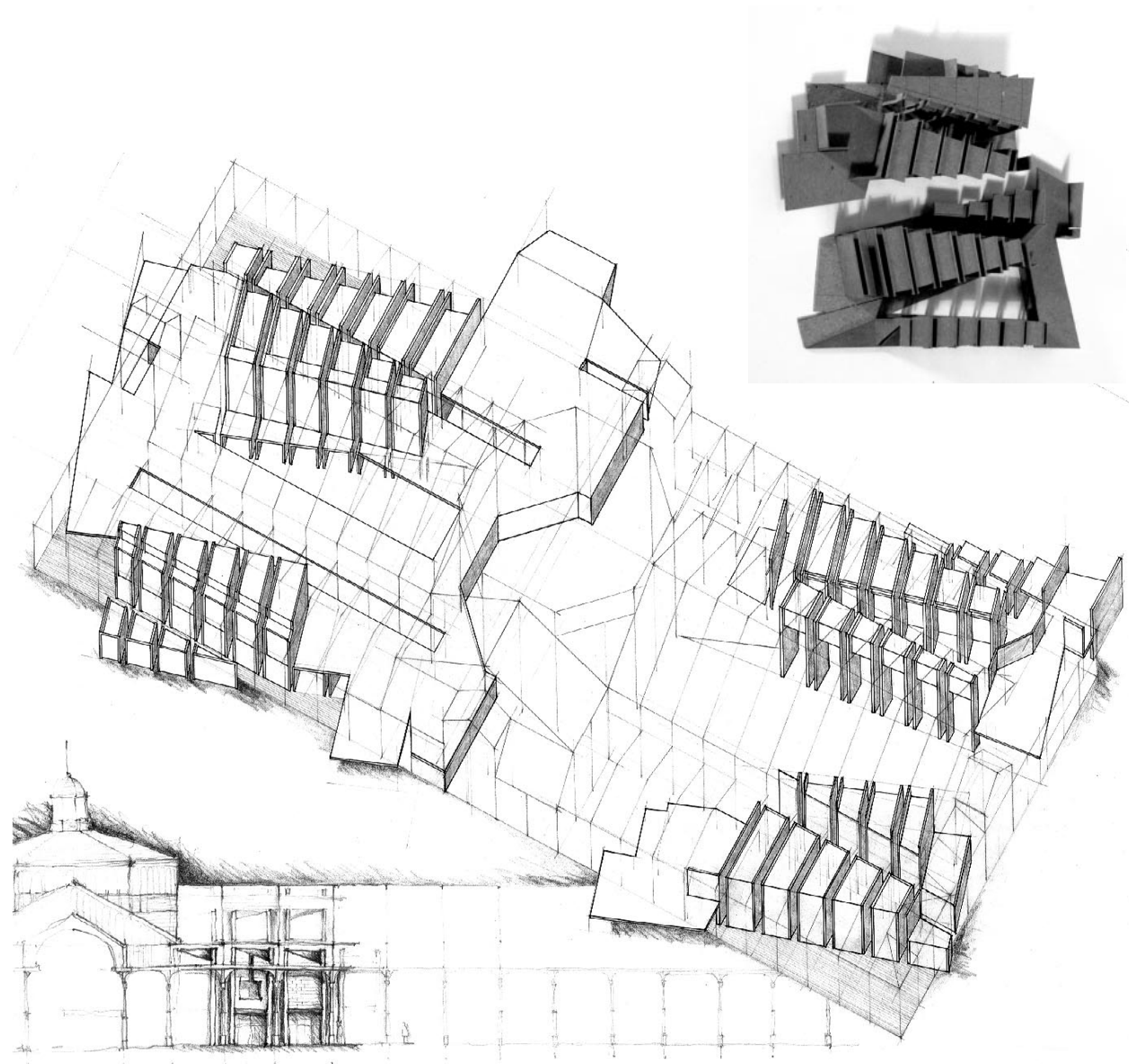
interior market stall at the "Boqueria"
Las Ramblas, Barcelona

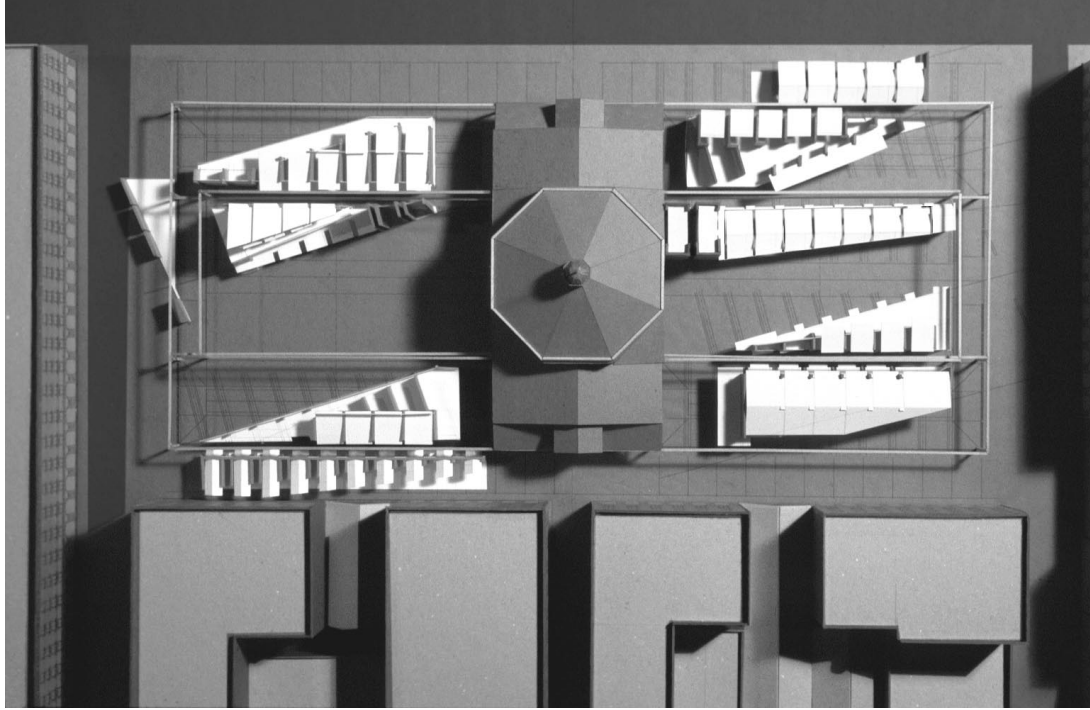


the PROJECT

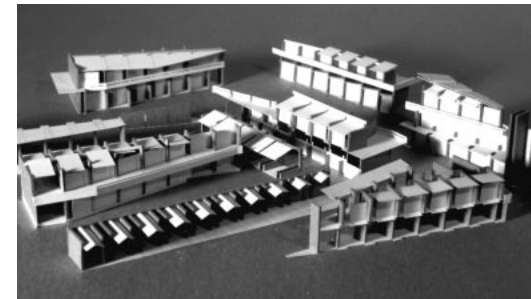
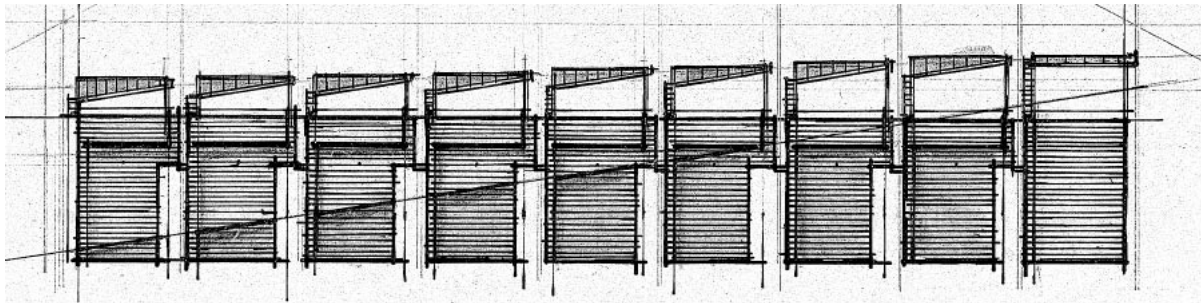


The primary intention is to give a *functioning* market back to the city and its people. This can be done through establishing a new network to the urban surroundings, by introducing a new line of smaller-scale commerce activities to define and support the new network, and by developing a new state of permanence (i.e., securing units, businesses, storage, services, etc.).





... a new network to the urban surroundings, a new line of smaller-scale commerce activities to define and support the new network, and a new state of permanence ...

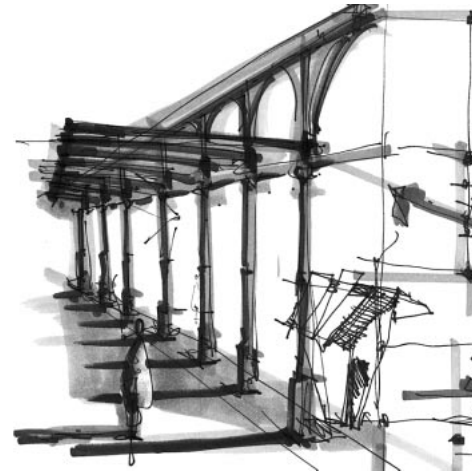


There is an experiential progression as well as connectivity throughout the project that ties the experience of the viewer to the environment. The physical interaction with the work leads to the exposure of the essence of the parts. Offered through variable sequences set forth through a construct, the experience of the individual is interpreted and shaped to the particular moment.

There are specific parameters that, while supporting the possibility of multiple interpretations, become secondary to the individual experiences of each person. The physical dimensions, the notion of lines of movement and the fields of possibility comprise a constantly changing set of variables that transforms through the act of approaching from different "angles". Each "shift of perspective" establishes different relationships or connections among the elements of the new market. Along with the effects of perspective, parallax and point of view both play leading roles that enhance the experiential multiplicity of the Borne.

The Sonsbeek Pavilion by Aldo van Eyck and the work of Richard Serra are worthy examples of paths of connectivity and the notions of directing experience. There is a connection through "directing layers" that informs the individual in his interaction with the project. The act of directing plays a prominent role, whether it be physically directing the individual through the volumes of a built space, directing the senses through an experience, or even the directing of memory through a sequence of unfolding events.

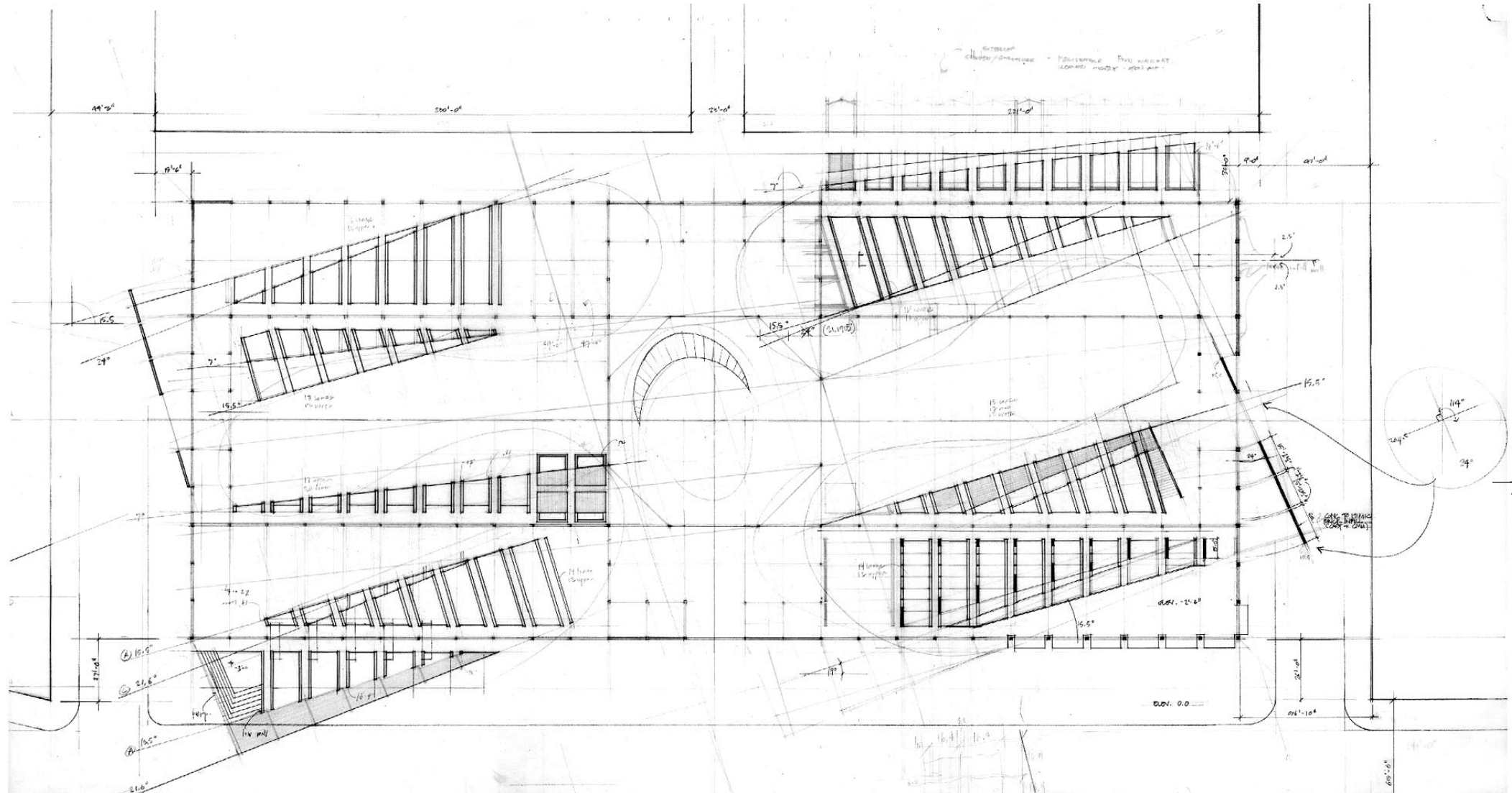
These various notions of progression, sequence and memory are crucial to the understanding, not only of the project, but also of our daily experience within world we live.

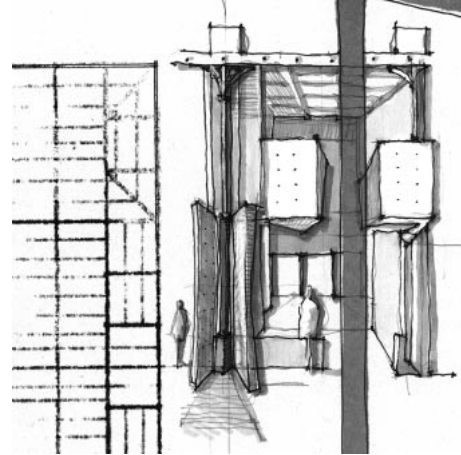
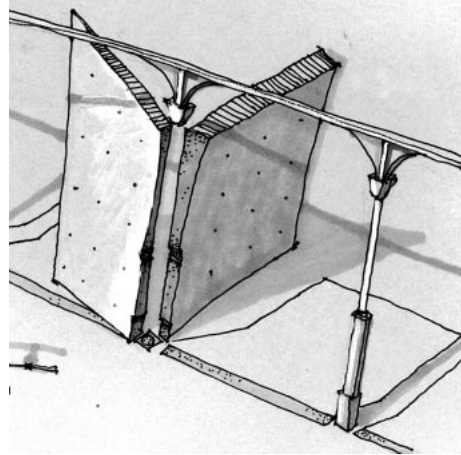


The act of yielding to the artifact constitutes the premise for the project. Whether in compliance with the most literal interpretation of the theme, or (seemingly) defying these parameters, the construct still establishes an underlying set of controls ... i.e. an "enabling field" that infuses the project with a potentiality fundamental to things urban.

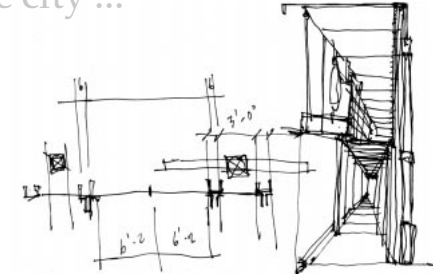
The multiplicity of experiences

manifest by the implementation of such a structuring system derives directly from the idea of infusing the project with potential. The interplay of perspective, parallax and point-of-view works in conjunction with the potentials of framing and obscuring (the artifact) and saturate the entirety of the new organization with an instability that evades the static.





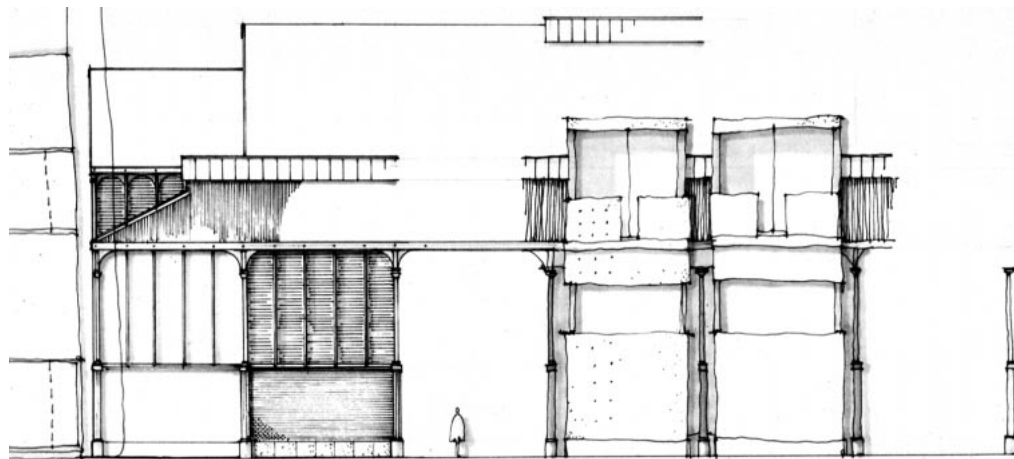
... continuity, as a significant act in regard to the evolution of the urban fabric of the city ...

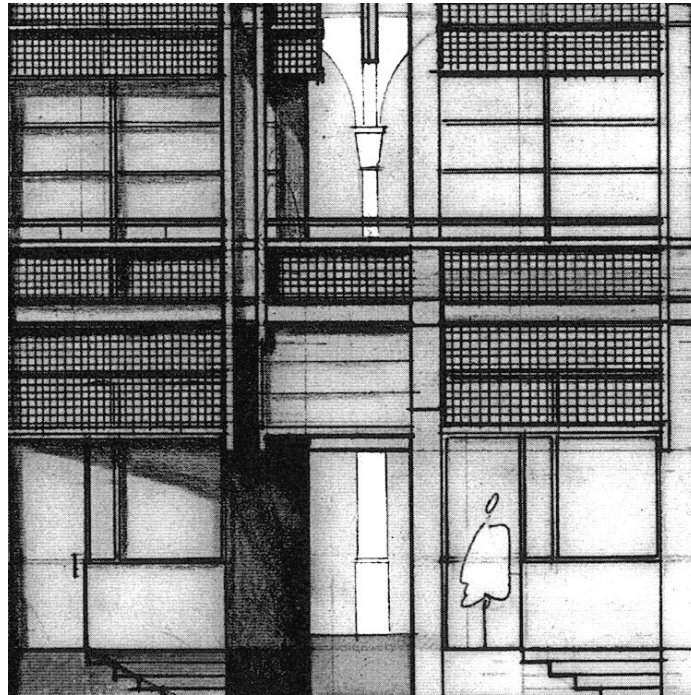


This architecture interacts directly with the nature and essence of the past market. The re-definition of the existing market structure is accomplished by an accentuation of the building parts that comprise the physical market.

By setting the tectonic in a light that it had not been seen before, an exposition of the dormant element(s) directs a prominence of the past. Through "framing", via new tectonic elements, complementing fields of possibility are generated within the latent bounds of the Borne. Infused with the tension of the "give and take" between these distinct systems, there is an affirmation of the value of the artifact while establishing a significant new contemporary identity. All of this dynamism grows forth from within the realm of the "extinct" and stimulates the revitalization of the market and its surrounding.

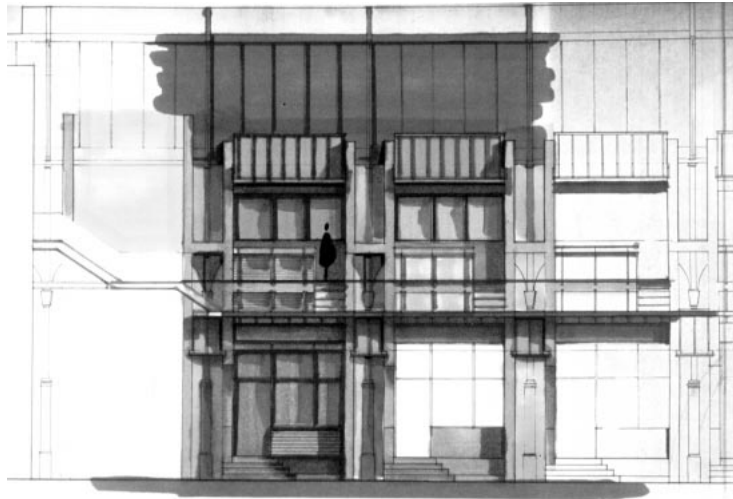
Through this dynamic interplay, the dialogue between these orders communicates that which was, that which has been initiated, and, ultimately, that about which the market can eventually evolve.



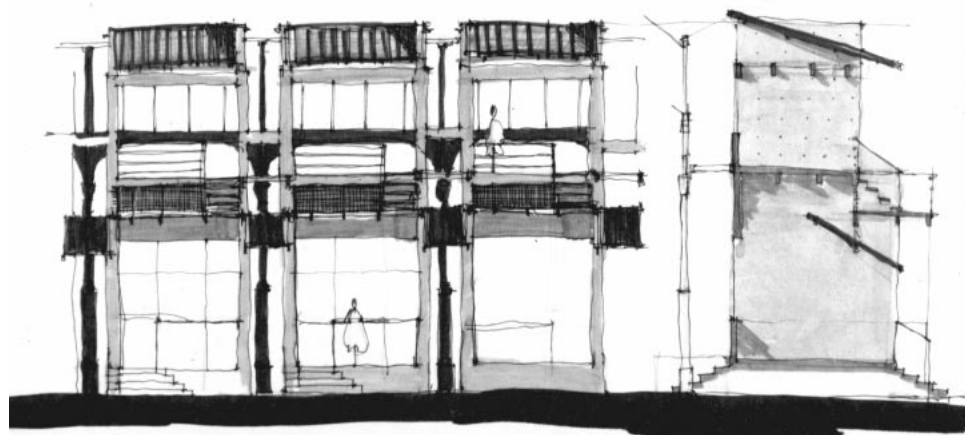
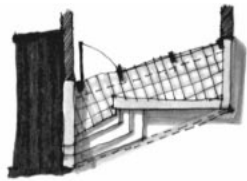


In support of Frampton's views, I can equate this thesis project to his notion of "continuity rather than originality" on the level of a continuation of the life of the architectural artifact. As I stated earlier, this connectivity or "continuity" is a significant act in regard to the evolution of the urban fabric of the city [of Barcelona].

The evaluation of the Borne Market as a significant urban element has been established, now the act of continuing takes the form of the intervention. It is not solely the intervention as an element, but moreover, it is the new relationship established between these elements that work to create the entirety of the project.

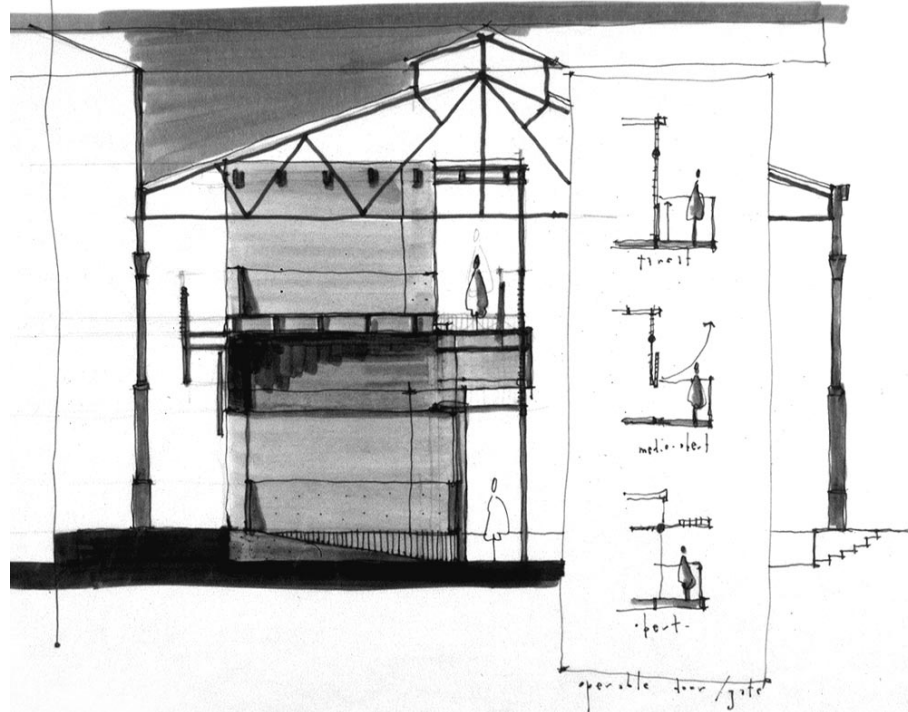
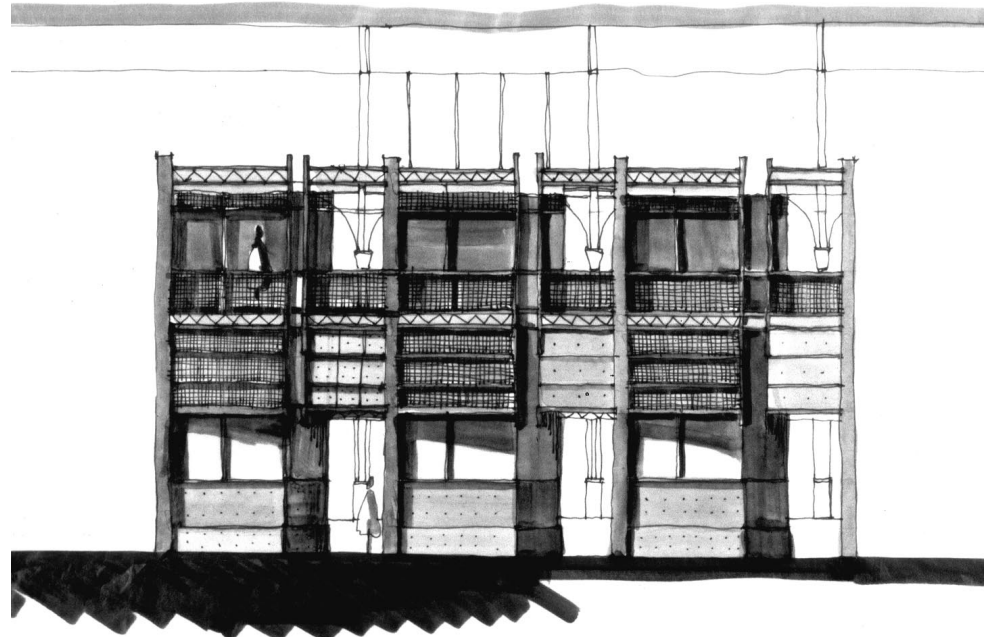


Making a place from which to observe fragments, in attempt to understand and enjoy the entirety of the market.



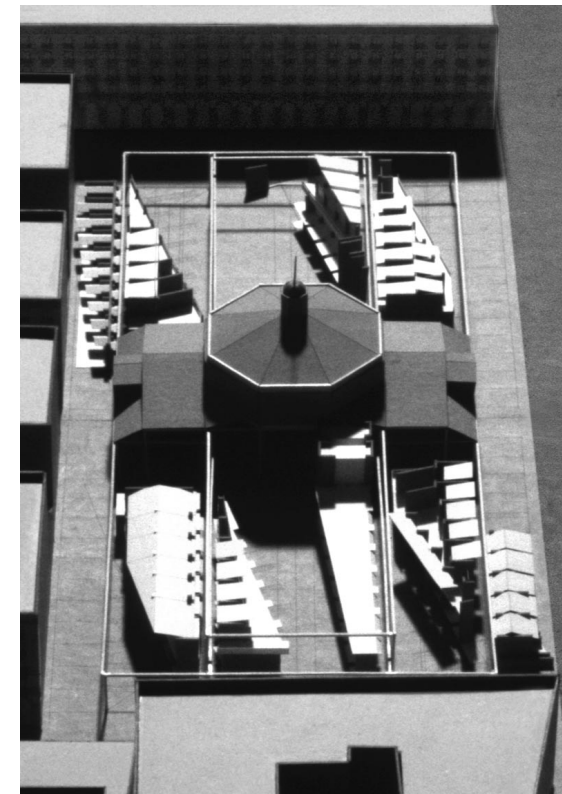
In concurrence with the writing of Arnulf Luchinger in *Structuralism in Architecture and Urban Planning*, "... It is a complete set of relationships, in which the elements can change, but in such a way that these remain dependent on the whole and retain their meaning. The whole is independent of its relationship to the elements. The relationships between the elements are more important than the elements themselves. The elements are interchangeable, but not the relationships." The relationships established within the project are essentially "joints" linking the old and the new.

On joints, Marco Frascari writes in his essay "The Tell-the-Tale Detail" that "... architecture is interested in ... putting together, spaces and materials, in the meaningful manner. This occurs through formal and actual joints. The joint, that is the fertile detail, is the place where both the construction and the construing of architecture takes place." Frampton also states that "Meaning may thus be encoded through the interplay between 'joint' and 'break' and in this regard rupture may have just as much meaning as connection." In fact, in this case the joint not only manifests itself in the form of a break, the break is the relationship between the elements that establishes the joint. The joint has no "physical" connection in the conventional sense of the word, however, the embodiment of the joint is the resistance by the old expressed through the new.



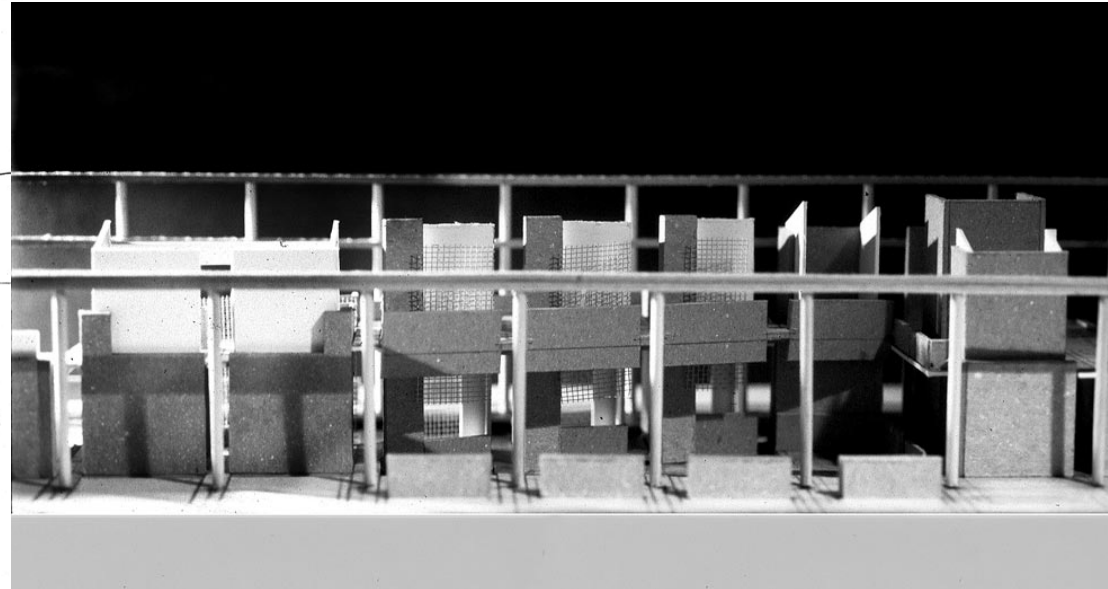
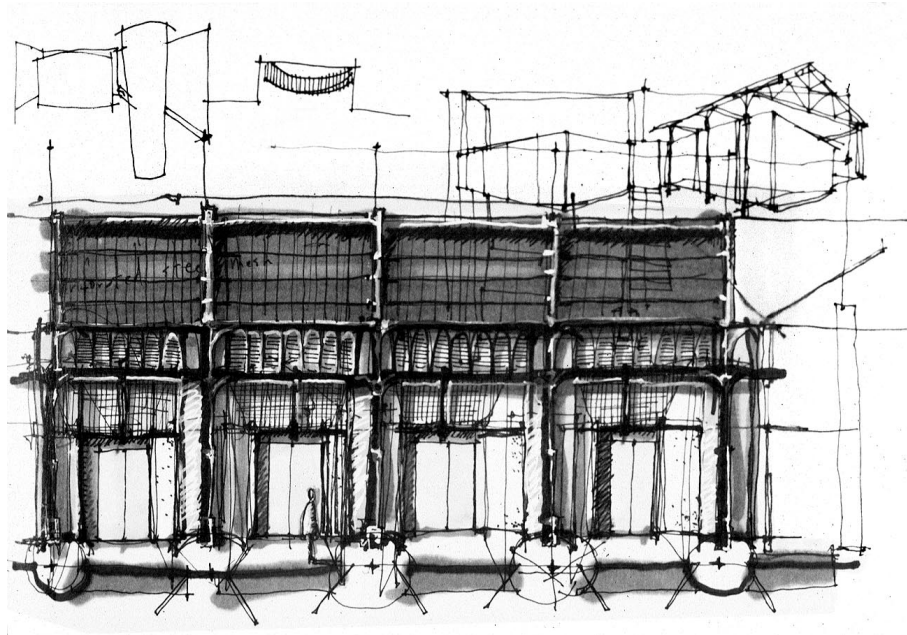
repetitive VARIETY

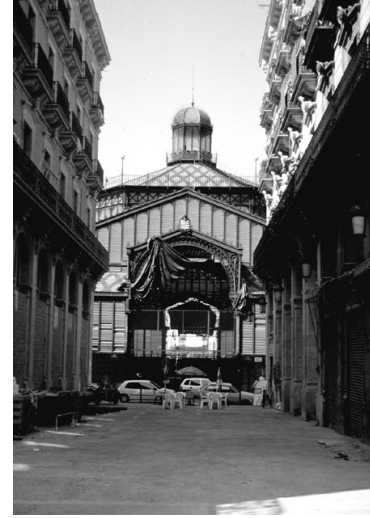
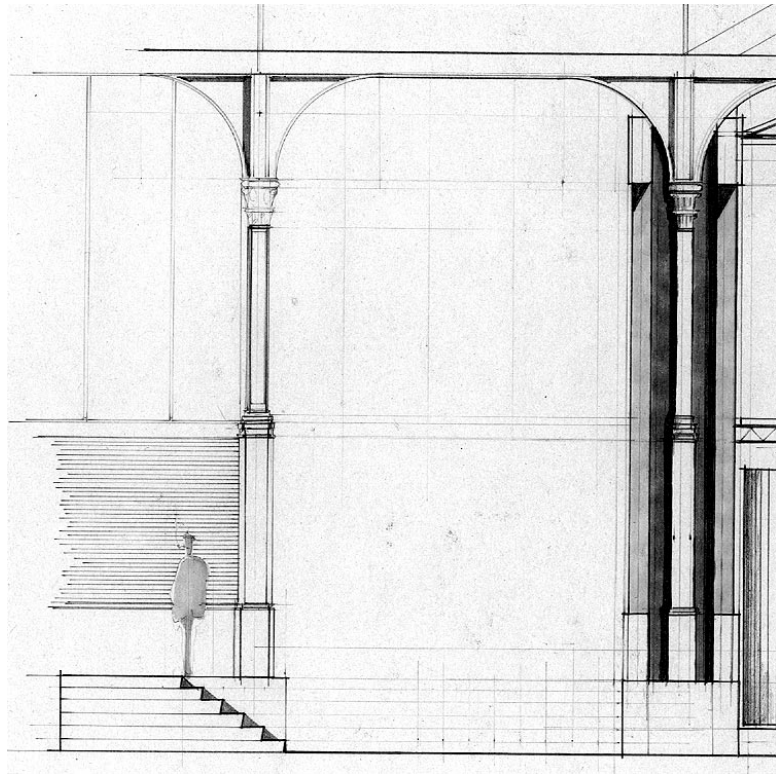
Infused with the tension of the “give and take” between these distinct systems, there is an affirmation of the value of the artifact while establishing a significant new contemporary identity. All of this dynamism grows forth from within the realm of the dormant building and stimulates the revitalization of the market and its surrounding.



Proximity of parts, dissolution of limits, the obscuring of conventional dualities (e.g., interior/exterior) and the juxtaposition of orders, elements and materials all provoke an interaction with the market building in a manner that saturates the new with a diversity able to support the functions of the urban core.

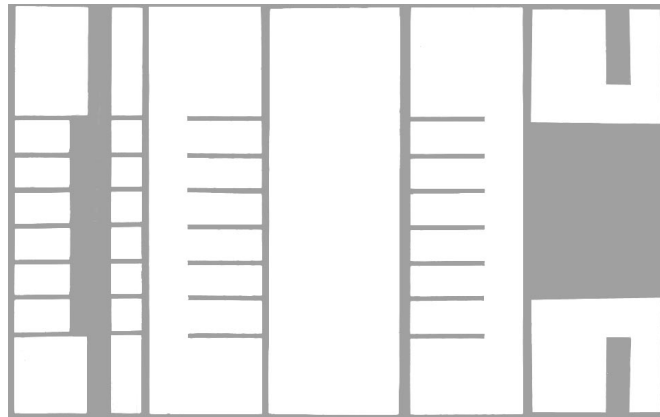
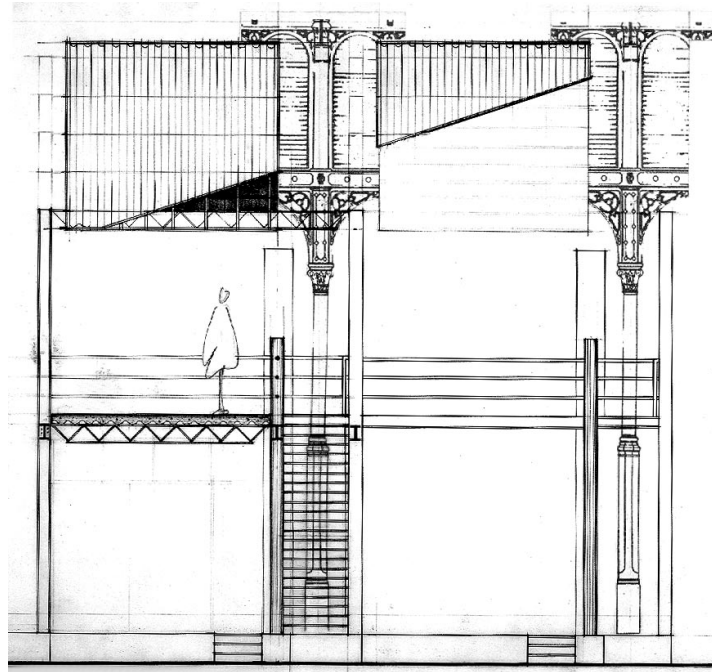
The separation of the new and old is activated through the synergy of the two complementary orders. The linking of the parts fluctuates across a broad spectrum, and the relationships established join the old and the new in such a way as to accommodate (and evoke) a multiplicity of interpretations.



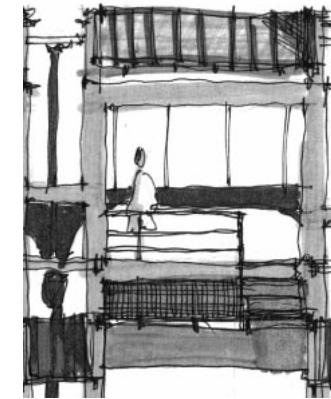


*Fondazione Querini-Stampalia
Carlo Scarpa. Venice, Italy*

The “joints” connect the elements of old and new architecture in a manner whereby the tension of the two orders dynamically infuse the totality of the parts with a potency of a contemporary urban generator. Subsequently, the overall syntax of the new organization of the Borne is formulated through these newly established relationships.



study model
 "repetitive yielding"
 the subtractive and the solid.



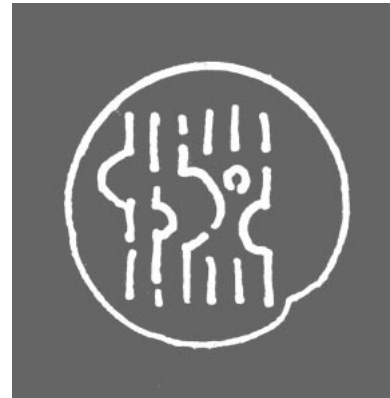
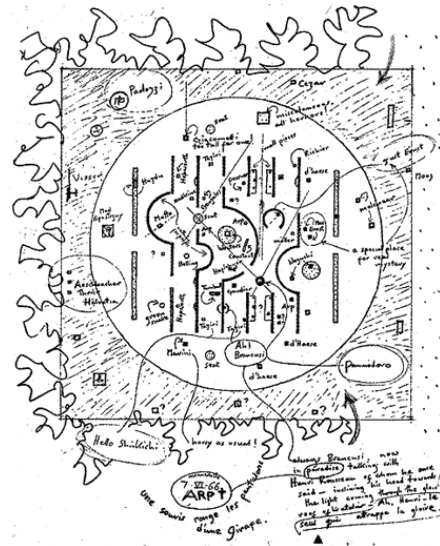
In response to the intersecting orders, the yielding lines working through the concept of *framing* and *obscuring* establish an "integrative separation" that enhances their relationship. Both in section and in plan, the premise of "yielding" supports a clarity that offers a readability of both new and old orders.



"front" view of pavillon



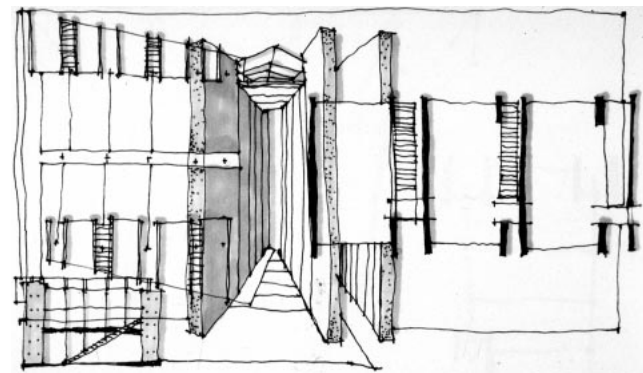
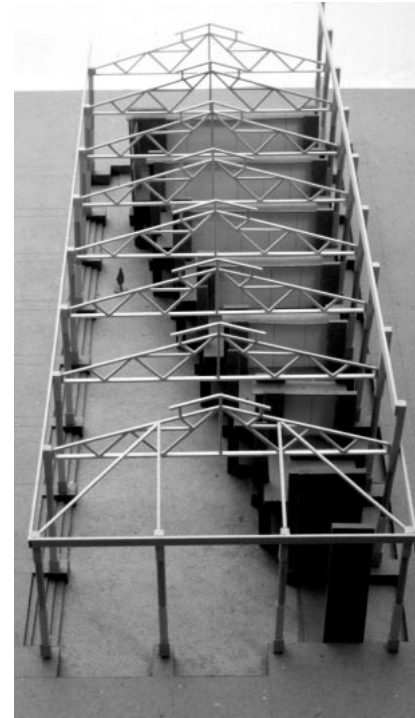
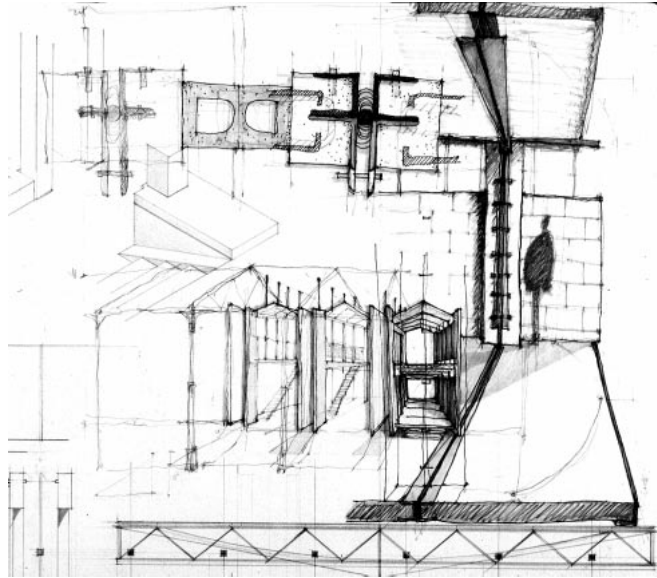
"rear" view of pavillon



plan sketch and organization of
Sonsbeek Pavilion. Arnhem 1966.
by Aldo van Eyck

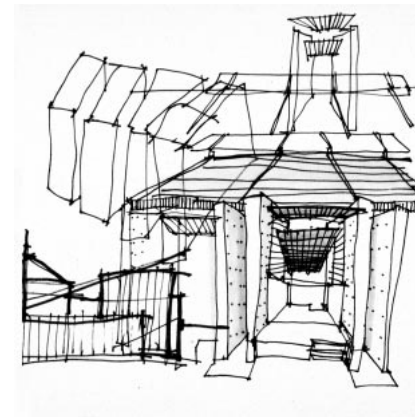
Aldo van Eyck on the Sonsbeek Pavilion:

"I decided that the pavilion should possess something of the closeness, density and intricacy of things urban – that it should in fact be city-like, in the sense that people and artifacts meet, converge and clash there inevitably."



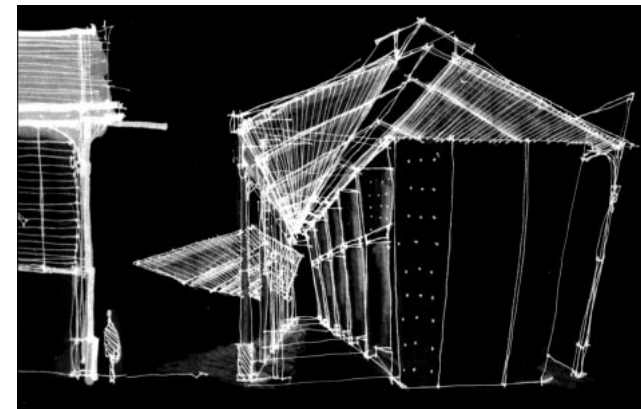
The “urban qualities” of the intervention with the Borne not only enable an exposure of the existing, but they predicate the interaction of the people of the city with the artifact. Essentially, the artifact is thereby reintegrated into the urban context and no longer exists merely as a remnant.

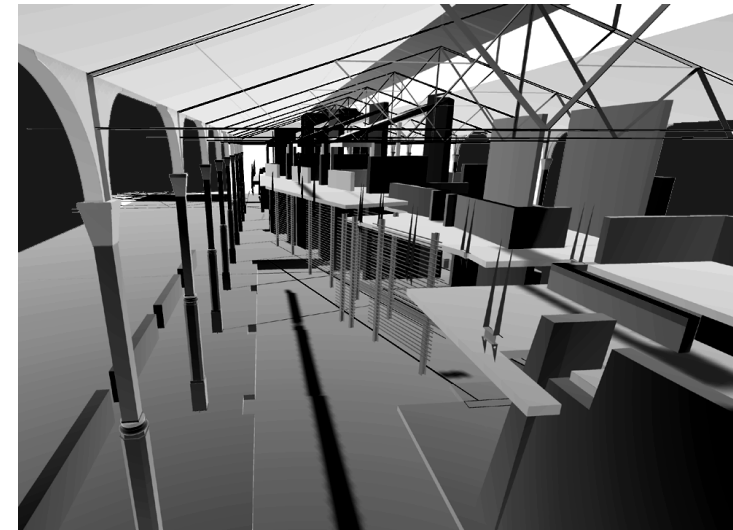
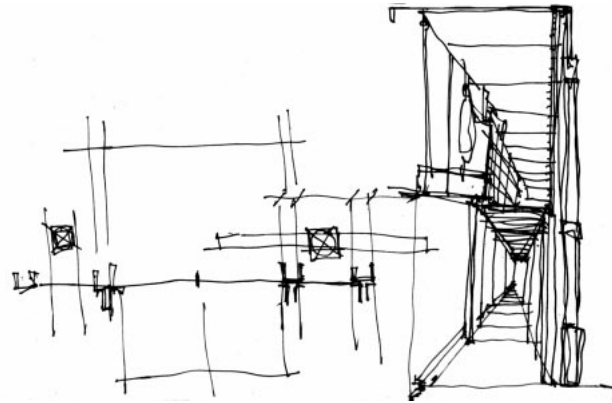
This “opening up” of the shell of the old is an act that provokes a merging of the parts into an integrative whole. The parts are still identifiable as elements, however their new roles support a focus upon them and their relationships as components within an ever-evolving urban totality.



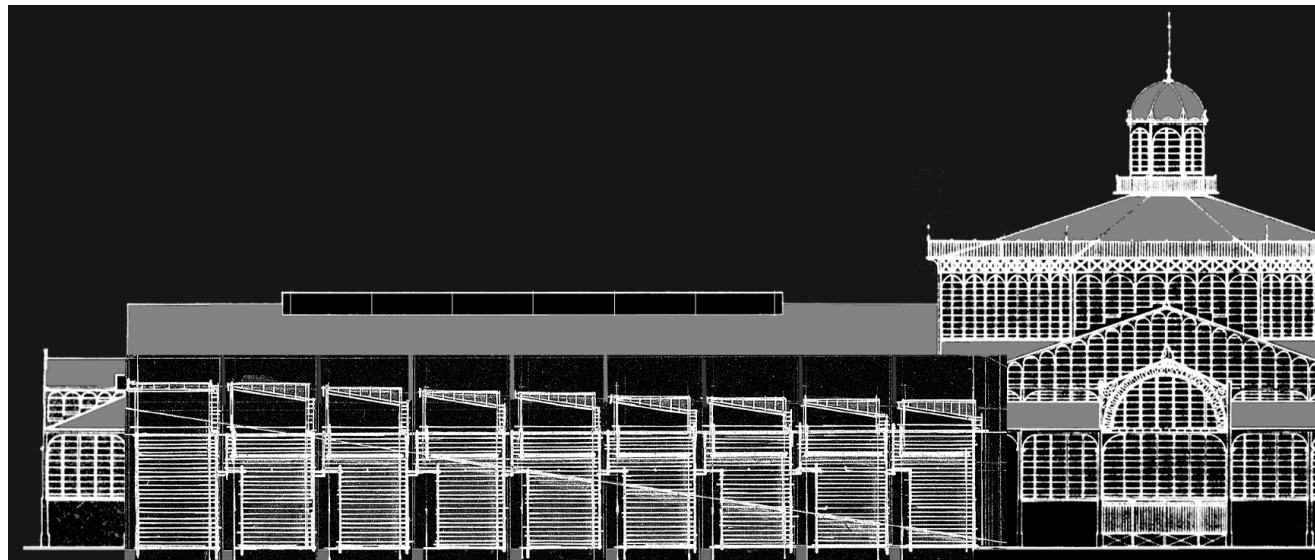
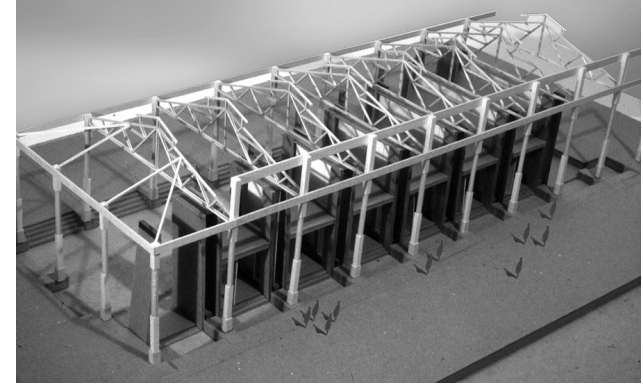


By directing views while suggesting movement, the possibilities of interaction with the new spaces vary greatly. Perception of the space is infused with an "instability" that invigorates the experience of the individual within the market. The intricacies that derive from the original organization result directly from a response to what already forms the (explicit and implicit) qualities of the market.





This re-organization presents the opportunity to newly experience the market that had virtually dissolved into itself. The complementing and contrasting of the rhythmic order of the old by the new intervention affords the possibility to reveal the market through fragmenting, separating and finally magnifying by re-presenting the elements individually. In this sense, the parts of the whole re-define a whole much greater than the sum of the parts. The parts are thereby infused with a meaning and history that invigorate the whole while maintaining their own identity ... the essence of symbiosis, a mutually beneficial relationship.



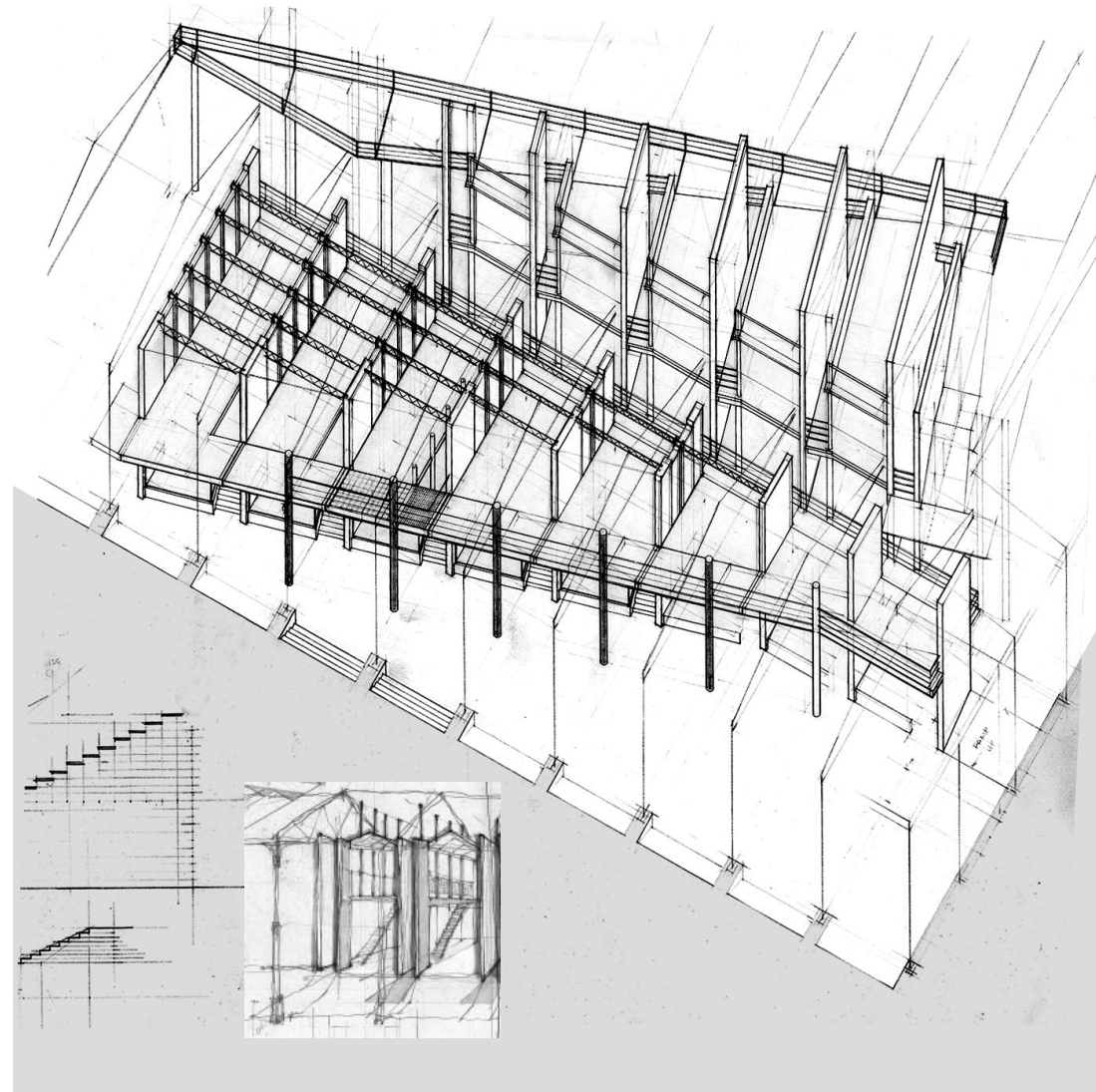
“FORM OF INTERVENTION and
INTERVENTION OF FORM”

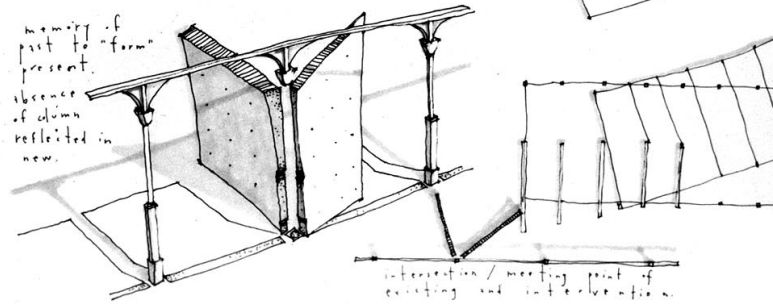
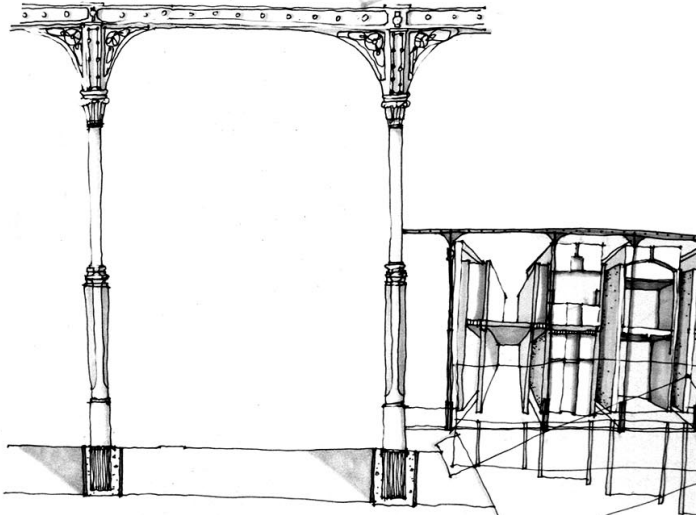
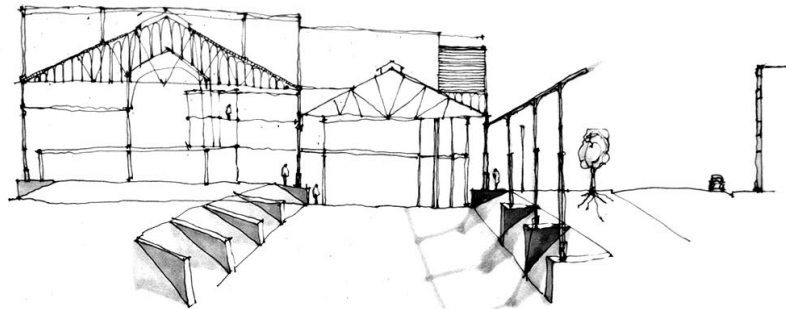
Re-discovering the elements of the
Borne through the formal acts of:

“**framing**” the column as the
essence of the past and offering a
diversity of experiential qualities of the
(formerly) monotonously repetitive order
of the market

“**obscuring**” the column and
structural network (as the essence of the
Borne) with the new “interference”
establishes a multiplicity of individual
experiences potentially inherent in the
market, but previously obscured through
the multiplicity of homogeneity.

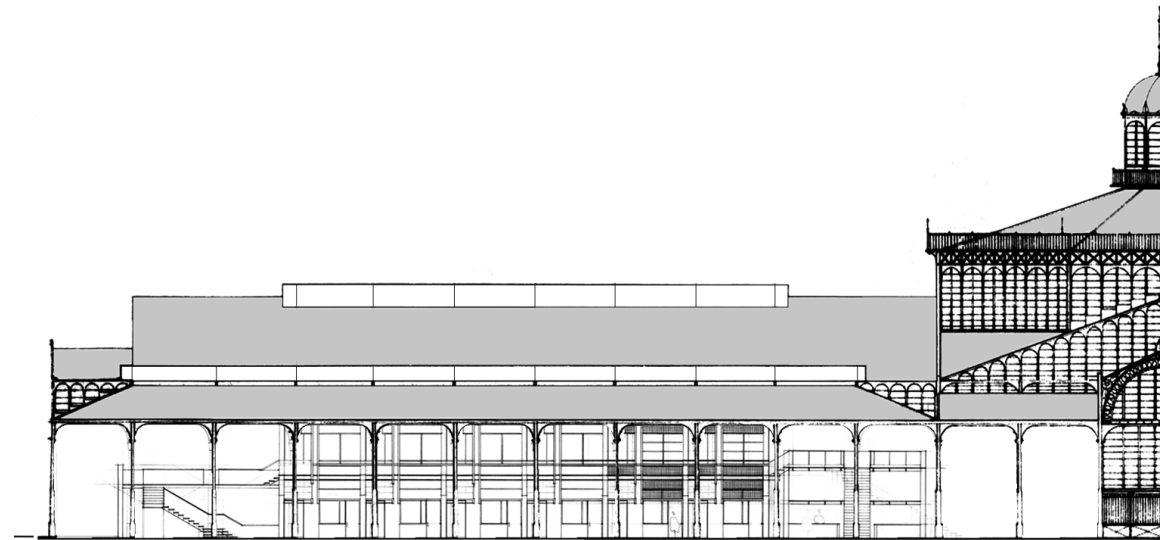
It is at this point that the
opportunity arises within the construct
of the “yielding” approach to manipulate
the “re”-presentation of the artifacts.

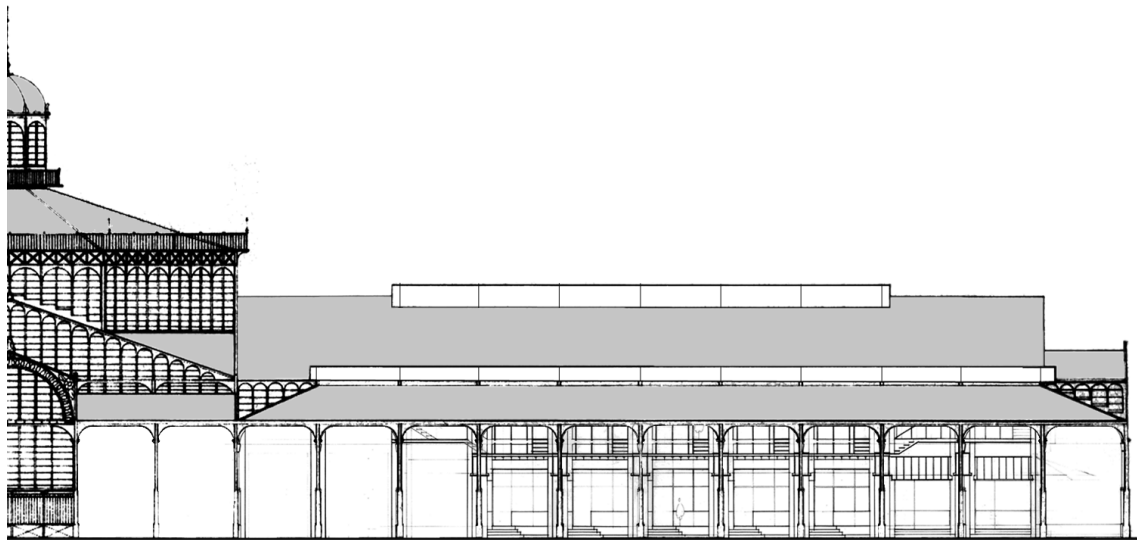
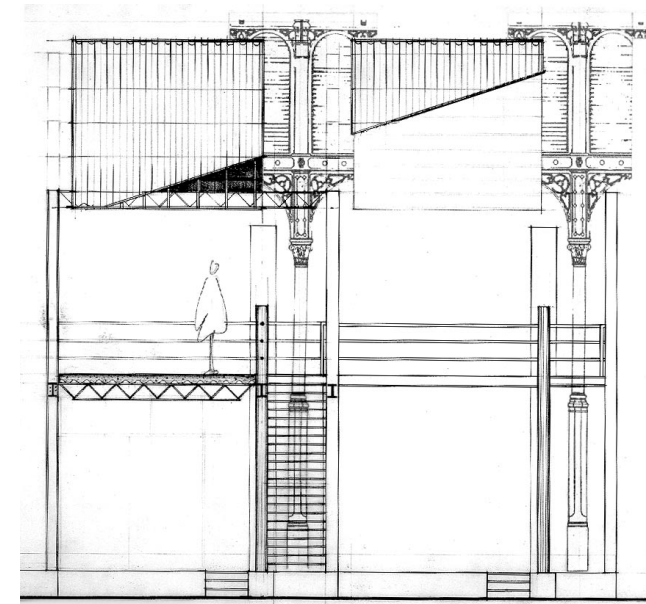
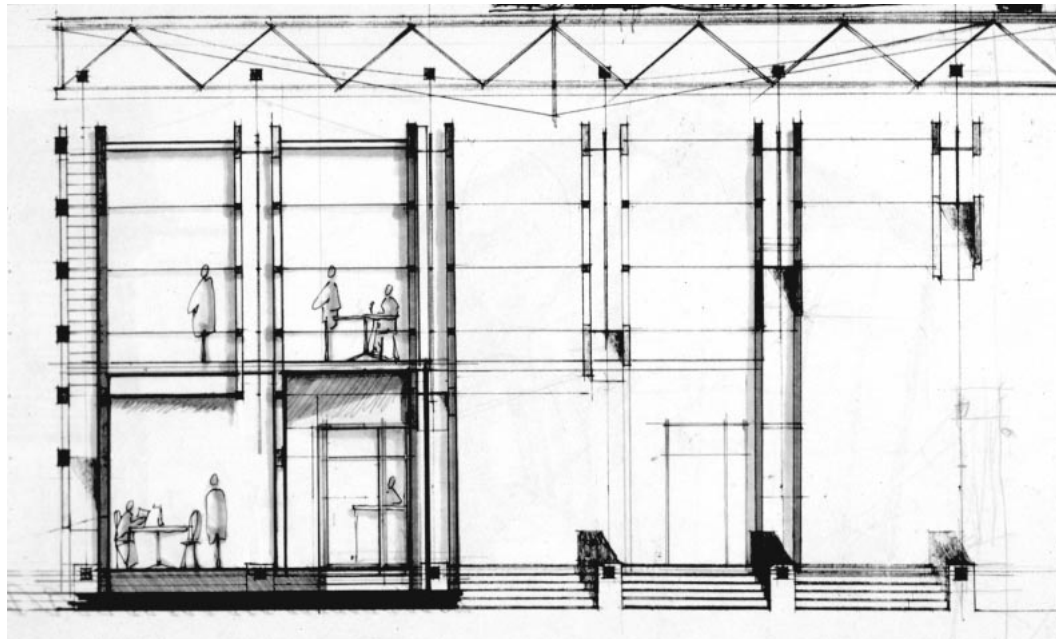




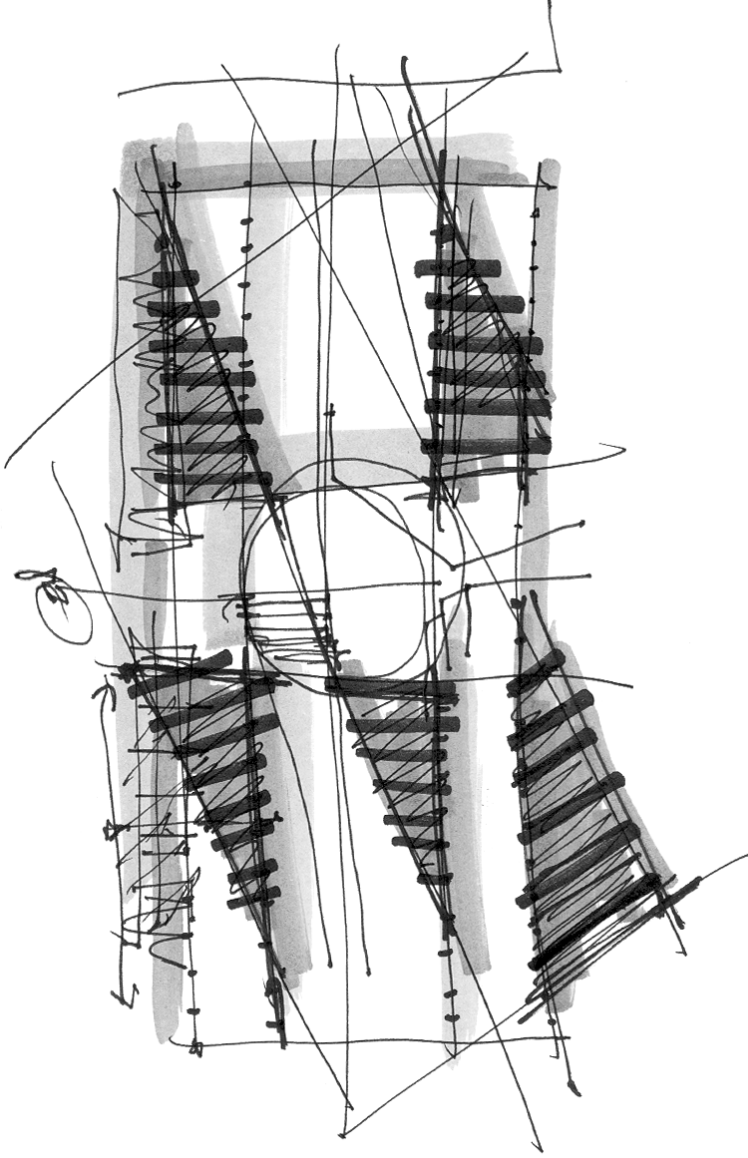
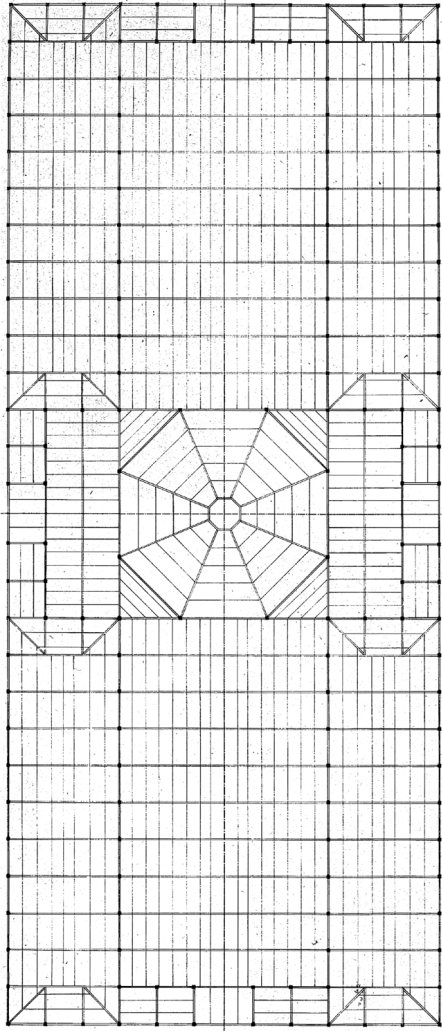
"...people and artifacts meet, converge and clash there inevitably."

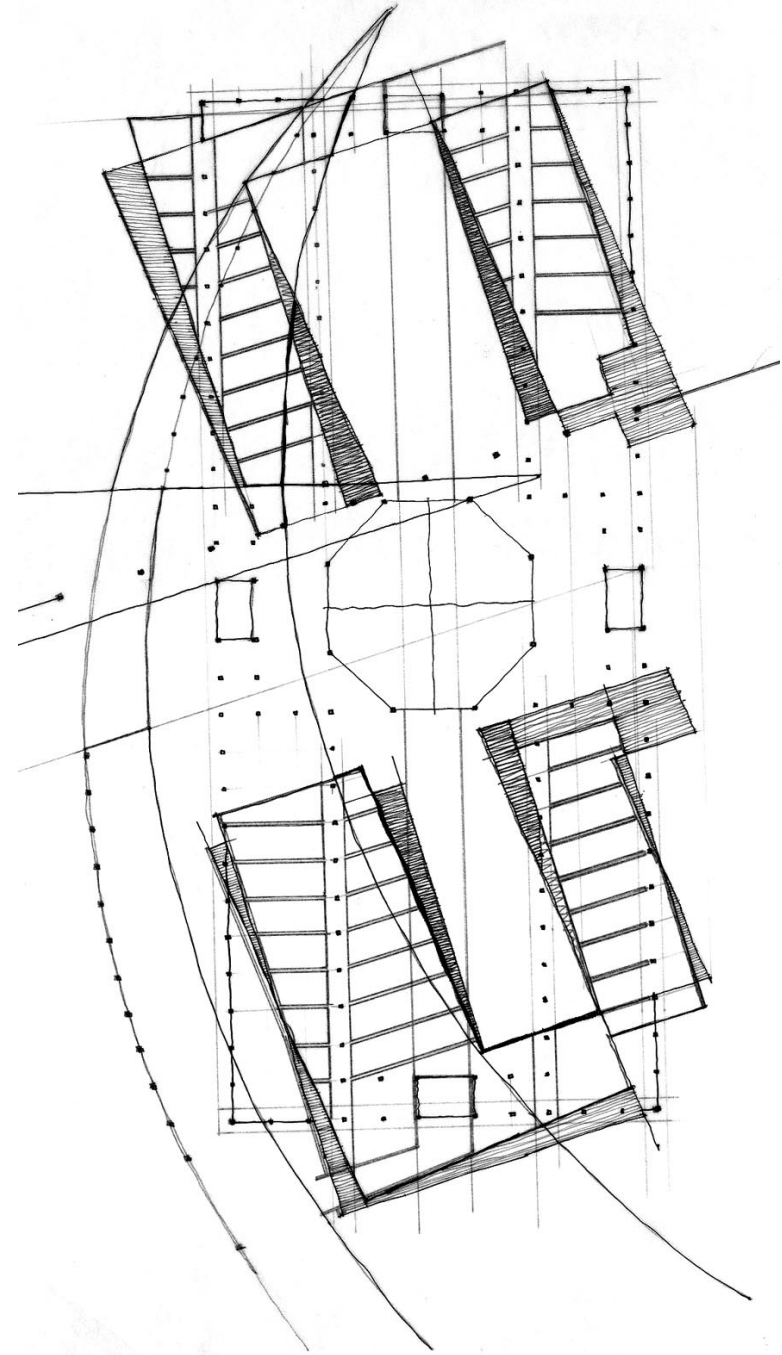
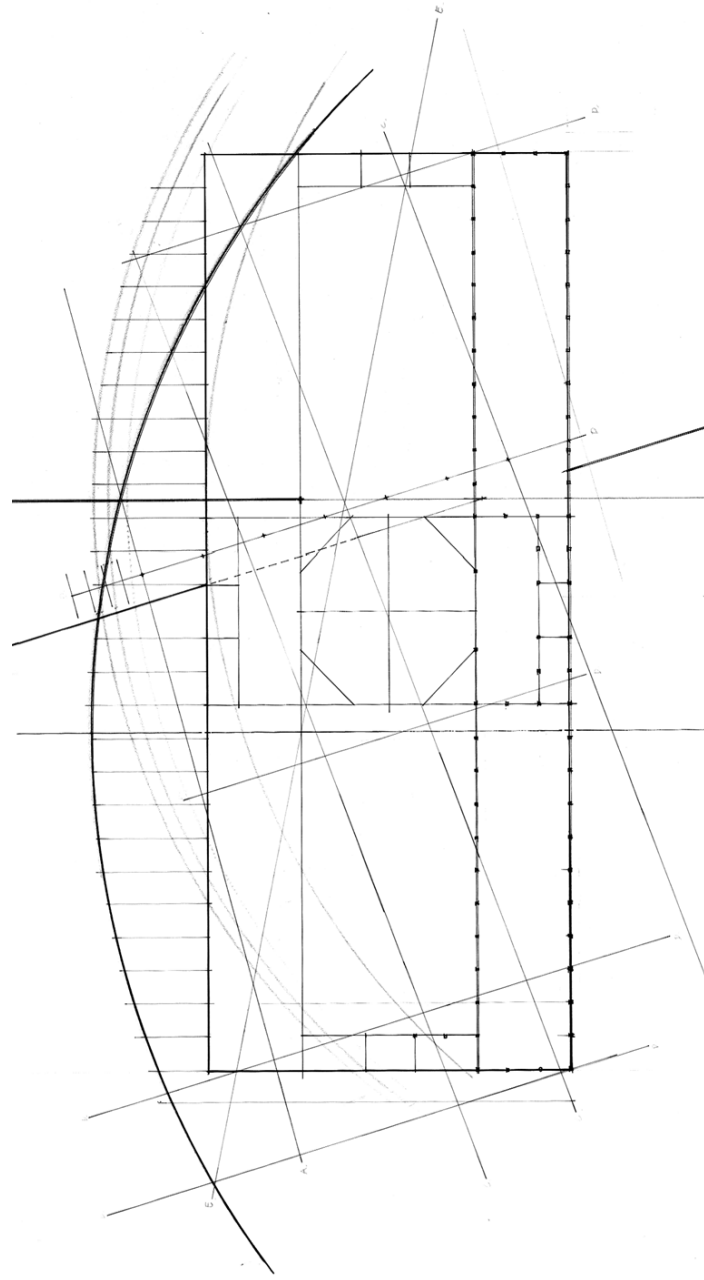
-Aldo van Eyck
(on the Sonsbeek Pavilion)

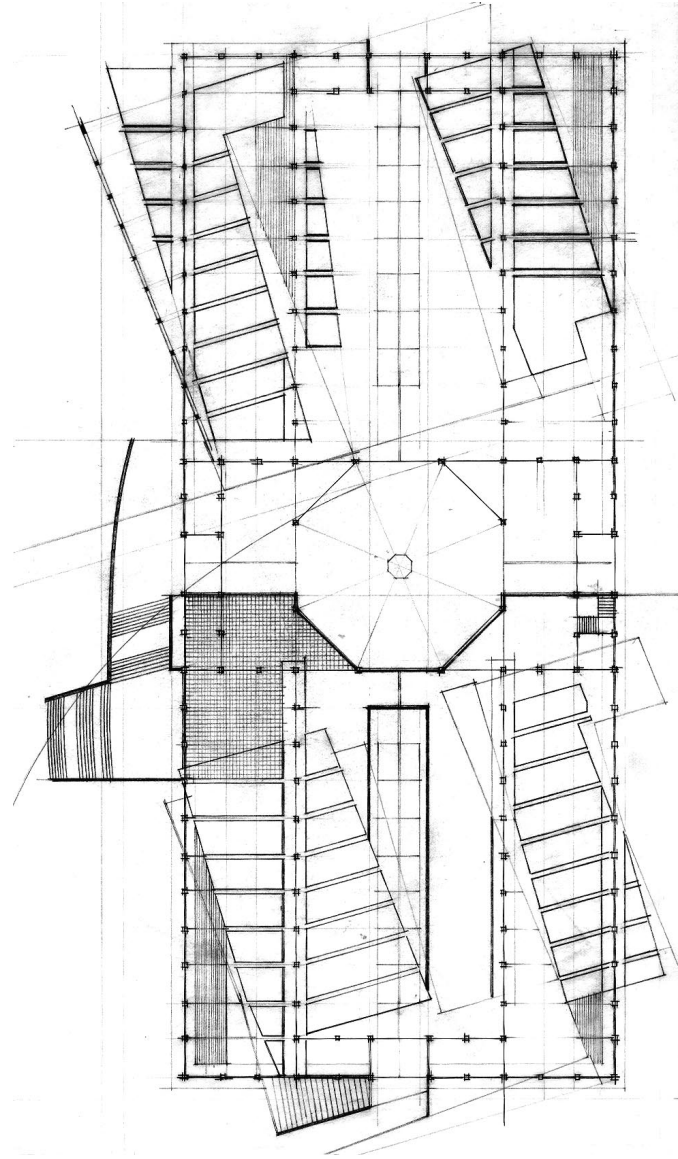
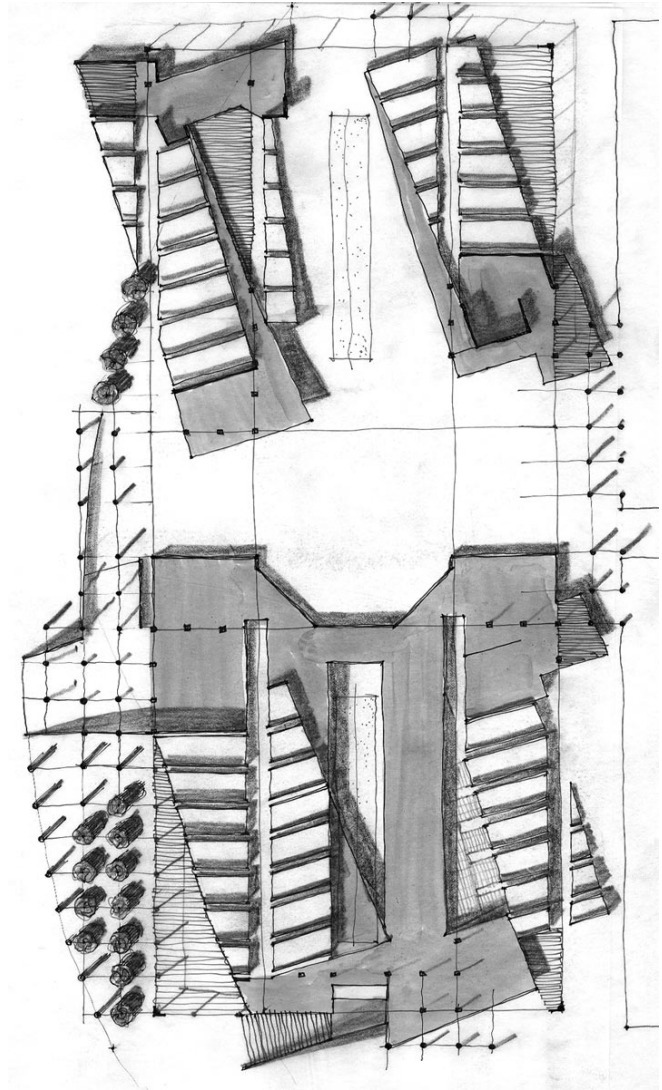


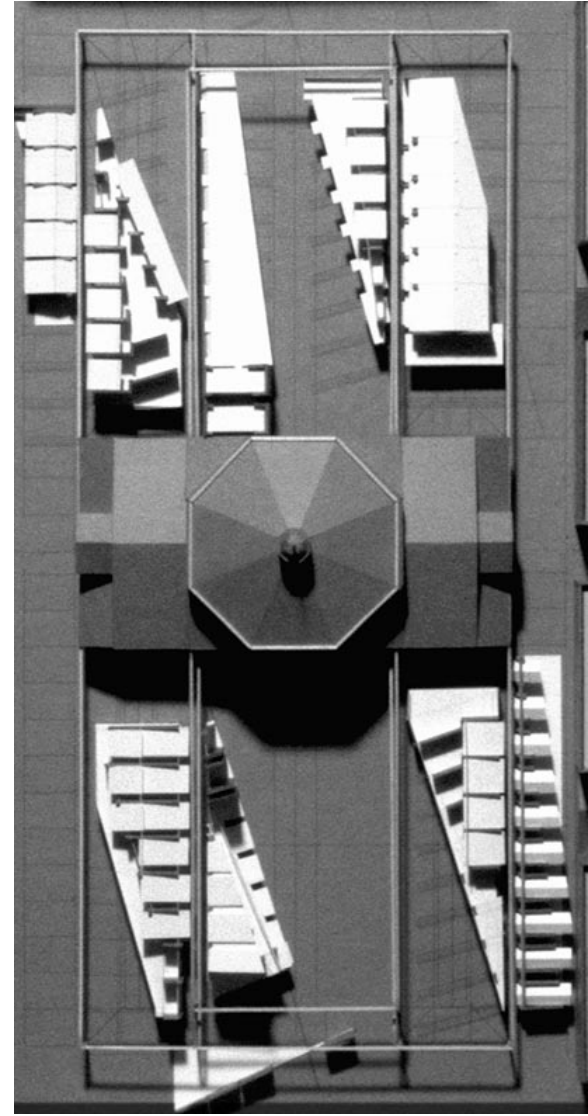
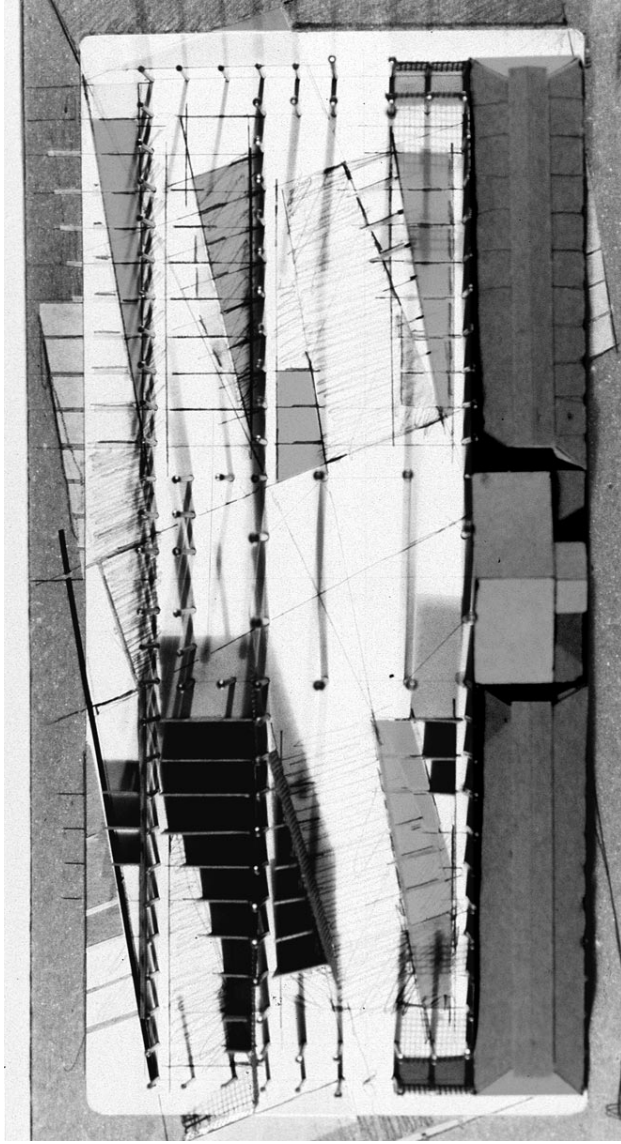


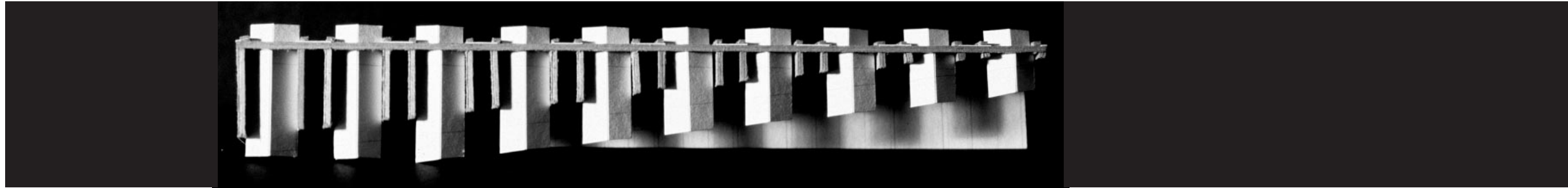
In a sense, the potentially aggressive nature of the adaptive intervention is "held at bay" by the core element of the artifact. The column sets forth a "yielding point" that controls the intervention and its limits. In fact, the origin and organization of the new was generated by the intersection of the prevalent "lines of force" found throughout the site and coupled with the repetitive interval of the cast iron columns. The geometry of the genesis of this scheme evolved from a manipulation of Euclidean elements derived from the existing orders of the market and its environs. From that, the simple geometric manipulation that set the grounds for the construct informs the development of a more sympathetic response which transcends the mere geometric catalyst.

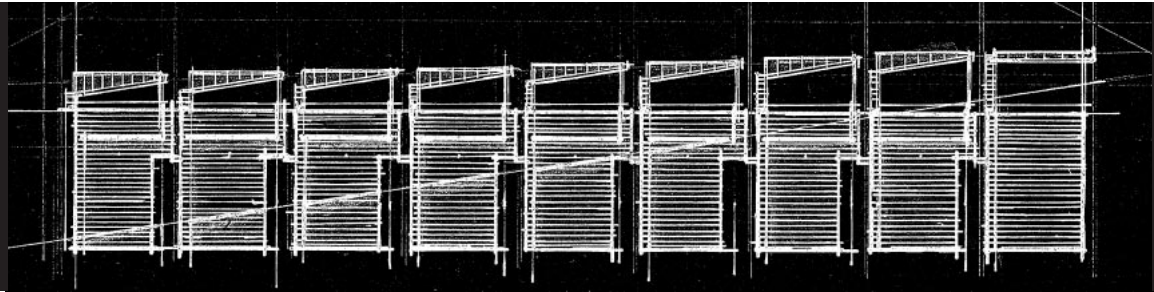


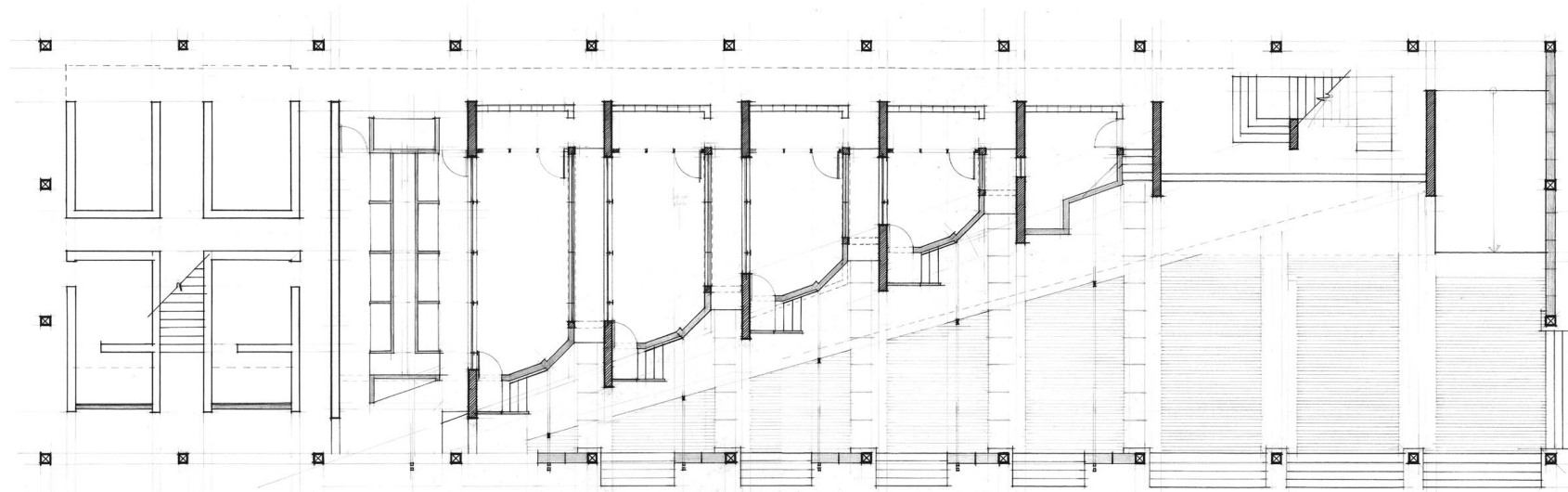
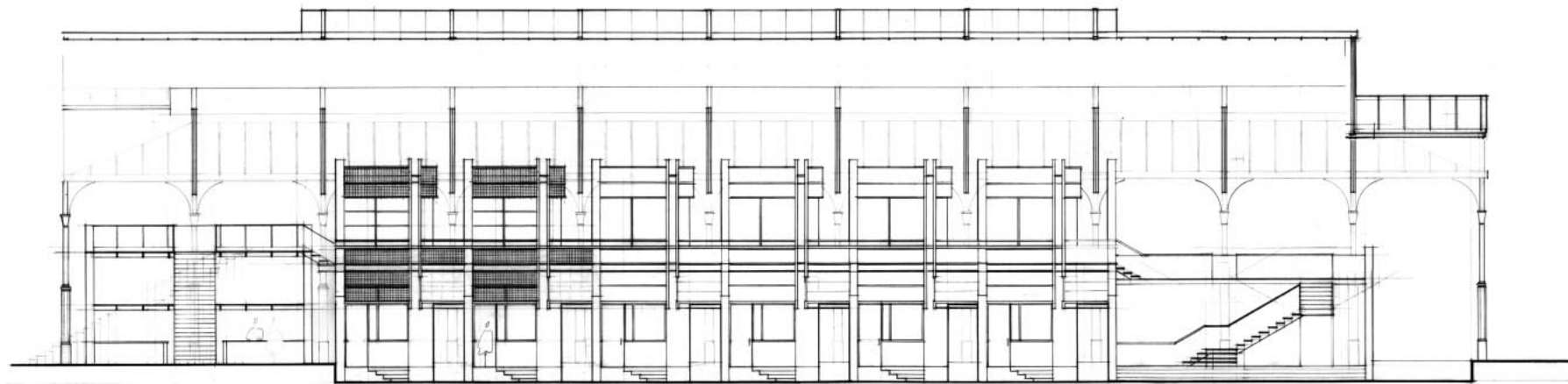


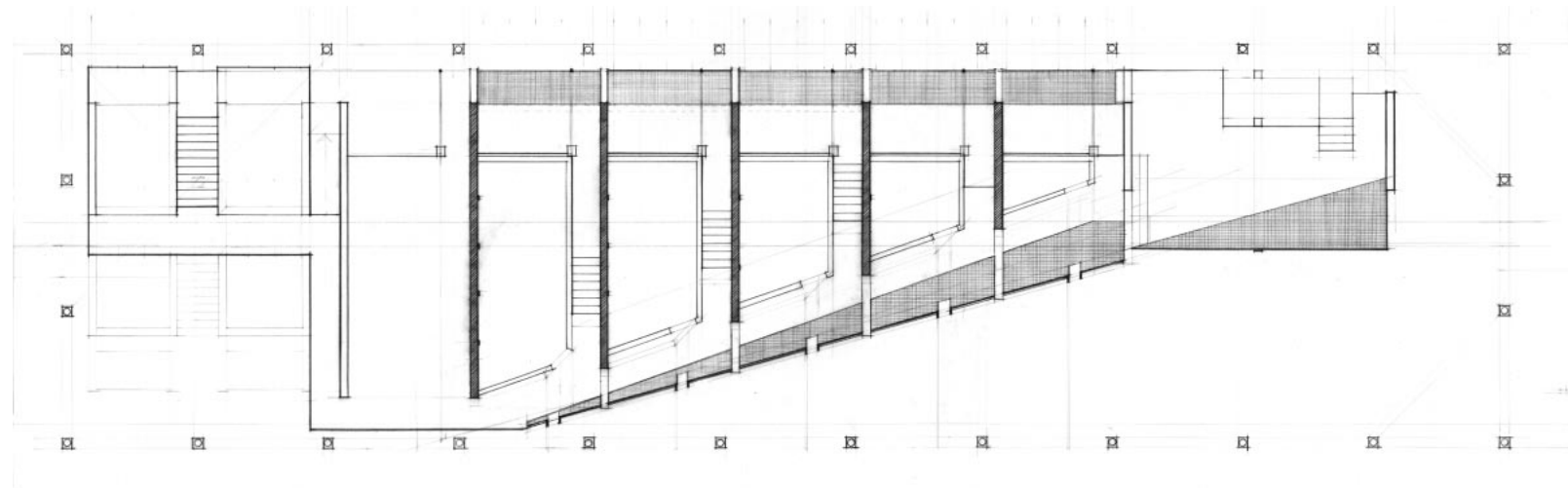






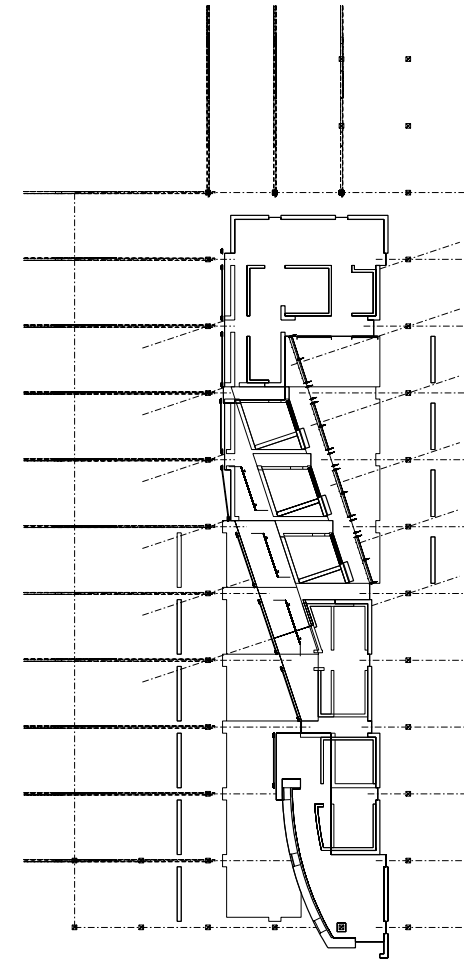
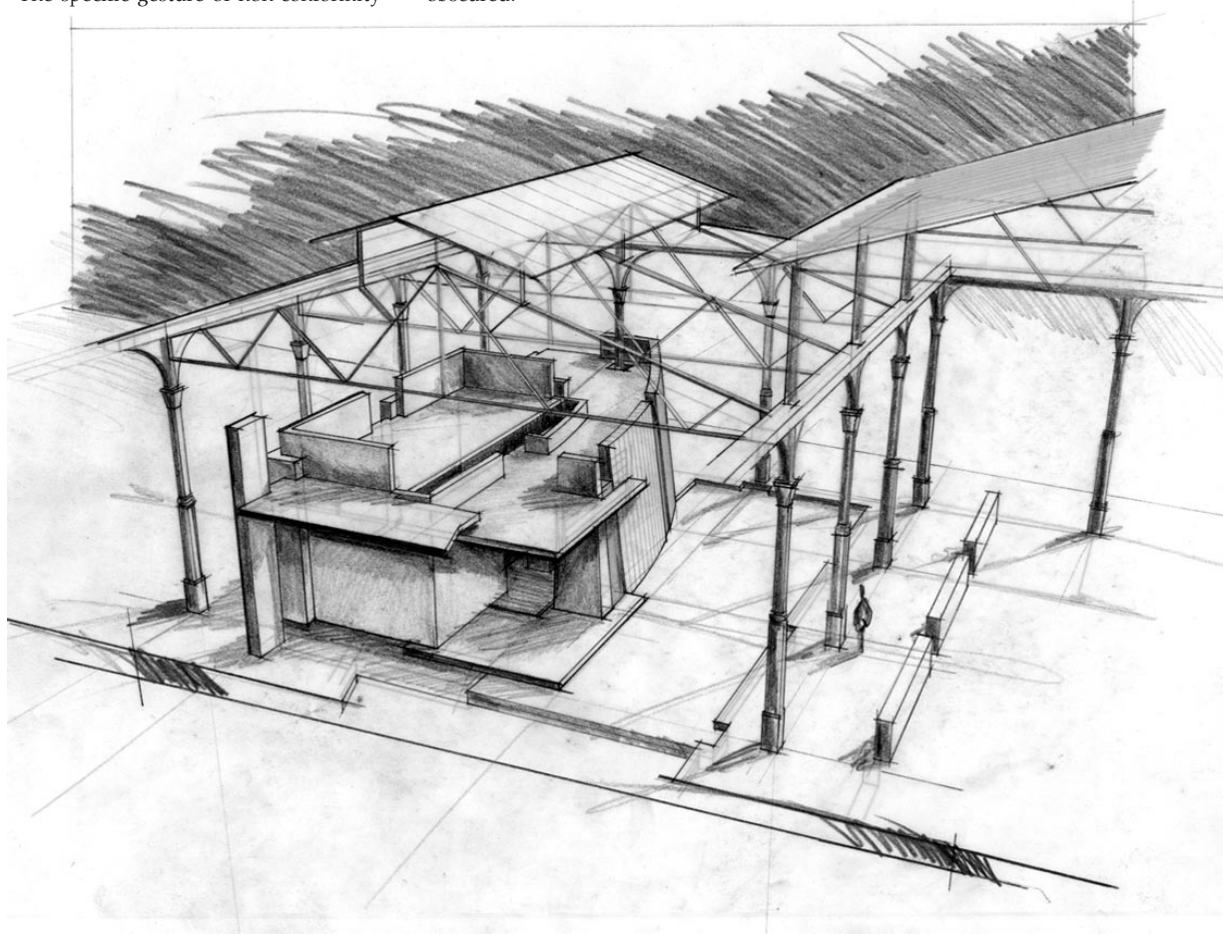


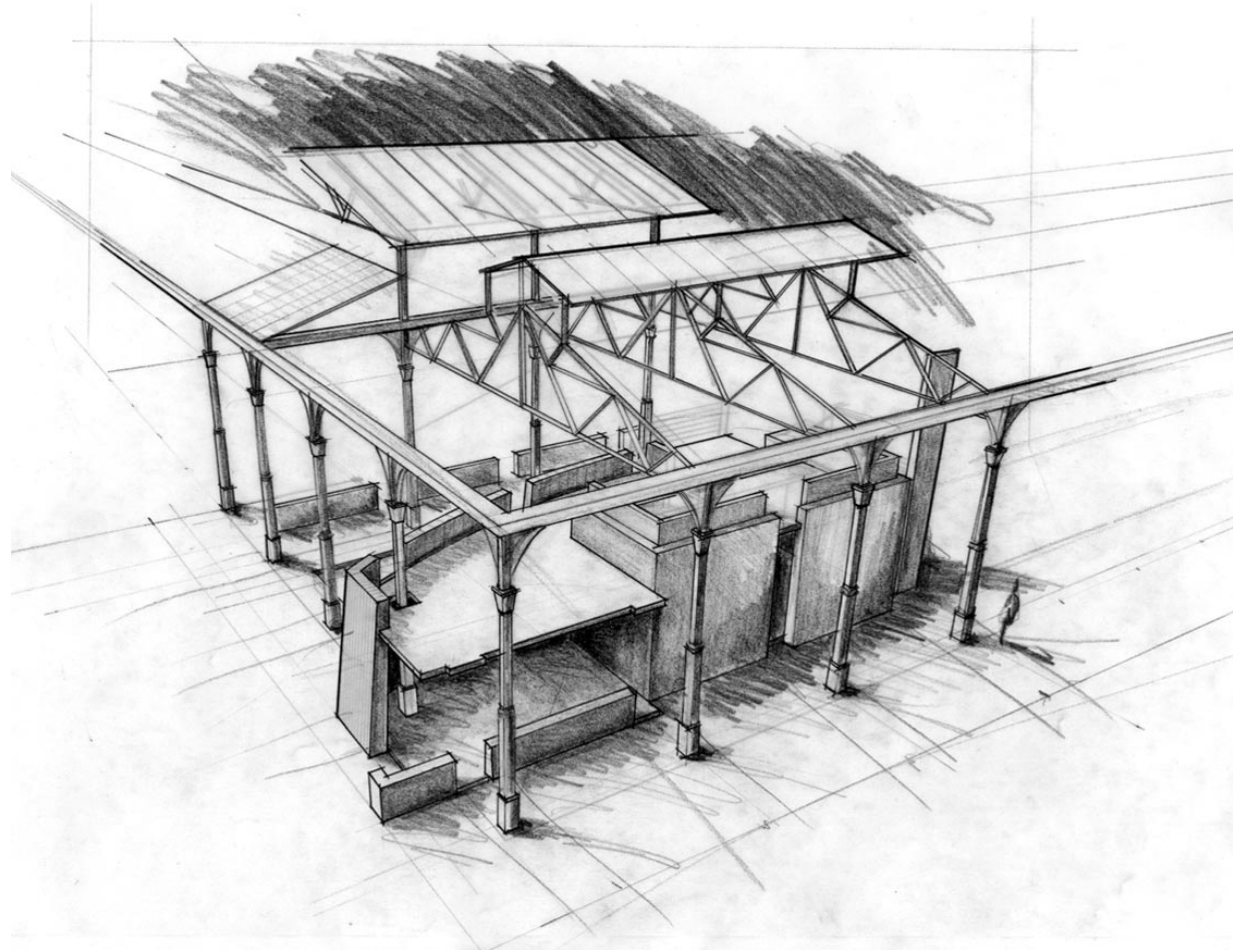
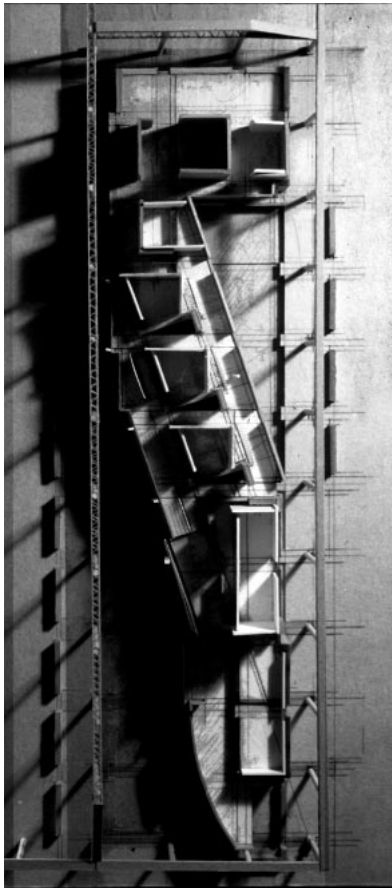




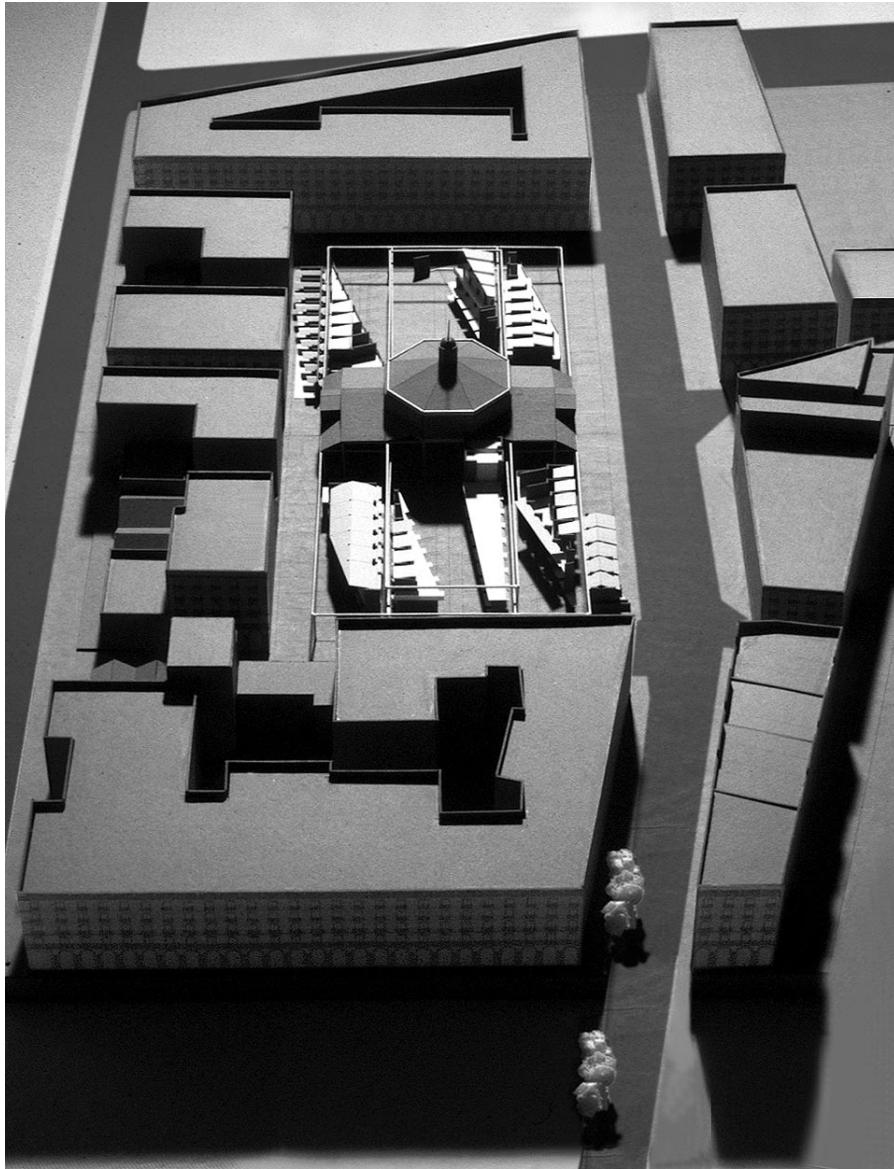
The relationship with the column, dictated by the parameters of the underlying construct, grounds the project in a legibility and straightforwardness that enables the market to be understood as a significant artifact. However, this clarity is intentionally challenged, at times, by the presence of the intervention. The specific gesture of non-conformity

with the physical elements of the market sets up the opportunity for the absence of that which is obvious in order to re-emphasize its significance. By not submitting to the resistance of the element (i.e. the column), there is an intentional emphasis upon that which is obscured.





PERSPECTIVE PARALLAX POINT-of-VIEW

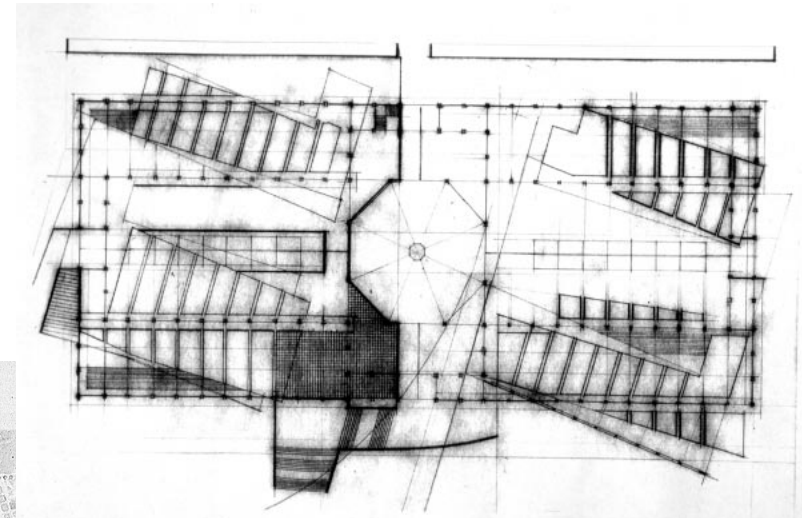
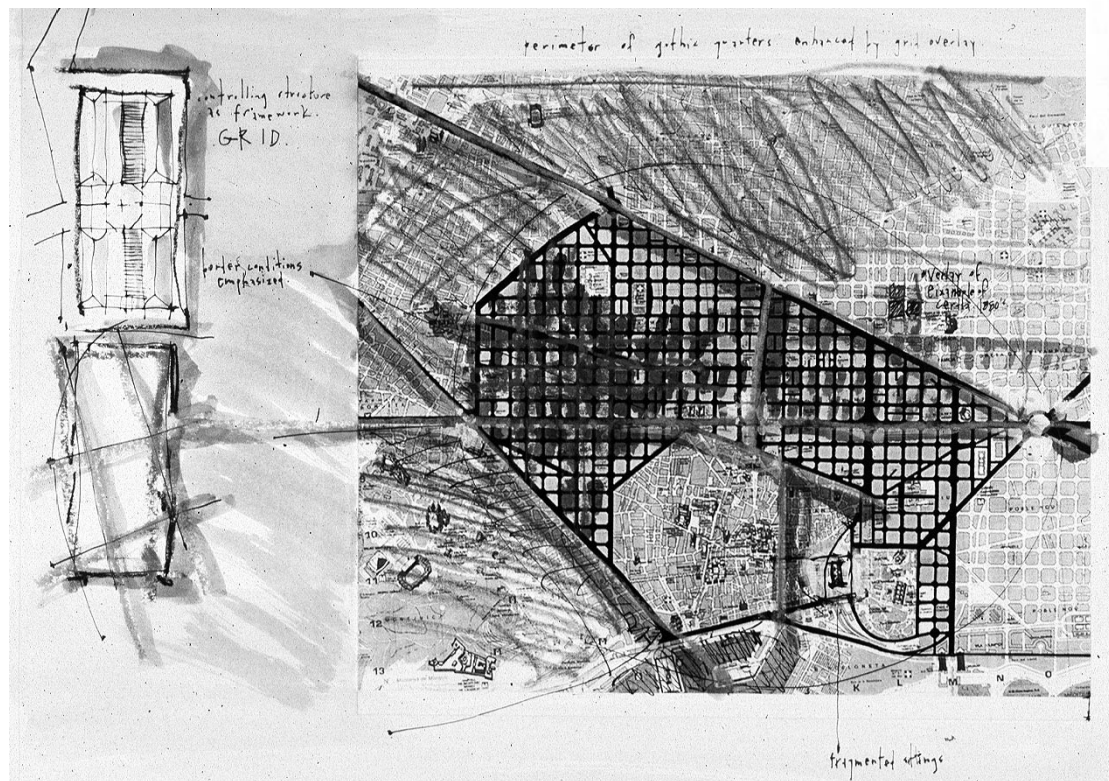


"If there is to be a 'new urbanism' it will not be based on the twin fantasies of order and omnipotence; it will be the staging of uncertainty; it will no longer be concerned with the arrangement of more or less permanent objects but with the irrigation of territories with potential; it will no longer aim for stable configurations but for the creation of enabling fields that accommodate processes that refuse to be crystallized into definitive form; it will no longer be about meticulous definition, the imposition of limits, but about expanding

notions, denying boundaries, not about separating and identifying entities, but about discovering unnameable hybrids; it will no longer be obsessed with the city but with the manipulation of infrastructure for endless intensifications and diversifications, shortcuts and redistributions - ... Since the urban is now pervasive, urbanism will never again be about the 'new', only about the 'more' and the 'modified' ... Redefined, urbanism will not only, or mostly, be a profession, but a way of thinking, an ideology; to accept what exists ..."¹⁰

10. (Rem Koolhaas, ANY 9)

“ ... the images transmitted by the forms ...”



“ ... Its meaning lies not in its forms, but in the images transmitted by the forms and the emotional force that they carry. Form only affects our feelings through what it represents.”

(Pallasmaa, Juhani. "The Geometry of Feeling...")

In that sense, the framing of the Borne by the intervention grounds the old building in a representation of the past ... the artifact. Through that, the experience of the market connects with the memory of place ... of the significance and function of the market. In essence, the grounding of the new in the past links the market to the people through the symbol as a cultural element.

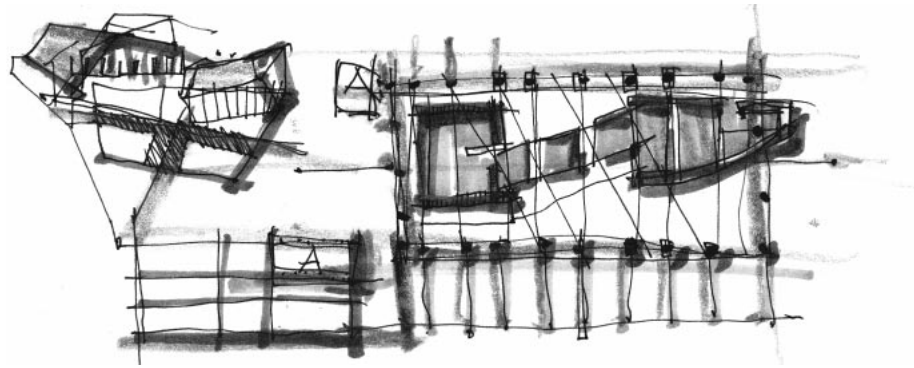
OBSERVATION – EVALUATION – FORMULATION – ACTION

(identification)

(analysis)

(reflection)

(response)

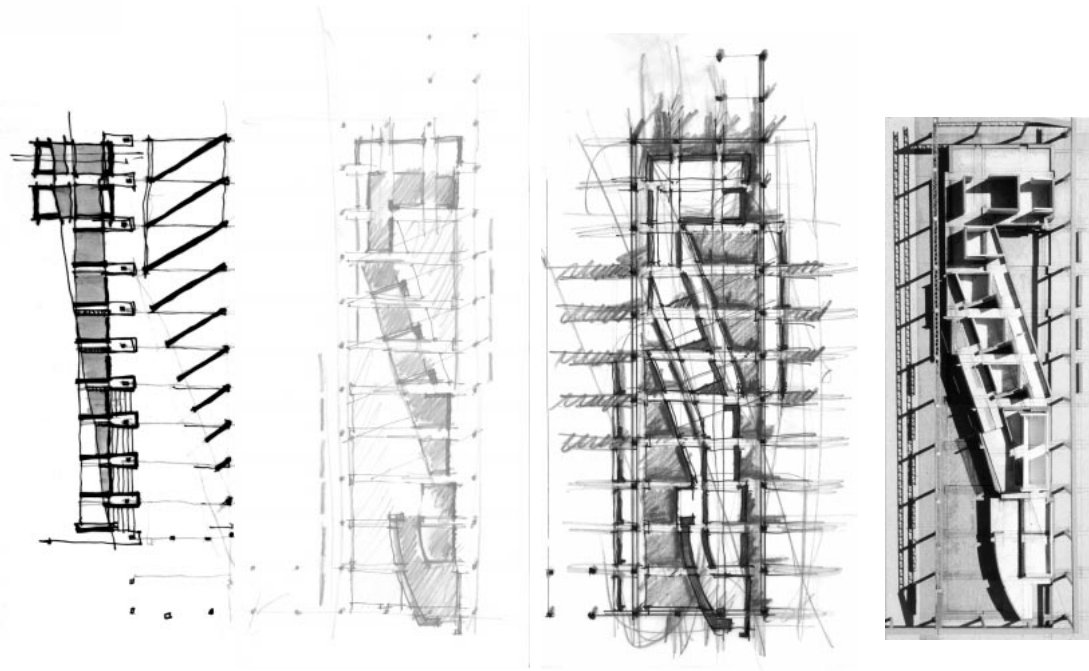


Architecture is the synthesis of (seemingly) discrete acts into a cohesive entirety which brings together thoughts and ideas to represent a conclusive, or at least comprehensive, consideration of the influences present within the realm of the project. Architecture can be achieved in many ways, but any act of architectural design has to respond to *context*.

The significance of context, (in the case of this project, embodied through the notions of *historic continuity*), whether it manifests itself in the form of resistance or the expression of inherent values (as in the market), must be confronted in order to establish a “foundation upon which to build”. Recognizing the value in these qualities, however dealt with, is an opportunity to infuse a work with vitality.

These “contextual” issues were addressed through the enjoyment of contrasting materiality. By placing something in resistance to another in order to emphasize one thing, the other, or both, this project has led to a greater understanding of what forms an “architectural” condition.

As architects we must be able to recognize and consider those issues which shape our environment ... then responsibly evaluate them and respond.

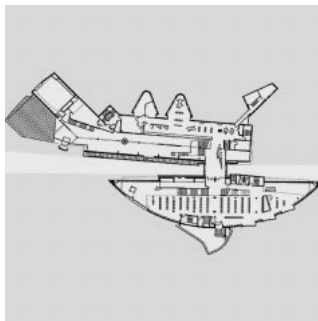


precedent study

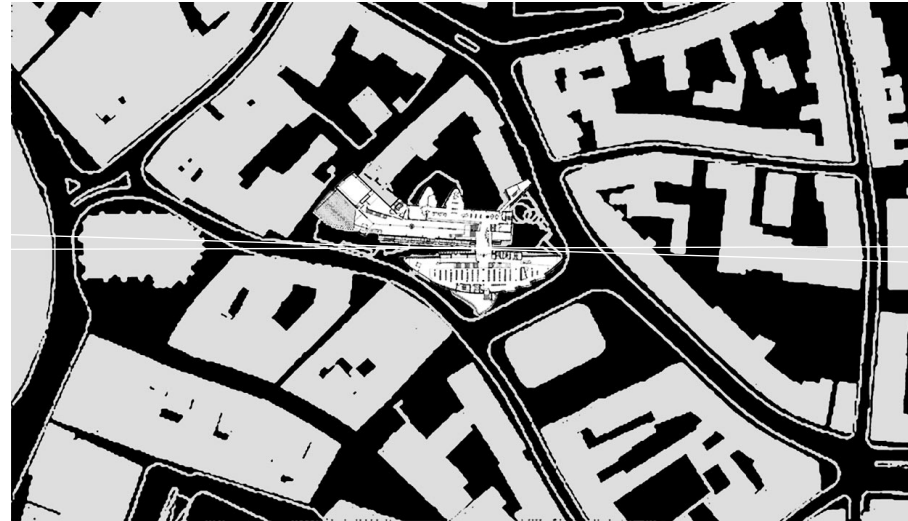
münster city library. bolles+wilson architects. 1987.



Pedestrian street established by the two main elements of the new Münster Library. Bolles + Wilson, architects.

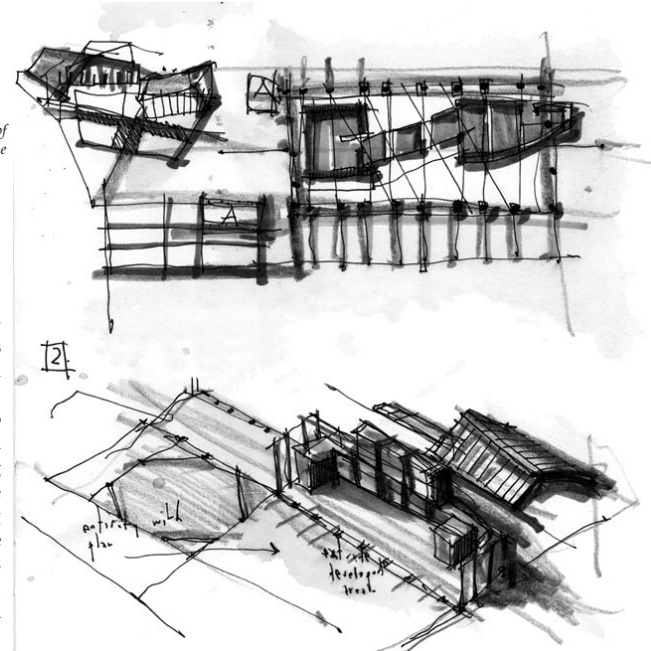


In Bolles-Wilson's project for the Münster Public Library, the contextual influences dictated a primary concept for the design. An existing street (used for parking) on the edge of the tight confines of the city was the element that characterized the importance of the "reading of the site". In developing an informed architectural response to the context as "path", the yielding of the building to the established urban element resulted in the clear demarkation of a new *essence of path* among the ambiguous urban milieu.



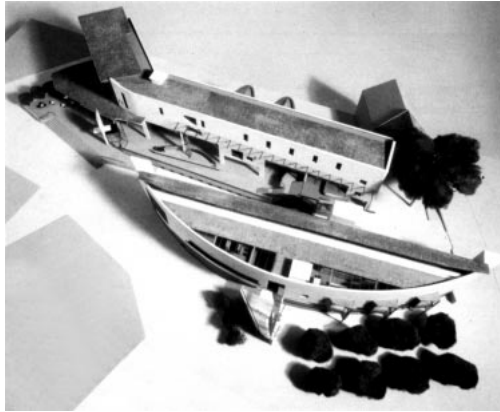
diagrammatic site plan showing Münster City Library . yielding of building to re-define path.

schematic sketch-diagram of "co-operative integration" with Borne

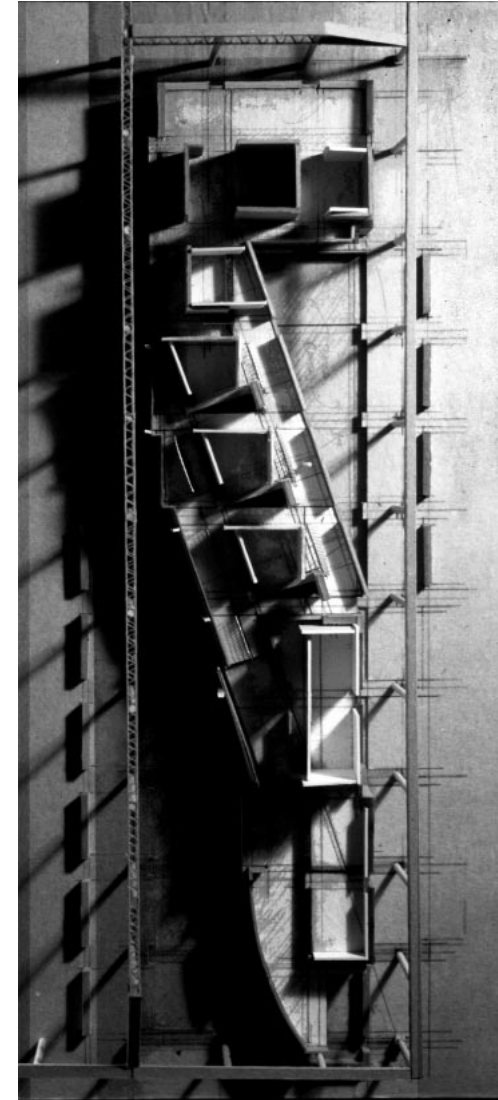
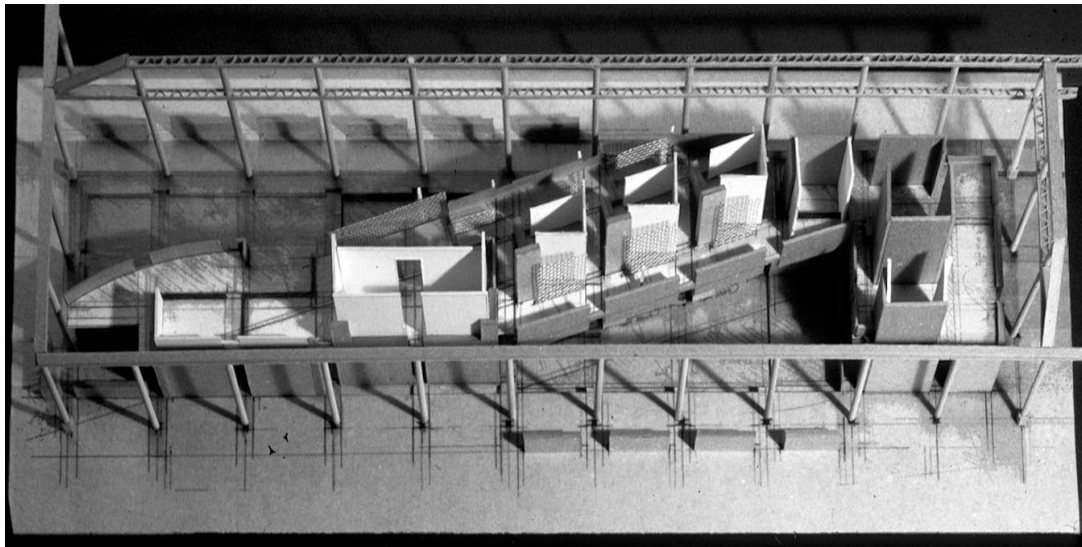


Similarly, in my proposal for the Borne Market, the responsive yielding is an act of "co-operative integration" with the existing.

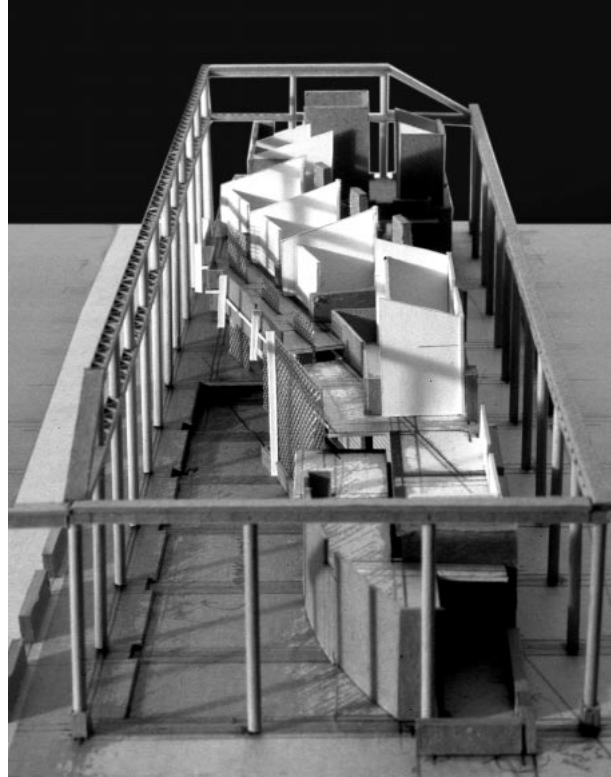
The relation of parts works to reinforce the existing while supporting a new resultant order. By yielding (comparable to the approach to the Münster Library premise), while defining a syntax in which the vocabulary of the project's entirety can evolve, there begins a re-emphasis upon that which had dissolved into the extant urban agglomeration.



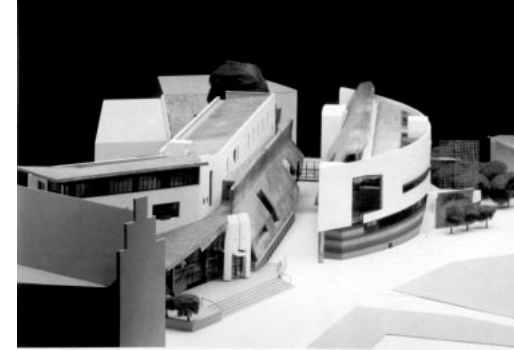
In Münster, Bolles+Wilson used separation to compress the streetscape into an urban path. By applying a condition more in scale to the older city (and the people of the city), the successful activation of an outdoor public space was achieved.



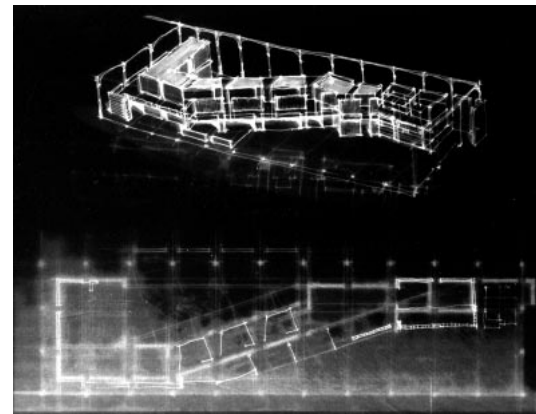
"permeability" as an issue among the assembled parts helps to reveal the accumulation of the significant artifacts through "transparent layers". The separation communicates the nature of the "new" and supports its function within the city.

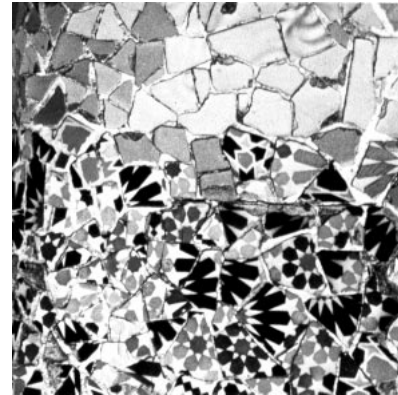


separation between the existing and the intervention defines the plaza as the urban room. By yielding to each other, the extension of the public space extends the street into the building and the building into the street.



in the Münster City Library project, the yielding produces the pedestrian street and defines the urban plaza as path or passage.





Both implicitly and even more directly, the idea of the “new” market is an analogue of the city of Barcelona. Developed at different periods in history, the market now reflects the intersections of these eras in its new configuration. The streets of the medieval quarters, interwoven with the newer axes, promenades or boulevards are analogous to those smaller paths, and avenues that interrelate the zones or “neighborhoods” of the new Borne Market. By enabling diverse programmatic possibilities this design enables a dialogue between that which the market was intended to serve, and the expansive urban space which has all but become a monument to technological competence of an industry of the late 19th century.

Nostalgia, in architecture, can

serve a people when the monument lends itself to an interaction that transcends mere viewing. The new interface with the surrounding neighborhood establishes a link which enables the old Gothic Quarters to engage the market in a way not recently possible. The Calle Comerical had severed the link with the market, and the perimeter walls, having served a previous role, only worked to exclude a wonderful, yet increasingly enigmatic, urban space from its societal functions. The re-establishing of this vital link re-joins the two parts of what is now a new whole.

The character of the historical richness and diversity of the city of Barcelona resides in the living architecture of its built forms. These buildings speak of a history and a culture that is truly unique.

The artifact lives on through the manipulation of the cultural building blocks ... the physical parts of the city.

Through architecture, *meaning* is established and reinforced via the acts of assembly, disassembly, fracture, distillation, evaluation and re-formulation. Thus we encode our beliefs and values upon that which forms the metaphors of culture within the built context of our surroundings. These markers convey the relevance of perception, experience and existence as historical creatures within our ever-evolving environment.



n o t e s / c r e d i t s

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p.12 top left. Gordon Matta-Clark. *IVAM Centre Julio Gonzalez : Generalitat Valenciana, Conselleria de Cultura, Educacio i Ciencia, 1993*. p.12 top right. from *VPI&SU slide collection, CAUS Library*. Pompidu Center aerial view of site. R. Cameron, p.30. p.12 lower right. *Halles Centrales at Lille*. from *Re/ Architecture*, photo: D. Sucheyre. p.13 background image. *Aerial photograph of Barcelona*. from cover image of *Cerdà: Ciudad y Terretorio: Una vision de Futuro*. Madrid: *Electa España*. 1994. p.14 bottom left. *partial plan of Barcelona*. from *Cerdà: Ciudad y Terretorio: Una vision de Futuro*. p.15 top left. *Medieval Barcelona, plan*. from *Cerdà: Ciudad y Terretorio: Una vision de Futuro*. p.16 left. *Borne Market (circa 1974)* from *Ianus: Old & New International Architecture*. p.17 top left. *aerial photo of Barcelona* from *Cerdà: Ciudad y Terretorio: Una vision de Futuro*. p.21 plan. *digitally altered map from Office of Urban Planning, Ajuntament de Barcelona*. p.29 columns details. from *Ianus: Old & New International Architecture*. p.32 aerial photo. from *Cerdà: Ciudad y Terretorio: Una vision de Futuro*. p.33 lower left *Arles, France and Lucca, Italy*. From *Luchinger, Arnulf Structuralism in Architecture and Urban Planning*. p.41 right. From *Rudofsky, Bernard Streets for People : A Primer for Americans*. p.42 left. *Kulturmagasinet*. architect: Esse Fahlman, photo: Lars Hallen. p.45 right pair. *column details from Ianus: Old & New International Architecture*. p.46 left. *columns*, from *Ianus: Old & New International Architecture*. right. *aisle, Rheims Cathedral* from *Collins, Peter Changing Ideals in Modern Architecture, 1750-1950*. p.58 *Borne at turn of the century*. Photo: F. Ruis, from *Cuadernos de Arquitectura y Urbanismo*. No. 101. 1974 (marzo-abril). p.61 *aerial view of Pompidou Center, Paris*. from *VPI&SU slide collection, CAUS Library*. R. Cameron, p.30. p.78 top left. from *Rudofsky, Bernard Streets for People : A Primer for Americans*. p.92 right. *Borne Market*. from *Cuadernos de Arquitectura y Urbanismo*. No. 101. p.33, 1974 (marzo-abril). p.95 top left. source: <http://www.aud.ucla.edu/~jeizenbe/fall196/bokwil1.jpg>. photo: Christian Richters. p.96 top left. from no.47 (1991) p.70 *el Croquis*. p.97 top right. *ibid.* p.71.

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v i t a

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(then.)

I opened my eyes.

(now.)

I'm learning to see ...

