

## ABSTRACT

Title of Thesis: AN ARTISANS'S MARKETPLACE IN OLD  
SAN JUAN, PUERTO RICO

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In San Juan, Puerto Rico, artisans work and sometimes live as nomads. The lack of permanent places to exhibit and sometimes produce their work makes them highly dependent on tourism agencies and private companies to provide them with places and opportunities to sell their work.

The existing site is located on the south border of Plaza Mayor in Old San Juan and occupied by a department store at ground level with office and retail spaces in the upper floors.

The objective of this thesis is to design a permanent artisans' marketplace with residences on this site. It proposes to bring the production and sale of this art into the heart of this historic and culturally important city. It aims to explore the insertion of a contemporary building in a historic context without copying the forms of the past while preserving the character and scale of the space.

AN ARTISAN'S MARKETPLACE IN OLD SAN JUAN, PUERTO RICO

By

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## **Dedication**

This thesis is dedicated to Roberto Ferrer and Mirtelina Rodriguez, my parents. Esta tesis se las dedico ha ustedes. Gracias por el apoyo incondicional durante toda mi vida.



## **Acknowledgements**

Thank you from the bottom of my heart to all the people who encouraged and supported me during these last two years. I could not have made it without you all.

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**Introduction:**

One of the elements that allow us to appreciate a country's culture is its artistic manifestations. Puerto Rican crafts and popular arts represent the cultural identity and rich ethnic heritage of its people. The origins of this art travel back to the times when farmers and people from the country in general, designed and manufactured their own working tools and everyday use objects due to the lack of economic resources to buy them or the fact that they were not industrially produced at the time. Raw materials such as metal, leather, wood and wool were transformed into useful objects such as gas lamps, knives, bags, belts, musical instruments, furniture, hammocks, and clothing.

Nowadays modern society has replaced these hand crafted utensils for industrially produced artifacts that require less effort to produce and are easily accessible to the general public. Rather than disappearing, popular arts evolved throughout generations. They became objects still in demand by a public that now sees them as art pieces that are symbol of their culture and traditions, and even as museum worthy pieces beloved by collectors.

Despite its general acceptance among the population, the arts and crafts field in Puerto Rico has lacked support from government agencies. The lack of funds and facilities for the production and promotion of this art has caused the closing of permanent markets throughout the Island; therefore limiting the sale and exhibition of these products to holiday fairs and weekend markets mostly found in tourist frequented areas, such as Old San Juan.

This thesis explores the design of an artisan's marketplace in Old San Juan. It explores the idea of inserting into the very heart of this historic city, a place for the production, exhibition and sale of one of the island's strongest cultural manifestations into one of the most historically intact colonial cities in the Caribbean.<sup>1</sup>

Declared historic district since 1951, Old San Juan still bears the scar of several urban renewal developments that threatened the architectural heritage of the city during the first decades of the 20<sup>th</sup> century. This thesis will explore the idea of contemporary architectural expression in historic contexts, an architecture that in the words of Kenneth Frampton, “distances itself from the Enlightenment myth of progress and from a reactionary, unrealistic impulse to return to the architectonic forms of the preindustrial past.”<sup>2</sup>

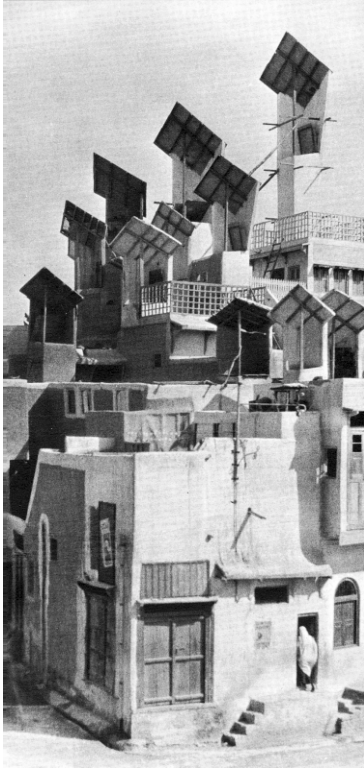
## Chapter 1: Critical Regionalism: Towards an Architecture of Place

“There is the paradox: how to become modern and return to sources; how to revive an old dormant civilization and take part in universal civilization.(footnote)  
-Paul Ricoeur, History and Truth

Critical Regionalism was a term first coined almost twenty-five years ago. The idea behind it was developed as a reaction to modernist (and later postmodernist) architectural tendencies of that time. Modernist aspirations for creating a new architecture that was free from any preconceived notions from the past and history degenerated into the application of reductive and universal formulas for the creation of its buildings<sup>3</sup>. The application of these formulas posed an underlying conflict in all fields, between globalization in one hand, and local identity and the desire for ethnic insularity on the other<sup>4</sup>. The concept of Critical Regionalism was a new and reactionary approach to design that gave priority to the genius loci rather than to preestablished universal canons.

The word critical was added to this term in order to distinguish it from the merely regional architecture. The critical regionalist architecture not only incorporated regional elements into design in order to adapt to local conditions, it also criticized an architectural order that claims universal application. Critical regionalism focuses on specific elements from the region, elements that define place and uses them in a strange way rather than familiarly, thus making them appear strange and to some extent, new. This concept named *defamiliarization*, according to the words of Alexander Tzonis, “is at the heart of what distinguishes critical regionalism from other forms of regionalism and its capability to create a renewed, versus a sentimental, sense of place in our time<sup>5</sup>.





**Figure 1. Wind scoops in Hyderabad Sind. (Architecture without Architects fig. 115)**



**Figure 2. Vaulted Cell houses, Apanomeria (Architecture without Architects fig. 58)**

Figures 1 and 2 show images of vernacular architecture that can be classified as regional; their forms are almost predetermined by climatic conditions and tradition. No innovation or architectural expression is pursued in regional architecture, for its only purpose of adapting to the environment is already attained.



**Figure 3. Nordic Embassies, Berlin, Germany. (Critical Regionalism p.90)**



**Figure 4. Tjibaou Cultural Center, New Caledonia. (Critical Regionalism p. 82)**

The use of the same materials in slightly different ways imparts characteristic sense of place and community to this building complex in Berlin.

Architect Renzo Piano architecturally reproduced and adapted the shape of Caledonian huts to create a new synthesis between tradition and modernity.

Dough Kelbaugh in his article “Towards an architecture of Place: Design Principles for Critical Regionalism”, defines five principles in an attempt to reduce critical regionalism to its essential elements:

1. **Sense of Place-** What makes a place unique is worth celebrating with architecture: finding and keeping the differences that make a difference. (p.183)
2. **Sense of Nature-** Buildings can be treated as organisms that are conceived, grow, flex, adapt, interact, age, die and decay- always rooted in and seeking to liberate the genius loci of its site. (P.184)
3. **Sense of History-** Look of enduring patterns and types rather than traditional forms in history. A building type that has stood the test of time for many generations must be fundamentally correct in terms of responding to building materials and practices, climate, social and cultural needs, tradition and economy. (p.184)
4. **Sense of Limits-** To develop contained spaces that provide the notion of contained and finite. An architecture of limits and stasis that also reflects the limited nature of our natural resources. (p.187)
5. **Sense of Craft-** Aim to build with human care, and with authentic, palpable and substantial materials; therefore avoiding the slippage from tectonic to scenographic design (p.186)<sup>6</sup>

## **Subtle Destruction of Cultures**

As mentioned before, globalization's homogenizing effects not only affect the architecture field but every aspect of all cultures. Paul Ricoeur states that "universalization, while being an advancement of mankind at the same time constitutes a sort of subtle destruction, not only of traditional cultures, but of the creative nucleus of great cultures".<sup>7</sup> This homogenizing stream has devastating effects on cultural expressions such as music, arts and traditional crafts; aspects that help create identity and diversity among global cultures.

This thesis explores the application of critical regionalism, not only in the architecture field, but also its application in favor of preserving cultural expressions in today's ever changing world and save them from the "subtle destruction of universalization".<sup>8</sup>

## **Chapter 2: Craftmanship, Art Populaire, Volkskunst**

### **Craft and Popular Arts**

When one talks about crafts and popular arts, important distinctions must be made. Craft objects are useful: they spring directly from life and they serve life; they are in fact one of life's integral parts<sup>9</sup>. They are not made as merely decorative objects with the purpose of being displayed in a glass cabinet or a gallery for the admiration of connoisseurs; they combine utility and beauty and at the same time express the cultural tradition of a country through manual skill.<sup>10</sup> They are collective creations because their design and beauty can not be adjudged to the individual that makes them but to the socio-historical knowledge that the artisan possesses about expressing the utilitarian and useful.<sup>11</sup> In the broadest sense, the form of popular objects have utilitarian basis.

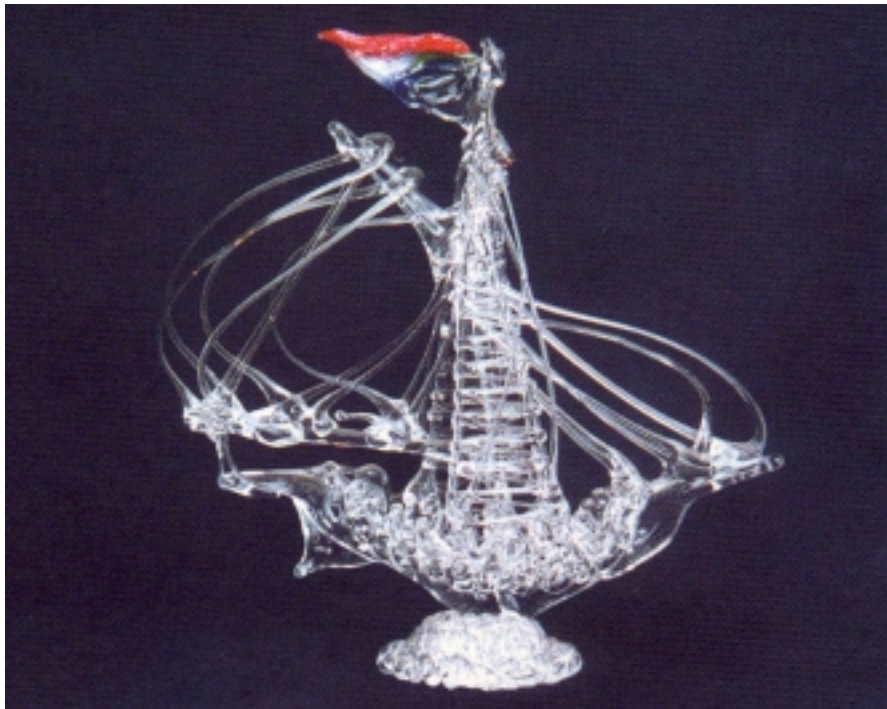
On the other hand we have Popular Arts; creations that first and foremost express the talent and creativity of the individual producing them. They share certain aesthetic values with the working class in general and communicate their feelings and particular vision of the world. Their pieces are frequently unique (not a piece is similar to any other) and a lot of time is invested on their creation. They can be said to be the closest to the general definition of an artist; and although their materials, lifestyles, studios, working tools and themes are similar to those used by craftsmen, they serve originality and personal expression regardless of any existing traditions.

In fewer words it can be said that there exist several strata among the crafts field, and these range from the almost purely utilitarian to the artistic. Their common aspects are the expression of cultural tradition by means of materials, working methods, lifestyles and themes. They are both equally important as cultural entities but in general terms a

popular art piece requires more effort than a craft. Its higher economic value does not reside on its creator's name but in the nature of the work itself.

### **Artisans in Puerto Rico**

Crafts and Popular Arts in Puerto Rico are gaining more importance everyday. Many people prefer to acquire unique, hand made objects instead of objects that are industrially manufactured, a process that takes away the uniqueness and beauty of crafts.<sup>12</sup> As in many other countries, hundreds of artisans have learned their occupation from past generations, who transmit their values and customs through their pieces. Artisan's can still be found all over Puerto Rico producing popular arts and crafts of very high quality.



**Figure 5. Blown Glass Sailboat, Victor Lequerique. (Marat)**





**Figure 6. Bird Carving/Enea Furniture (Marat)**



**Figure 7. Corozo carving/Petate Weaving (Marat)**



**Figure 8. Mask Painting/ Piro-engraving (Marat)**

### **Current Situation**

Although their work has lately gained acceptance and demand from the public, several problems still deeply affect artisans' situation:

- Artisans live traveling from fair to fair in order to sell their work. A lack of a permanent market to sell their products causes these fairs to overflow with artisans, which in turn reduces the overall sales.
- Their overall economic situation deprives them of the opportunity of acquiring a permanent live/work place, which frequently limits the production of their work to the reduced leftover space available in their rented houses or apartments and the fairs
- Unfair competition by foreign craft, mostly found in Old San Juan. Its products are usually cheaper than local craft due to its production methods and materials and therefore more attractive for the tourist. San Juan is a great venue of continuous tourist flow and therefore, an important outlet for local arts and crafts.<sup>13</sup>

- The lack of economic incentives for the development of their art deprives the artisan's from being active participants of Puerto Rican economy; this situation also discourages future generations from embracing it as a way of life due to its unstable incomes, therefore endangering the continuation of local crafts creation as an expression of culture.
- The closing of some of the few existing marketplaces such as “The Craft Market” and “La Plazoleta del Puerto” (both in San Juan), limits the amount of permanent places available to sell and also promote this art as part of a culture.

The Puerto Rican arts and crafts field is in need of a permanent place for the production, exhibition and sale of local crafts. Furthermore, including live/work facilities for artisans would provide them with fixed work and living spaces that in turn, will provide the means for an increased production, promotion and sale of their product and cultural heritage.



## Chapter 3: The Market Place in History

### History of the Marketplace

Marketplaces were among the most significant public places of any historic city. They were almost always public open-air spaces and were centrally located in squares and plazas. Markets were usually ephemeral in nature, consisting of booths, tents, and stalls brought in by independent merchants on a daily or seasonal basis.<sup>14</sup> That way, the public spaces could be used for other purposes on holidays and weekends. Until the 19<sup>th</sup> century, this was - and in many cities with temperate climate still is- the traditional market for the purchase of vegetables, fruits and meats.<sup>15</sup> Several other variations of marketplaces have been born throughout history due to different physical and economic reasons. Shopping arcades and indoor markets as well share most of these factors. The important difference between these two resides in that fact that the indoor market is primarily a private destination rather than a public pedestrian passage.



Figure 9. County Arcade and Kirkgate Market. Leeds, England. (Interior Pedestrian Places p. 39)

During the 1950's a new kind of marketplace began to appear in European and American cities. Termed the festival marketplace, it combines entertainment, socialization, specialty shopping, and recreational eating—usually in a historic setting.<sup>16</sup> Several projects of this kind have been developed in various parts of the United States such as the Ghirardelli Square in San Francisco , “The Cannery”, only two blocks away and Rouse Company developments such as the Faneuil Hall Market Place in Boston, Massachusetts and the Harborplace in Baltimore, Maryland.



**Figure 10. Ghirardelli Square. San Francisco (Interior Pedestrian Spaces p.92)**



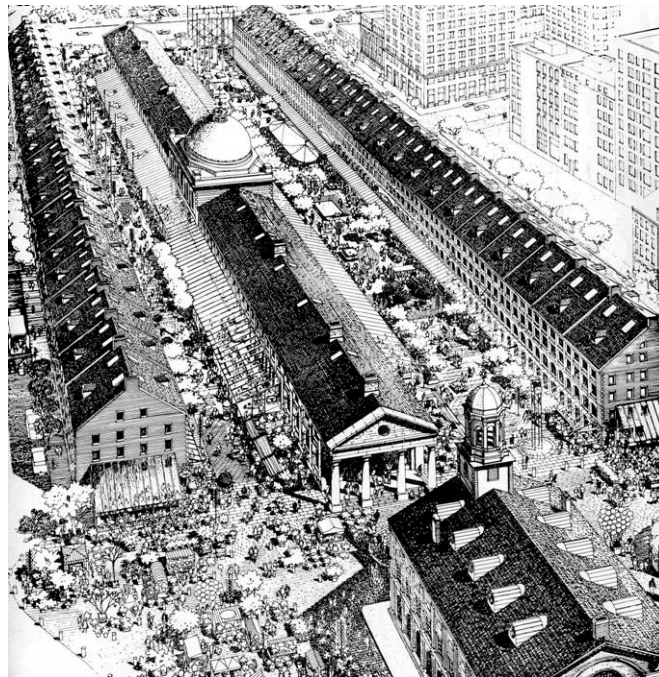
**Figure 11. Harborplace, Baltimore, MD (Interior Pedestrian Spaces p.94)**





**Figure 12. Exterior view of Quincy Market and North Canopy Street. (Ferrer)**

It could be said that Faneuil Hall's success as a marketplace relies not on the physical market building or buildings but on the way these relate to the streets between them.



**Figure 13. Aerial Perspective, Boston Market. (Source)**

The market activity generated inside the buildings “spills” on both streets, transforming them from circulation spaces into destinations of equivalent importance to the buildings, this seems to be the formula to provide unity for the whole system of streets and buildings and make it work as a single entity. (Architectural Record, December 1977)



**Figure 14. Interior of Faneuil Hall. (Ferrer)**



**Figure 15. View of South Canopy. (Ferrer)**

Glass sheds extend from the main structure of the market into the street.

In an article written in 1979, Jane Thompson cited six inherent qualities that generate the attraction of the festival marketplace, as summarized below:

1. People and Activity Are Elemental: Animation attracts people who visibly attract more people.
2. Real Use: Goods and services that relate to daily needs are offered.
3. A True Environment: Use of genuine old buildings avoids pretense and fakery.
4. Elemental Novelty and Change: Intrinsic movement of people evolves with day, night and seasonal changes.
5. Elemental Aesthetic Pleasure and a Sense of Quality: Sensual pleasure from building elements, lights, plants and trees.
6. Authentic Meaning in the Urban Context: Despite private ownership it has public purpose in revitalizing downtown and serving human needs.<sup>17</sup>

### **Marketplaces in Puerto Rico**

At the end the 19<sup>th</sup> century Puerto Rican towns served as exchange points where manufactured and imported goods were paid for using agricultural products such as sugar cane, coffee and tobacco. In cities and countries alike, market buildings made their appearance. These were buildings with simple layouts, usually of rectangular plan and roof structures that employed either wood trusses or colonnaded spaces that supported eaves roofs and flat brick roofs respectively.<sup>18</sup> Multiple double doors made of wood or iron faced the street facades thus providing means for circulation of both people and air.



Their architectural concept was of simple elegance: moldings, pilasters and cornices modulated the proportions of the masonry or brick structures. The use of bull's-eyes and elaborated **montantes** above the doors provided for cross ventilation (figures 16 and 17).



Figure 16. Bull's Eye. (Puerto Rico 1900 p.165)



Figure 17. *Montante* above door in Old San Juan. (Ferrer)

### Marketplaces today

Despite the appearance and intense development of shopping malls on suburban sectors of the Island, the urban centers are still important economic hubs inside the city. Paradigms such as El Paseo de Diego in Rio Piedras and the recently renovated Plaza del Mercado (market plaza) in Santurce provide evidence that urban commercial centers are still capable of attracting local and tourist public; not only for commercial purposes but also for recreational activities.



Figure 18. Plaza del Mercado, Santurce. ([www.elmenupr.com](http://www.elmenupr.com))



Figure 19. Paseo de Diego, Rio Piedras. ([www.travelandsports.com](http://www.travelandsports.com))

Plaza de Armas in Old San Juan was also an active commercial center since its origins in the 18<sup>th</sup> century. It was initially an open air market and was later moved to a building at the north-west corner of the plaza in 1856. In 1876 another relocation moved the marketplace further away from the city's center to the northern boundaries of the city where it was eventually transformed into a museum. Today Plaza de Armas is still the city's biggest public open space and backdrop for important civic buildings such as the City Hall and the Department of State buildings. However, the establishment of fast food restaurants and department stores around it has weakened a great deal of its urban activity due to the reduction of residential and recreational retail uses.

This thesis proposes the reinsertion of the marketplace function on the Plaza de Armas through the creation of an artisans' marketplace with residences in the very heart of Old San Juan. It explores the marketplace function combined with residential uses with the purpose of stimulating, commercial, residential and public activity in the plaza as indispensable part of the urban drama of Old San Juan.

## Chapter 4: The Site

### Location

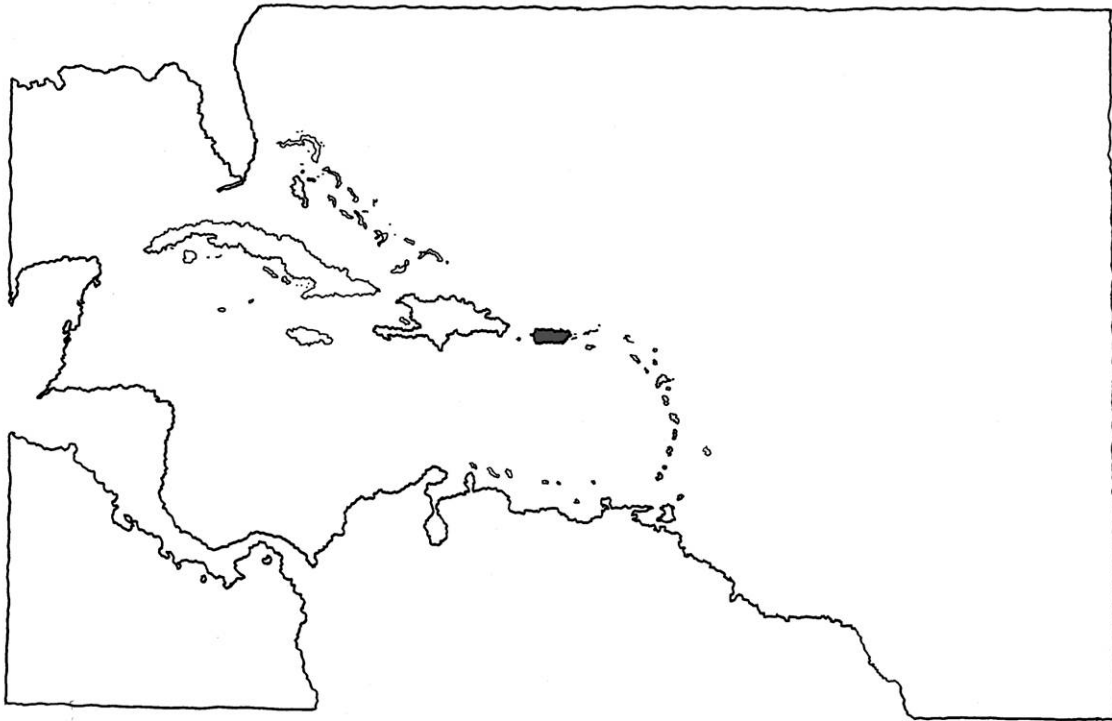


Figure 20. Map, the Caribbean. (Author's drawing)

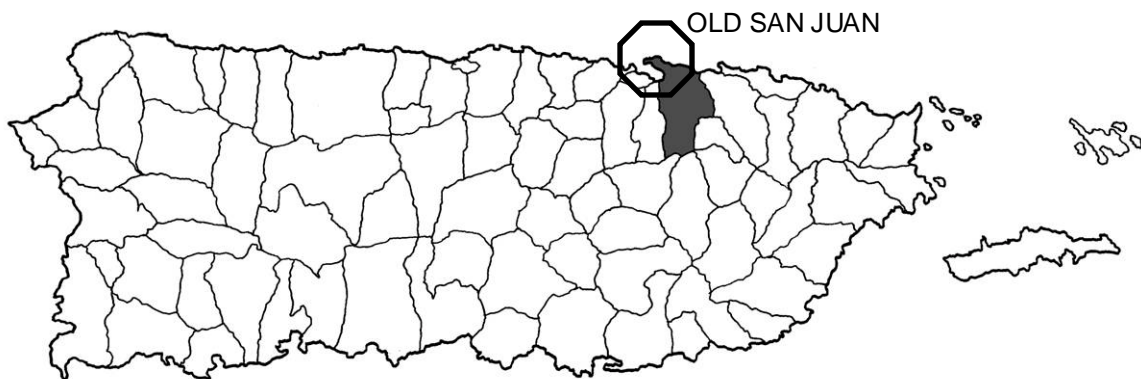


Figure 21. Map, The Island of Puerto Rico. (Author's Drawing)

The Municipality of San Juan (shaded in gray) is located on the north-eastern region of the Island and is the capital city of Puerto Rico.





Figure 22. Aerial View of Old San Juan. (Source: DTOP)

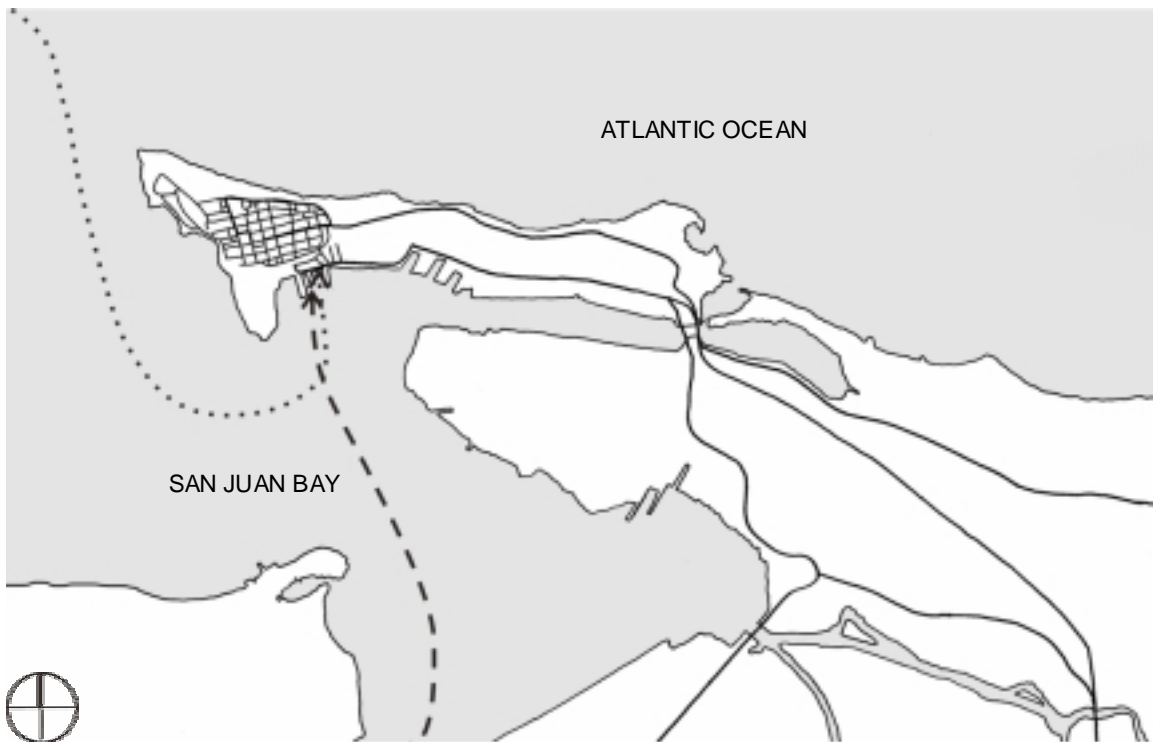


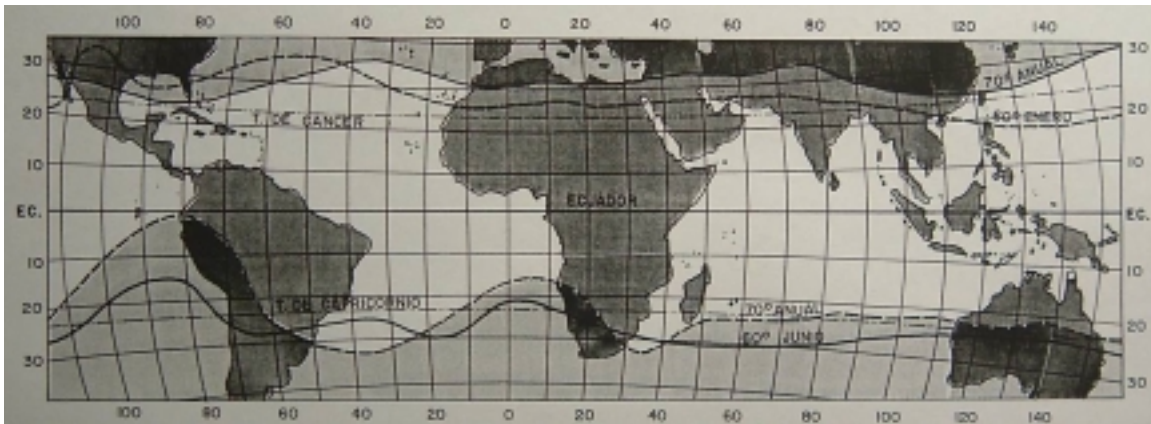
Figure 23. Diagram, Access to San Juan Peninsula. (Author's Drawing)



**Figure 24. Old San Juan. Aerial picture with site location. (DTOP)**

AREA OF SITE

## Climate



**Figure 25. Puerto Rico's location in relation to the Ecuador. (Enfoque Biotropical p.9)**

Puerto Rico is located in the tropical “belt” that wraps around the world globe, at latitude 18 degrees north of equator. This latitude situates the Island in the zone that receives the maximum amount of solar exposure, which is located between the tropics of



Figure 26. Map, Puerto Rico's latitude within the Caribbean. (Muñiz)

Cancer and Capricorn. The average temperature is 74 degrees F and very slight changes in temperature occur throughout the seasons. Its location is also within the latitudes of the trade winds, which are received from the east and all year long. At the site's location in San Juan, which is the North coast and very close to the sea, trade winds blow from the north east during day time and from the south east during night time.

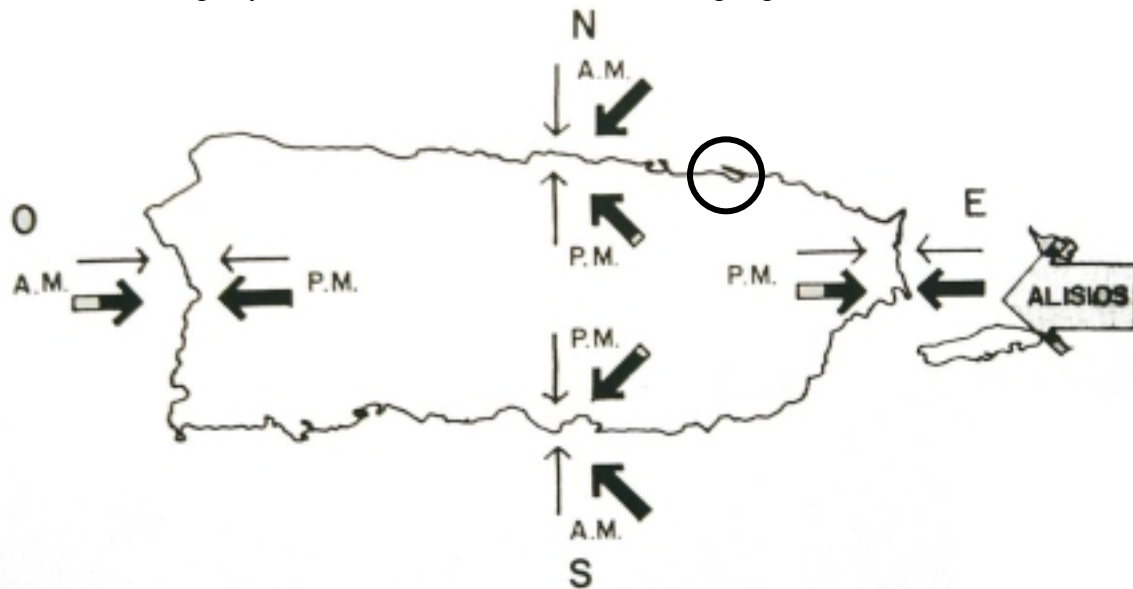
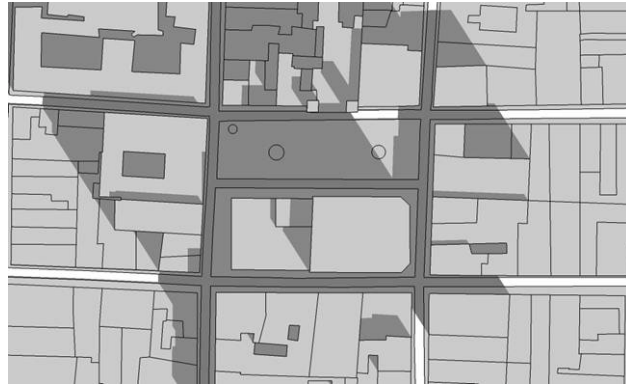


Figure 27. Variation of trade winds. (Enfoque Biotropical p.21)





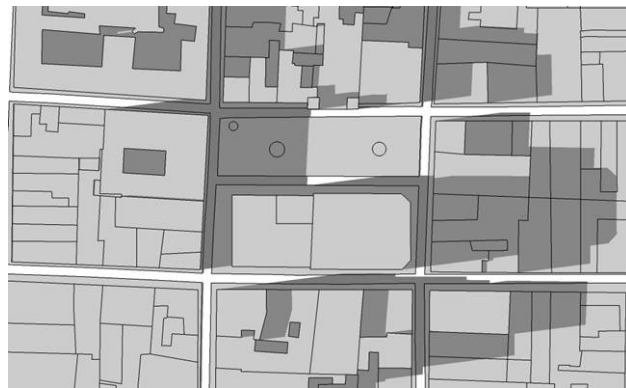
Figure 28. Shade Diagram, summer season. (Drawing by Author)



Winter  
8:00 am



Winter  
1:00pm

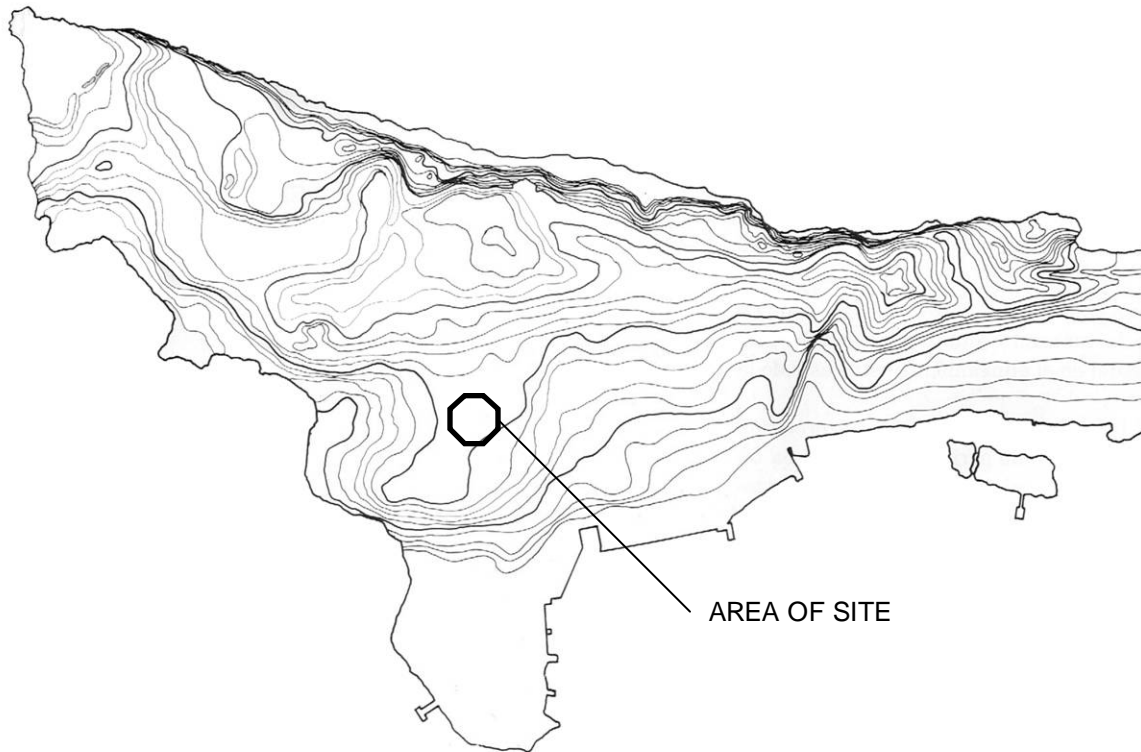


Winter  
4:30pm

**Figure 29. Shade Diagram, winter season. (Drawing by author)**

Topography:

The old city is located on a peninsula which is connected to main land at its east side. It was mainly this geographical condition that made it perfect for defense purposes during times of the Spanish conquest of the Americas. Its highest point (at an altitude of 38 meters above sea level), is located close to northern border of the city, which in turn generates steep cliffs on the north and west sides of the peninsula. The city's landscape slopes more gently towards the southern and eastern portions of the peninsula.

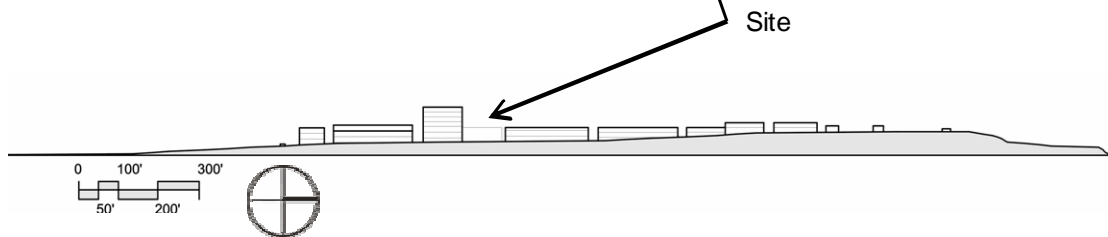


**Figure 30. Topographic Map, Old San Juan Peninsula. ( San Juan Historia Ilustrada)**

Every contour line represents an elevation of two meters (6.5 feet)



**Figure 31. Overlay of topography map and aerial picture. (Author's photomontage)**



**Figure 32. Cross Section Through Old San Juan Peninsula. (Author's Drawing)**

The site is partially located on one of the few plateaus throughout the city, making the Plaza de Armas a relatively flat surface while the block south of the plaza has a height difference of approximately 4 meters from its north to south facades.

## Old San Juan Origins

San Juan was the second Spanish settlement in Puerto Rico; in 1521 the transfer of the city from its former location in Caparra was completed and a plaza in front of the cathedral's location was built.<sup>19</sup> Until 1604 the Plaza in front of the Cathedral was considered the most important public space in the city, this due to the importance of the Cathedral as the most important building in the city at the time. In 1604 the construction of the city hall on the North side of the space until then known as El Terraplen de los Milicianos, took away the hierarchy away from the Plaza in Front of the Cathedral (Plazoleta de Las Monjas). This space became the city's geometric center and most important public space in the city<sup>20</sup>. Additional open spaces were developed while the city grew in size. These spaces developed particular uses and acquired relative importance in the hierarchy of open spaces existing today (see fig 36). The *Terraplen de los Milicianos* has been know with several different names such as Plaza del Cavildo, Plaza de Armas and Plaza Mayor; however it is known today as Plaza de Armas (Arms Square) due to its original use for military exercises.



Figure 33. Diagram showing important civic buildings. (Author's Drawing)





**Figure 34. San Juan City Growth (San Juan, Historia Ilustrada )**

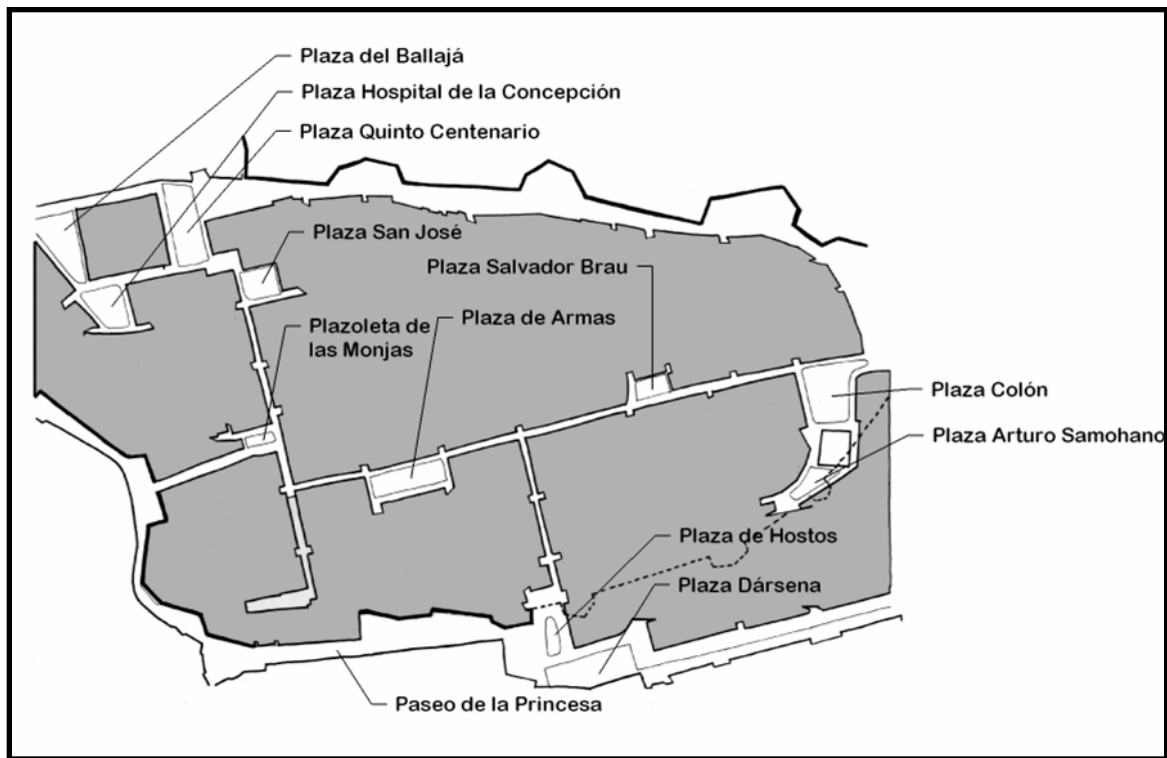
The diagram shows San Juan's main stages of growth: 1625-1792-1850-1887.

Notice the location of Plaza the Armas on a fairly flat area among the varied topography of the city.



**Figure 35. San Juan, Figure-Ground (Author's Drawing)**

The presence of the courtyard house in almost every city block can be appreciated in this drawing. The courtyard is an effective way to induce cross ventilation in buildings that lack the presence of lateral yards.

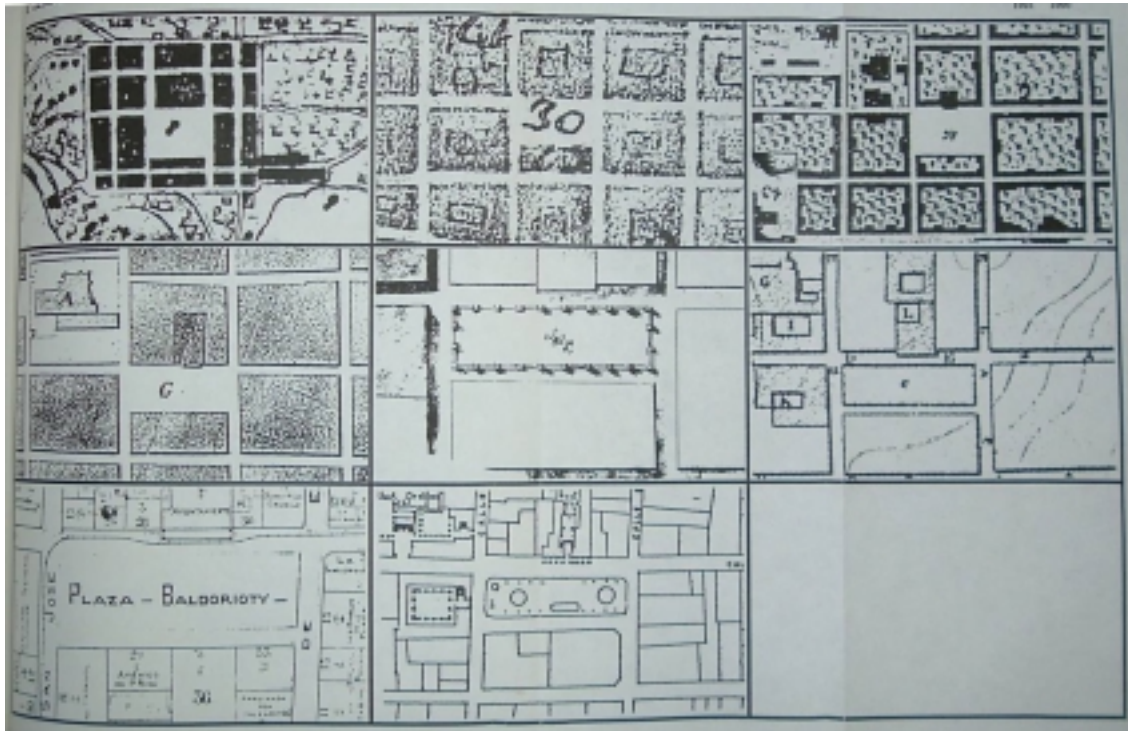


**Figure 36. San Juan's Public Open Spaces (Author's Drawing)**

Notice the centric location of Plaza de Armas (central part) in relation to the rest of the city's public open spaces.

The Plaza de Armas originated in 1530 with the construction of the San Carlos military quarters (where the Department of State building sits today)<sup>21</sup>. The space in front of it was named “Terraplen de los Milicianos”, its function was an open field for military exercises, hence its later and current name “Plaza de Armas”. During the following decade the Royal Hospital was built on a half block to the south end of the Plaza (Marshall's department store current location); although later demolished the configuration of this exceptional block remained the same ever since. In 1604 the City Hall was built on the space it occupies today on the block to the north of the Plaza (Fig.38) and therefore, the *Terraplen* became the city's main plaza and new geometric center.

Until the 19<sup>th</sup> century the plaza served mainly as an open market and the city's urban center. In 1820, for hygienic and aesthetic purposes the market was relocated to the north of the city and the plaza was adorned with masonry benches and light posts, it remained unpaved until its first improvement in 1840. In 1850 the Royal Intendancy building was built (fig.39). From this date until the beginning of the 20<sup>th</sup> century several proposals for the improvement of the plaza were made.<sup>22</sup> The first in 1851 raised the plaza above street level (creating what was called *Salon Paseo*) and delineated the surrounding streets with an iron and masonry fence that incorporated greenery and light posts. General discontent was expressed toward this improvement.



**Figure 37. Plaza de Armas' Evolution (San Juan, ICPR)**

The diagram shows different stages of the Plaza de Armas urban configuration on the years, 1625, 1750, 1766, 1792, 1862, 1887, 1921 and 1990.



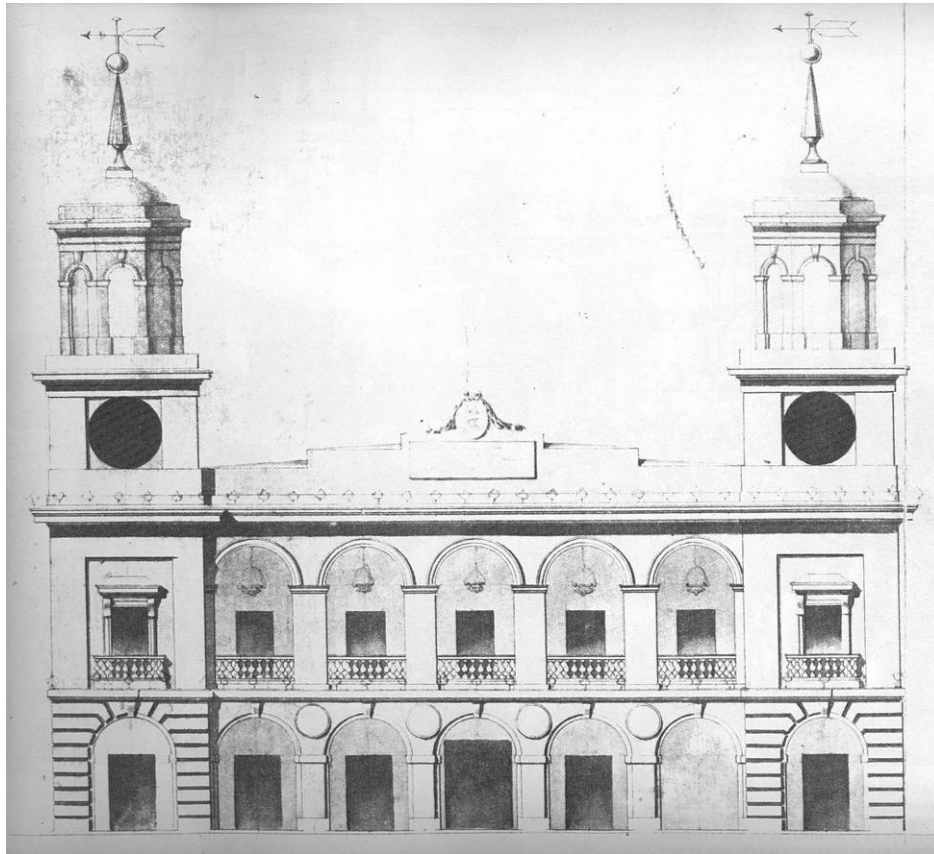


Figure 38. San Juan's City Hall. Façade drawing. (San Juan: Historia Ilustrada)

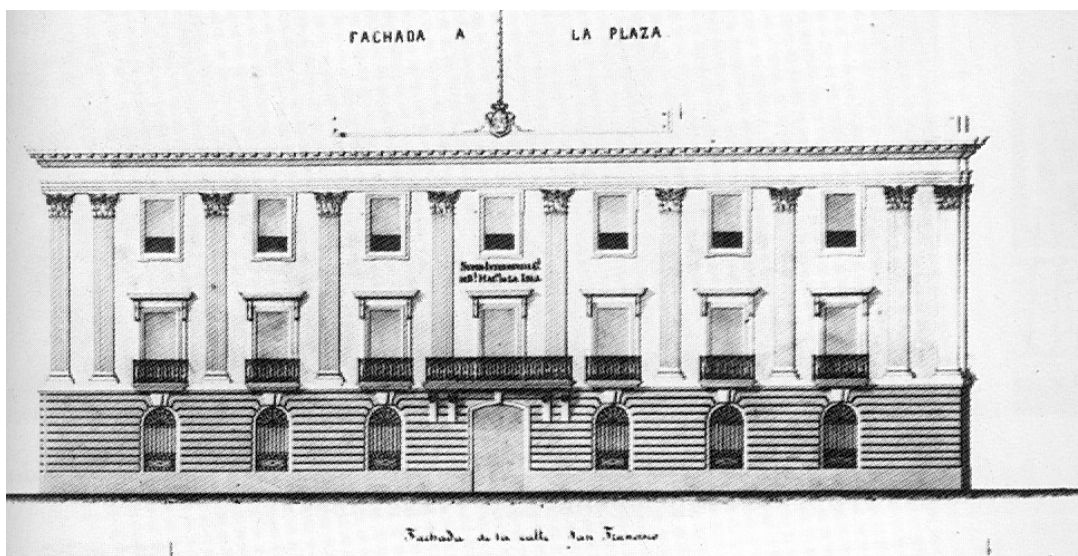


Figure 39. Royal Intendancy, main façade. (ICPR)



**Figure 40. Plaza Mayor, perspective c.1860 (San Juan, ICPR)**

The first major improvement to the plaza was called Salón Paseo; it was made in 1851.



**Figure 41. View of the Salón Paseo. (San Juan, ICPR)**

Notice the presence of four statues located at the four corners. These statues are used today as part of the fountain adorning the plaza.



Although usual in every other town's main plaza around the island, no trees were planted here for it was thought they would not allow for the appreciation of the architecture around it or the celebration of important activities. In 1895 the last improvement under Spanish government was made, the *Salon Paseo* (1851) was demolished and the space was brought down to street level. Narrow stone paved streets were delineated around its perimeter and an arrangement of benches and trees with noticeable French influence was executed.



**Figure 42. Aspect of Plaza after 1895 renovation. (Post Card Collection, AGPR, San Juan)**

Above, northeast corner of the Plaza. Below, northwest side of the Plaza

In 1920's higher density redevelopment was proposed for a city that was no longer capable of handling the pressures of a "modern" capital city. It was like this that the block south of the plaza was drastically transformed to its present state, high rise buildings replaced the existing two and three story structures and disrupted the scale of the plaza's facades. The Gonzales Padin Building on the east side of the block was the first (1923), followed by the construction of Klein's department store in 1931, in 1940 the block was finally completed with the addition of a residential building placed between the first two.<sup>23</sup> A stop was put to further development by means of a preservation law created in 1950's. The law declared the city a historic district and from then on, no existing building was to be touched except for restoration purposes.



**Figure 43. West corner of the block south of Plaza de Armas, 1898. (San Juan ICPR)**

The overall profile of this block varied very little on its east west axis (see fig.#).



**Figure 44. Gonzales Padin Building. (San Juan Siempre Nuevo)**

The remaining portion of the old block can be seen at the far right.



**Figure 45. South-west corner of Plaza Mayor. (San Juan, ICPR)**

View of the Klein's Department Stores (right) and apartment building (left) c. 1940.



During the remaining decades of the 20<sup>th</sup> century the plaza underwent drastic changes. In 1940 a new *Salon Paseo* is created, this time smaller than its 1851 counterpart in order to allow for two sided parking on every street surrounding the Plaza. Huge turning radiuses on every corner were introduced to facilitate traffic flow. For the first time (and not the last) the car generated drastic changes in the city. The latest intervention of 1998 in commemoration of 500 years of Spanish legacy brought the plaza and its surroundings to its present state.<sup>24</sup>



**Figure 46. View of 1940 renovation from the Treasury Building. (San Juan, ICPR)**



**Figure 47. View from southeast corner of plaza. (San Juan, ICPR)**

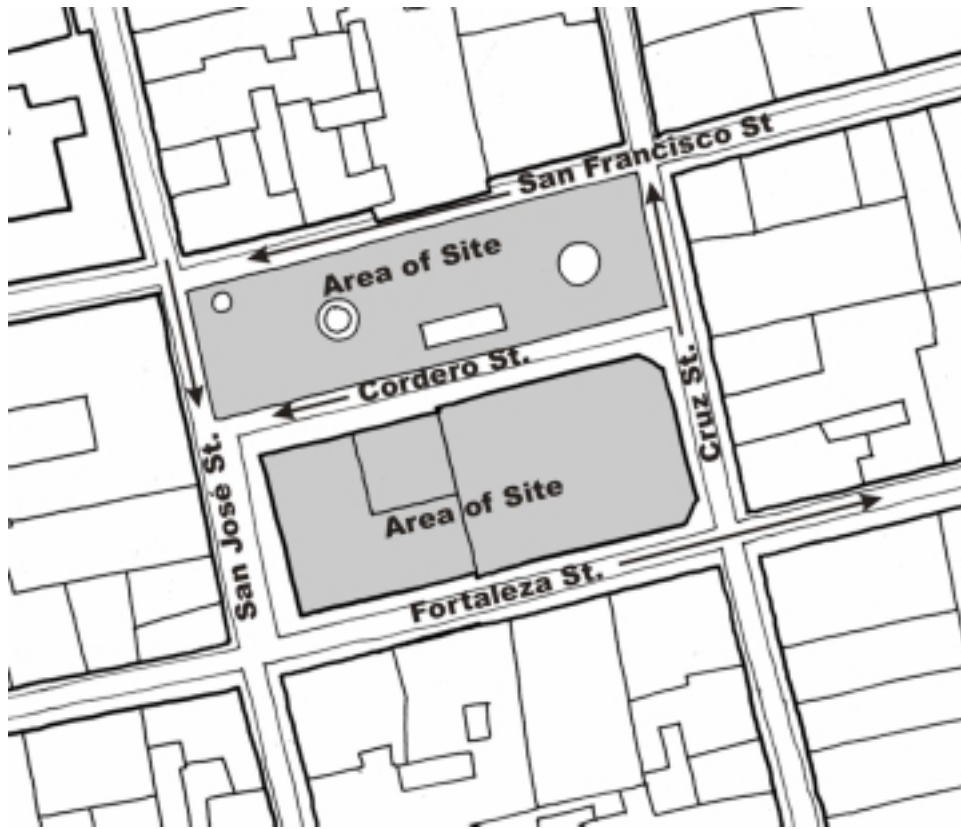
Notice the Town Hall's arcade behind the trees. The inappropriate scale of this species for the Plaza caused the effect feared since the Plaza's early stages, the perception of the space created by the buildings was lost.



**Figure 48. View from Northeast corner of Plaza. (San Juan, ICPR)**

Trees also blocked the view toward the Department of State Building (former Treasury Building). Notice the streets' widened dimension and turning radiuses for better vehicular flow.

## Site Description



**Figure 49. Streets Surrounding Site Areas. (Author's drawing)**

The site is located on the block that defines the southern border of the Plaza de Armas. This block (100'x 233'), is half a typical San Juan block and is occupied by three main buildings. Two of these buildings are 6 and 5 stories high and have a single retail space on the ground floor and office and retail spaces on the remaining levels. The third building, located between the former two, is solely for residential use in all of its 6 levels with no retail or residential use on the ground floor. The ground floor on the southern face of the block is occupied by four retail spaces that have little or no influence on the street they front, their lack of a contextual language “isolates” them from the rest of the street. (Picture)



**Figure 50. The Site: Hard Boundaries (Author's Drawing)**



**Figure 51. View towards existing buildings on site. (Ferrer)**

From left to right, the former Gonzales Padín Department Stores (today Marshall's Department Stores at its first two levels), an apartment building and the former Klein's Department Stores building.



The western boundary is defined by the Royal Intendancy building. Built under the rule of Isabel II of Spain in 1850, its neoclassical façade (**fig.#**) fronts the shortest side of the plaza and creates a tension relationship with the City Hall building on the north block.

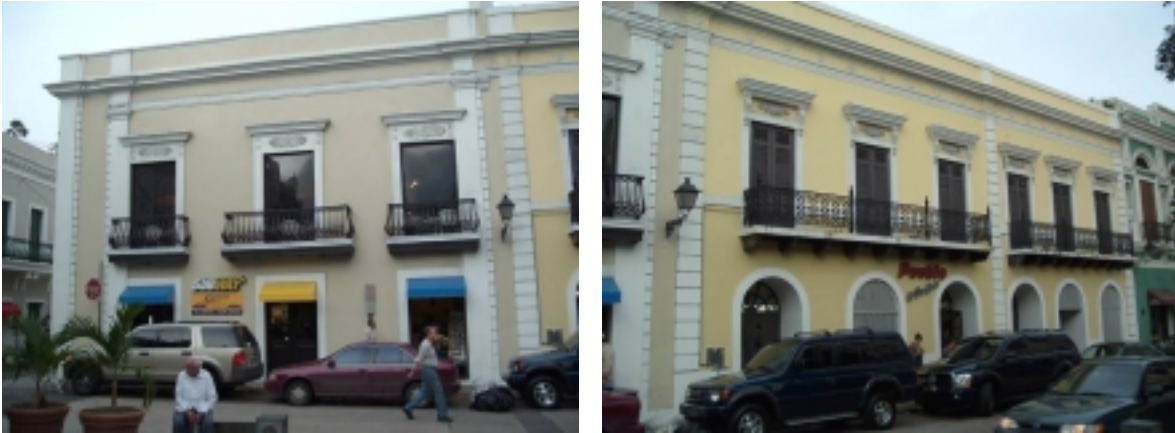


**Figure 52. Department of State Building. (Ferrer)**

The northern block façade is dominated by the City Hall building located off its center;(image) to its flanks and with lower heights there are commercial uses on the ground floor such as fast food restaurants, a small circus and a pharmacy. Although the second floors on this block are no longer residential but vacant or storage spaces, the unity still present on its façade responds harmoniously to both the City Hall and the Plaza de Armas.



**Figure 53. San Juan's City Hall façade. (Ferrer)**



**Figure 54. View of block east of Plaza de Armas (Ferrer)**

The eastern border houses commercial uses similar to that on the north block, but uses the same strategy of keeping the typical façade so it does not disturb in any way the plaza's spatial perception.



**Figure 55. San Francisco Street looking west. (Ferrer)**

The Plaza (77' x 263') is bordered by streets in all four of its sides. To the north, San Francisco Street has an east-west direction



**Figure 56. View of Cordero Street looking West. (Ferrer)**

Cordero Street, running between the plaza and the south block has an east-west direction.



**Figure 57. San Jose Street looking North. (Ferrer)**

San Jose Street, located at the west border of the plaza runs toward the south.



**Figure 58. Fortaleza Street looking east. (Ferrer)**

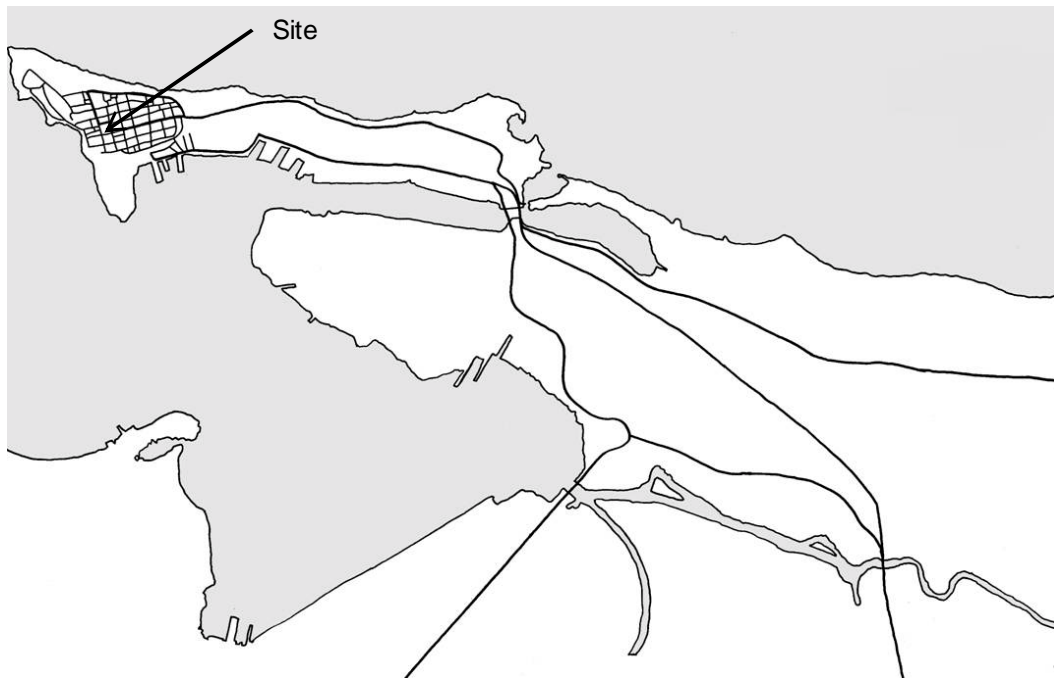
Fortaleza Street, immediately south of the block, provides an easterly direction.



**Figure 59. Cruz Street looking North (Ferrer)**

Cruz Street runs towards the North.





**Figure 60. Vehicular Access to Old San Juan Peninsula. (Drawing by author)**

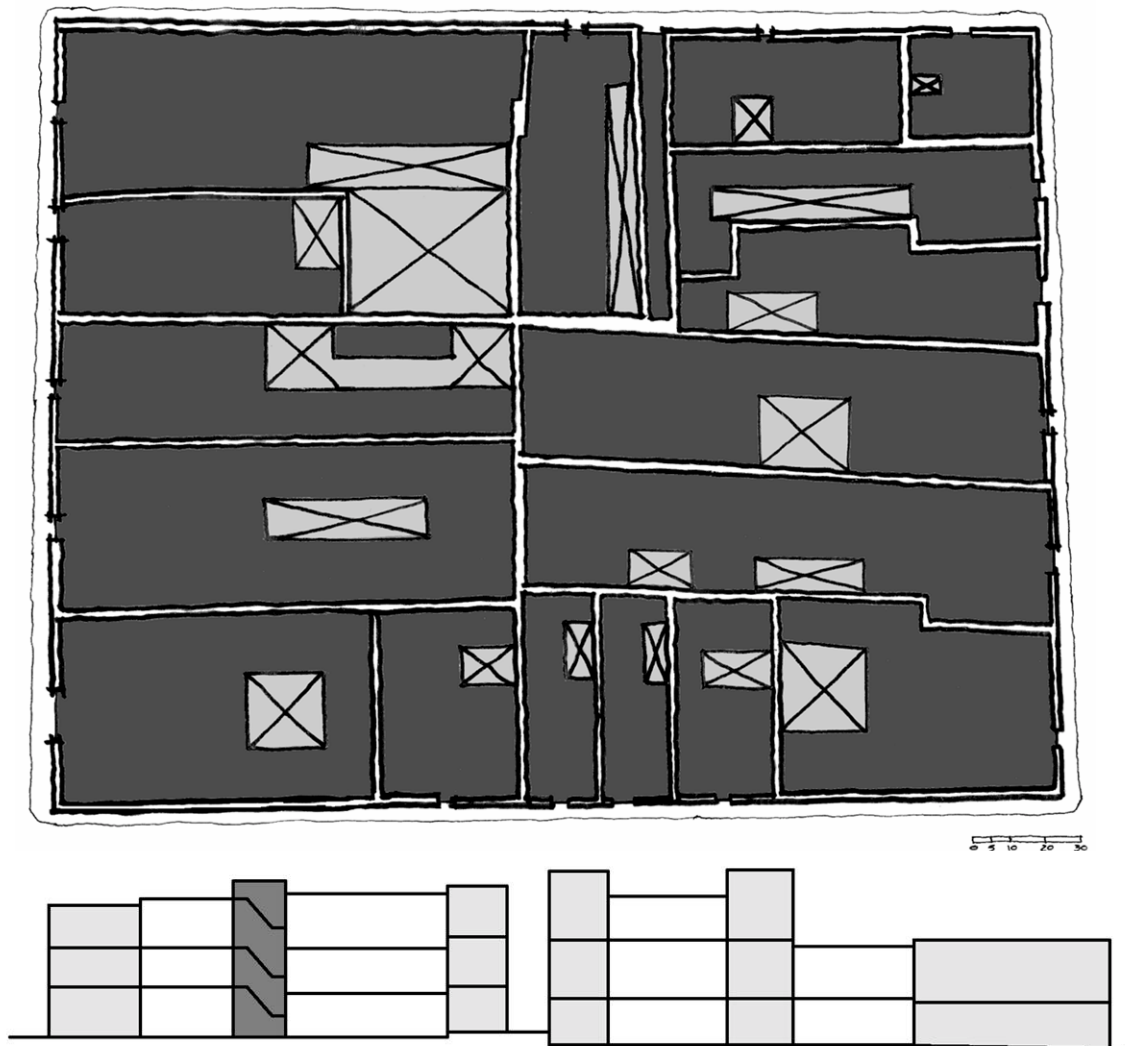


**Figure 61. Main Vehicular Access to Site. (Author's drawing)**

**Figure 62. Old San Juan Street Directions. (Author's Drawing)**

Since most of the streets bordering the Plaza are primary streets, the heavy traffic circulating along creates difficulties to the plaza's pedestrian flow. Its size is definitely not able to cope with the contemporary vehicular circulation demands.

## The Context: San Juan Houses



**Figure 63. Typical San Juan Residential Block. (Modified from NHBS)**

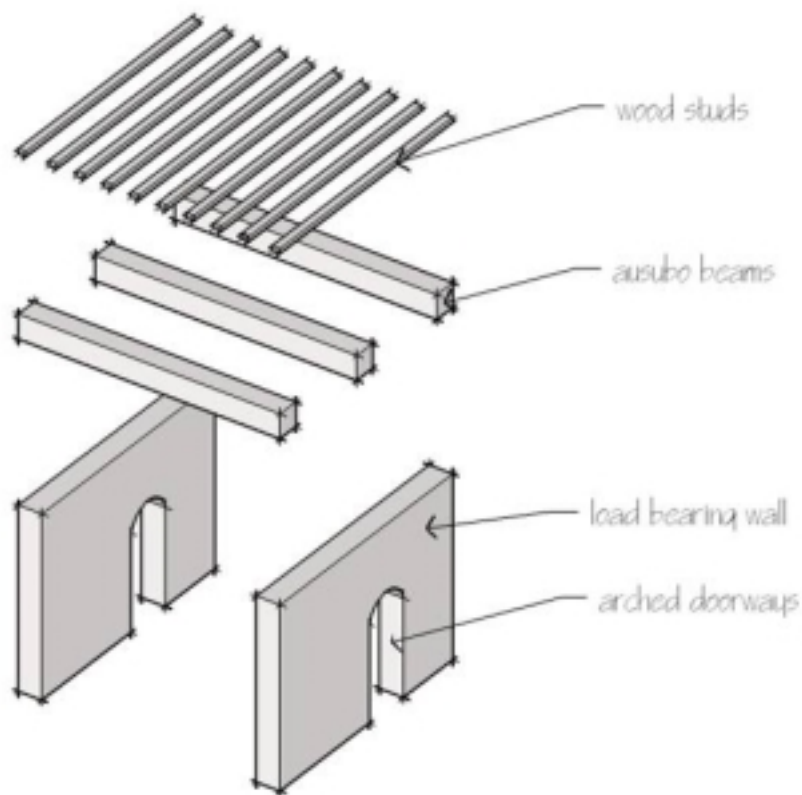
**Figure 64. Diagrammatic Section through block. (Author's Drawing)**

The diagram shows the arrangement of parti wall houses that can be found in Old San Juan blocks.

During the 16<sup>th</sup> century San Juan was composed of one story houses with gable or hip roofs and generous side and back yards. The city was denser only near the south west quadrant near La Fortaleza, the Cathedral and the Plaza de Armas. Once enclosed by the defensive system built during the 18<sup>th</sup> century, it expanded and then “grew” to its actual configuration of two and three levels. (footnote icp manual del prop. De edificaciones

hist. p.49). More compact city blocks were developed in order to accommodate the growing population inside the city and side yards disappeared from the urban scene (fig.63).

The early dwelling versions were usually one story masonry structures and were very similar to those found in central and southern regions of Spain. As time passed, they began to be adapted to the Puerto Rican climate with the use of local materials such as *caliza* stone, *ausubo* (iron wood) or *moralón* as structural woods and *Capá* or *Caoba* for doors and windows. (Footnote) <sup>25</sup>



**Figure 65. Typical Structural System. (Drawing by author)**

Early versions of these dwellings were usually one story masonry structures roofed with gable, hip roofs or even a flat heavy wood frame covered with brick.

Eventually the typical height grew to two or three stories to accommodate higher density. The dwelling plan among these new block was usually composed of several spatial modules interconnected by doors located in the center of divisory walls.

There were two or three modules defining the front facades while two additional modules (one module wide) denominated *martillos* defined the depth of the unit at the same time created the ever present *patio* (courtyard). The *patio* was the main social and utilitarian space in the house.<sup>26</sup>

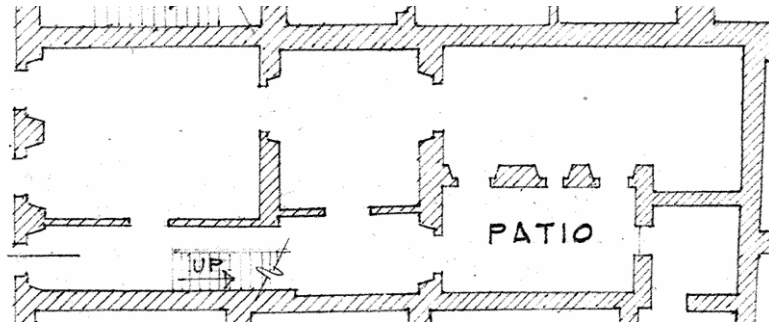
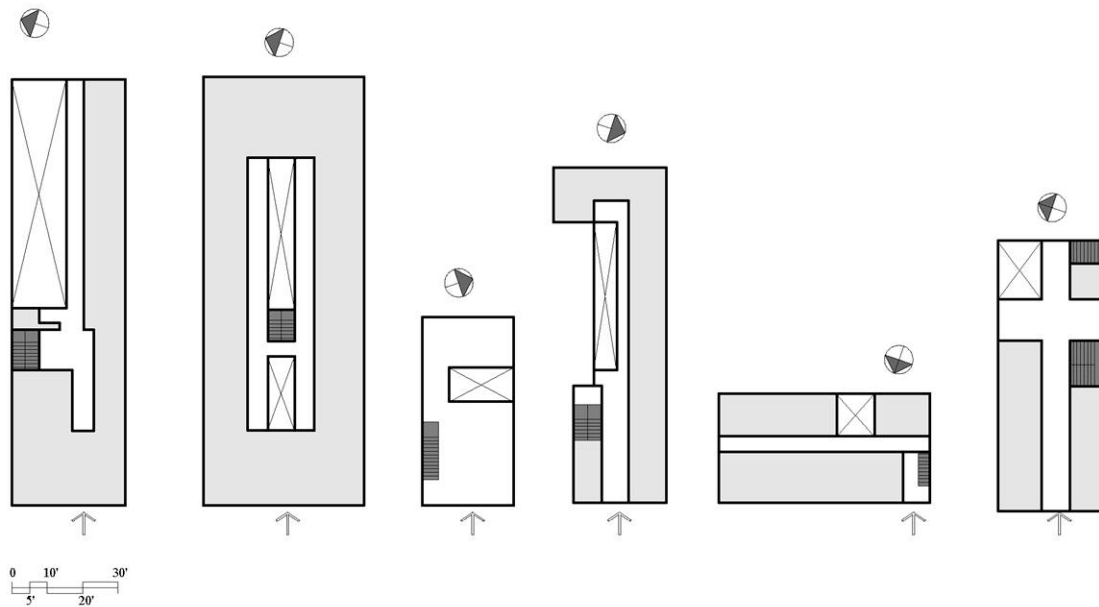


Figure 66. San Jose #153, plan view. (NHBS)

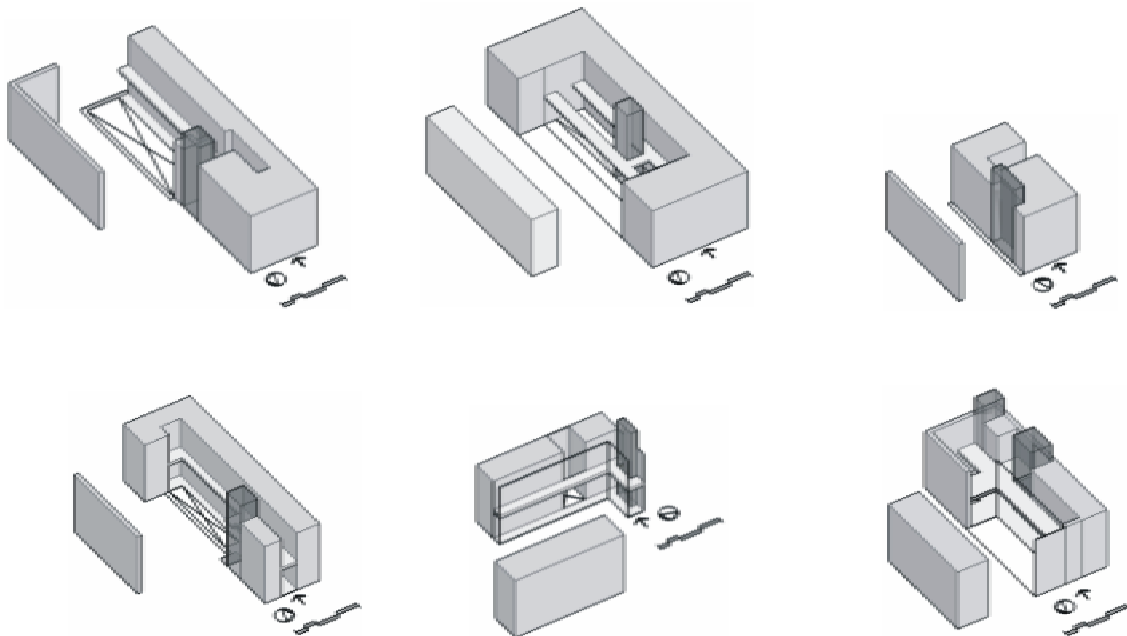


Figure 67. View of San Jose #153 facade. (NHBS)



**Figure 68. Diagrammatic examples typical block units . (Drawing by author)**

Spaces are shaded in gray, circulation or gallery spaces are white and open courtyards are indicated with crossing lines. Vertical circulations are shaded darkest. The lack of side yards leaves the options for ventilation from the street or from the patio as the only alternatives.



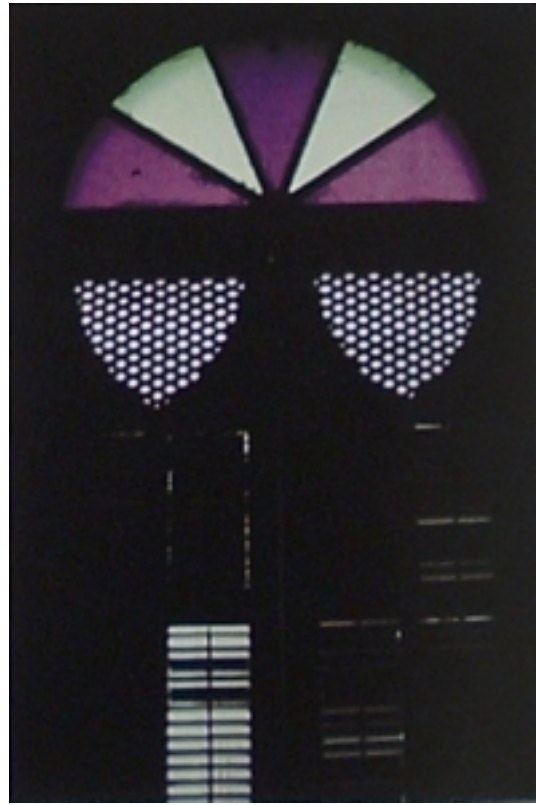
**Figure 69. Axonometric Diagram of typical units. (Drawing by Author)**

The patio is usually surrounded by the main circulation gallery, it could be either completely open to the spaces or have fixed louvered windows that control the entrance of sunlight.





**Figure 70. Montante above door opening to courtyard. (NHBS)**



**Figure 71. Sol trunco above louvered window. (Puerto Rico 1900 p.160)**

Additional elements used to control natural illumination and ventilation are window bars and *soles truncos* (glass placed above window and door openings), a very common solution in San Juan.



**Figure 72. Ventilation devices on ceiling and doorways. (NHBS)**



**Figure 73. Louvered window. (Ferrer)**

At ground level, openings in the form of *antepecho* are frequently used (fig. 76); these consist of doors with railings that serve as windows, therefore providing more ventilation their counterparts. At second and higher levels the use of balconies is ever present. These range from *corrido* (running the whole length of the façade), partial and the already mentioned *antepecho*.



**Figure 74. View of façade with corrido balcony type. (Ferrer)**



**Figure 75. View of façade with partial balcony type. (Colors of Old San Juan)**



**Figure 76. Front view of antepecho window/balcony. (Colors of Old San Juan)**

## Building Regulations

The 20<sup>th</sup> century brought drastic changes to a city that until that point remained relatively untouched by progress. In 1923 the Gonzales Padin Department Stores was inaugurated. With noticeable influence from the Chicago School, the tower-like structure surpassed the historic context's average height, forever altering the perception of the Plaza it fronted. (Plaza de Armas) (image of GP building). Before more “renewal” was accomplished, the city was declared historic district in 1951. Building regulations were developed in order to protect and preserve existing historic structures and urban spaces from inappropriate additions or renovations.

The following points summarize some of the most important regulations regarding the construction of new buildings in San Juan:

- **5.04.5 Roof Form-** New roofs will be compatible with that of existing structures or typologically similar on the street of its location. It will respect the slopes and predominant materials of these buildings.
- **5.04.6 Balcony Rhythms and Entrances-** Balconies and other elements indicating entrances should be compatible with elements found in existing historic structures.
- **5.04.7 Main Façade Directional Expression-** The main façade's directional characteristics (either vertical, horizontal or neutral) should be compatible with those of existing or typologically similar
- **5.04.8 Solid vs. Void ratio in Main Façade-** The proportion of solid versus void in the main façade should be compatible with those of existing or typologically similar structures.
- **5.04.9 Fenestrations in Main Facades-** The proportions, size, type and location of windows should be compatible with elements found in existing historic structures.
- **5.04.10 Relationship of materials, color and texture-** It will be compatible with that of existing of “eligible properties” or typologically similar on the street of its location.<sup>27</sup>



Although some of the regulations might seem ambiguous, most of the examples of contemporary architecture found in Old San Juan seem to blindly obey the regulations as if they were an instruction booklet rather than a guide.

This thesis explores the insertion of a contemporary building in a historic context. Aiming to restore the spatial perception of a historic area, it argues that the successful insertion of new buildings in historic districts does not depend on blindly obeying building regulations, but on critical analysis, understanding of the history and character of the place. This critical analysis and understanding of the place should inherently provide the tools for the creation of an architecture that not only “rhymes” with the historic context, but also creates a renewed sense of place in our time.<sup>28</sup>

## **Chapter 5: The Program**

### **Design Goals and approach**

Crafts as well as architecture are a reflection of any given culture. The overall image and consumption of the artisans' works have been improving during recent years (this thanks to agencies concerned with the conservation and well being of Puerto Rican traditions). The successful creation of a permanent place to live, produce, exhibit and sell their work would not only improve the artisans' economic situation as individuals (therefore encouraging the practice of their art as their only source of income), but would give this cause the additional push it needs to promote the consumption of local products not only by tourists but by local clientele too. The reinsertion of mixed commercial-residential use to the heart of the city would also inject the spark that was taken away from it by retail spaces that turn away from the positive urban potential of this important Plaza.

This program envisions a building that serves as a market hub for the arts and craft field in the city of Old San Juan. Artisans willing to produce their work as their only source of income would be given the opportunity to live and work in a facility that would provide the appropriate space for both functions. This fusion of living and working facilities would help to improve some of the artisans' problems already mentioned such as the lack of permanent places to sell their work and the economic difficulties of obtaining an appropriate space for the production of their work.

**Design Objectives:**

- To employ a critical regionalist approach to the design of a contemporary building in a historic and tropical area; this in order to attain quality and character of place without “returning to the past”.
- To create a building that is complimentary in character and height to the historical context of the plaza.
- To restore activity to an area that currently dies during the night due to the lack of active commercial and residential activity.
- To provide a permanent space for the promotion, production and sale of locally produced goods that promote Puerto Rican culture.
- To successfully integrate living and working facilities for artisans.
- To create a building that by means of its program promotes the cultural significance of Puerto Rican crafts in its society.
- To create a magnet that draws tourist and local pedestrian traffic from the waterfront area to the very heart of the city.
- To create an example that could be employed for the creation of permanent craft marketplaces all around the island that attracts both tourist and local economy.

Berdnar (1989) states a defined criteria for the design of contemporary interior pedestrian spaces that can be considered for the strategy or approach for this project: First, the spaces should be readily accessible from existing exterior places. This can be accomplished through direct physical linkage and/or visual transparency. Entrances and exits are the critical points whether at street level or above, or whether related to a sidewalk or urban square. Second, successful interior places should be legible and

imageable for purposes of circulation and orientation. Coherent spatial form and simple plan geometry will aid in achieving comprehensible circulation patterns. A strong spatial concept executed with consistent structural and architectural expression will aid in orientation. Third, the interior places should serve a public pedestrian purpose. They should contain pedestrian amenities and provide opportunities for socializing and public occasion.<sup>29</sup>

### **An Artisans' Marketplace-Program Description**

#### **Marketplace**

The marketplace area of the program should be easily accessible for the pedestrian from all sides of the building. It will house permanent sale stands for artisans in residence and a designated area for temporary sale tables. After hours access control could be attained by employing a system of doors that could function as an operable façade around the ground floor of the building, thus reducing the possible ways of entry when necessary.

#### **Café**

Complementing the shopping activity, the café will be located close to the market area but taking advantage of the amenable atmosphere of the Plaza de Armas to the North. It will contain kitchen facilities, seating areas and bathroom services.

#### **Gallery and classrooms**

The gallery will be a permanent space dedicated to the exhibition of artisans not living in the complex. It could work at different times than the marketplace, thus providing advertising for the artwork even after hours or during “gallery nights” (activity held in the city the first Tuesday of every month, when every gallery in the city opens new

exhibitions to the public. Classroom spaces can work in conjunction with the gallery facilities, these spaces will provide facilities for workshops on craft work given by artists.

### **Administration**

The administration will be located in an area easily accessible for the artisans in residence and for the general public as well. It will contain an information desk area for orientation of the public and administrative offices for the proper management of the building facilities.

### **Apartment Units**

Artisans rarely produce art work of monumental scale, mostly relying on precision work and manual skill rather than depending on big machinery to produce their work.

Woodworkers and furniture makers might use woodworking machines such as turning lathes or table saws, but mostly the pride of their work resides on their non-mechanical and hand-made nature. Hence, the location and design of a living/ working space for artisans will mostly be driven by the presence of natural light, natural ventilation for debris and particles that might be produced and generous storage space for materials, finished work, or any special equipment.



**Figure 77. Pottery, wood carving, basket weaving. (Marat)**



Figure 78. Blown Glass, drum making, hat weaving. (Marat)

## Program Summary and Tabulation

- Market/Exhibition area  
 Permanent stands  
     40 @ 245 s.f.  
 Temporary sale tables  
     30 @ 40 s.f.  
**Total.....23,174 s.f.**
  
- Cafe  
 Bathrooms  
 Seating area  
 Kitchen  
**Total.....2,000 s.f.**
  
- Classrooms  
     5 @ 1000 s.f.  
**Total.....5,000 s.f.**
  
- Gallery  
                     **1,500 s.f.**
  
- Administration  
 Offices  
 Bathrooms  
 Information desk  
**Total.....1,500 s.f.**
  
- 54 Apartment Units  
 1BR Studio/Flat  
     36 @ 760 s.f.  
 2BR Studio/Apartment  
     12 @ 1,100 s.f.  
 3BR Studio/Apartment  
     6 @ 1,250 s.f.  
**Total.....48,060 s.f.**



- Laundry Facilities  
**Total.....1,500 s.f**

**Program Total.....90, 534 s.f.**

#### **Site Area**

Block- 23,174 s.f. (.53 acre)

Plaza- 20,085 s.f. (.46 acre)

**Total.....43,259 s.f. (.9 acre)**

### **Design Problems and Issues**

This project's location in the middle of a historic district poses numerous design problems. Among the most relevant are the issues of how to insert a contemporary looking building in such an area without disrupting the spatial order already attained. Also, how to address the already existing issues of vehicular traffic in the area in order to improve it locally and also all over the city.

In terms of the building and its program, the combination of plaza, market and dwelling uses also brings important design challenges. How to relate the public and private aspects of the project in a building that places them so close to each other? If successfully solved, these relationships could enrich the dynamics taking place in the building and its surroundings, while providing an adequate level of privacy for the people living in the building.

At an urban scale, what strategies can be implemented in order for the building to become a positive "episode" in the numerous spatial sequences in Old San Juan? The building's successful insertion on the city's urban dynamic relies on the creation of a building that contributes to the city rather than taking attention away from the city.

## Chapter 6: Precedents and Examples



**Figure 79. Louvre Intervention Model.**

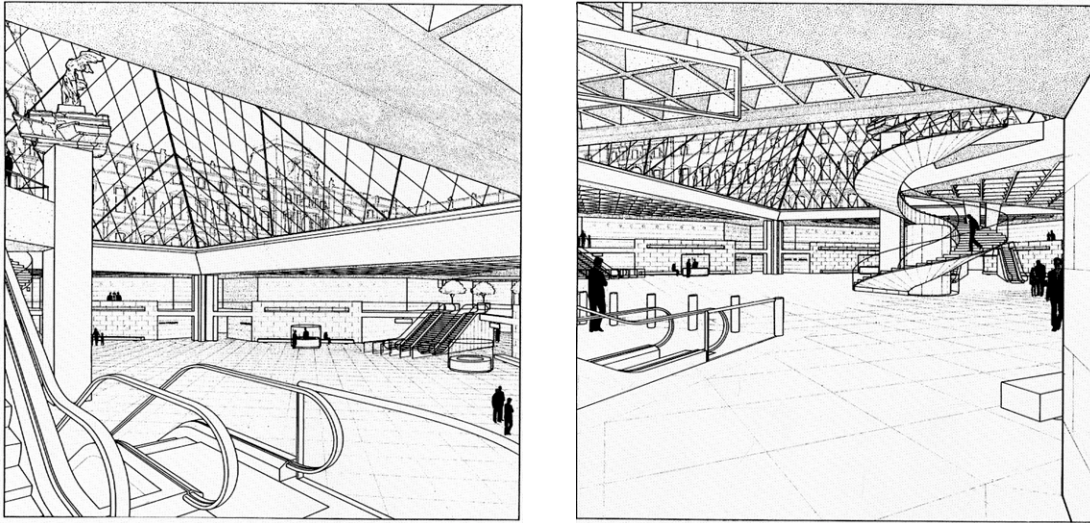
Project: Le Grand Louvre (addition)

Architect: I.M. Pei

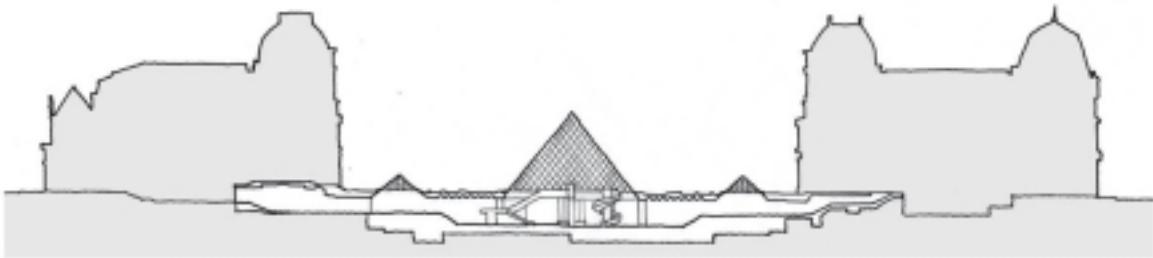
Location: Paris, France

Dates: 1985-1986

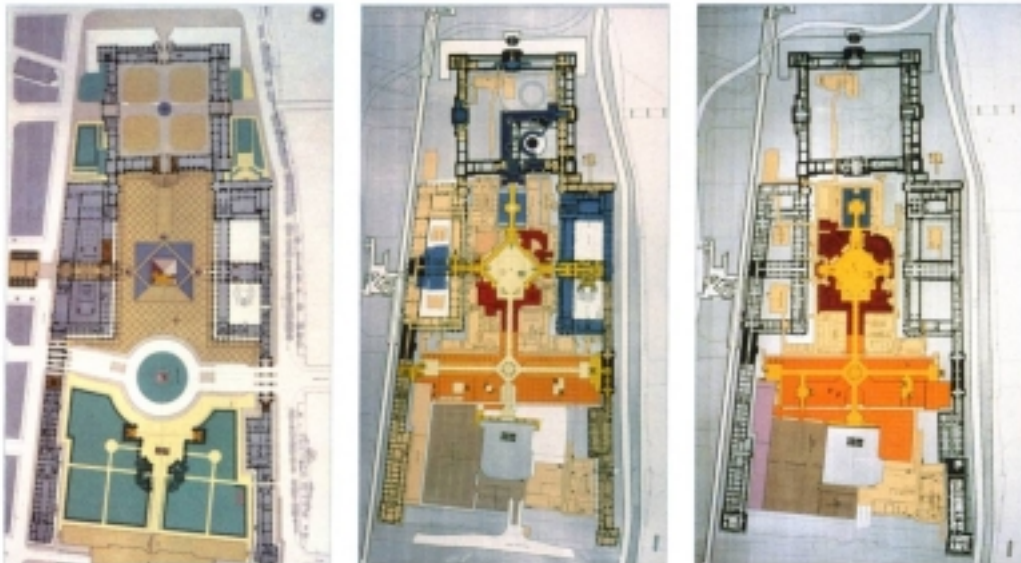
Pei's solution successfully deals with the programmatic problems presented by creating an attractive and new main entrance and doubling the floor space available for exhibition purposes. It also keeps the addition's effect on the existing buildings to a minimum and creates landmark that effectively integrates its contemporary character with the strong historical background of the museum complex. The addition measures 200x120 meters and houses a central information desk, turnstiles leading to clearly marked entrances, bookstores and souvenir shops, a post office, several restaurants and an auditorium.



**Figure 80. Louvre Interior Perspectives (Paris Contemporary Architecture)**



**Figure 81. Cross Section of Main Space. (Author's Drawing)**



**Figure 82. Floor Plan. (Paris Contemporary Architecture)**



**Figure 83. Orihuela Library, Model. (Campo Baeza )**

Project: Orihuela Public Library

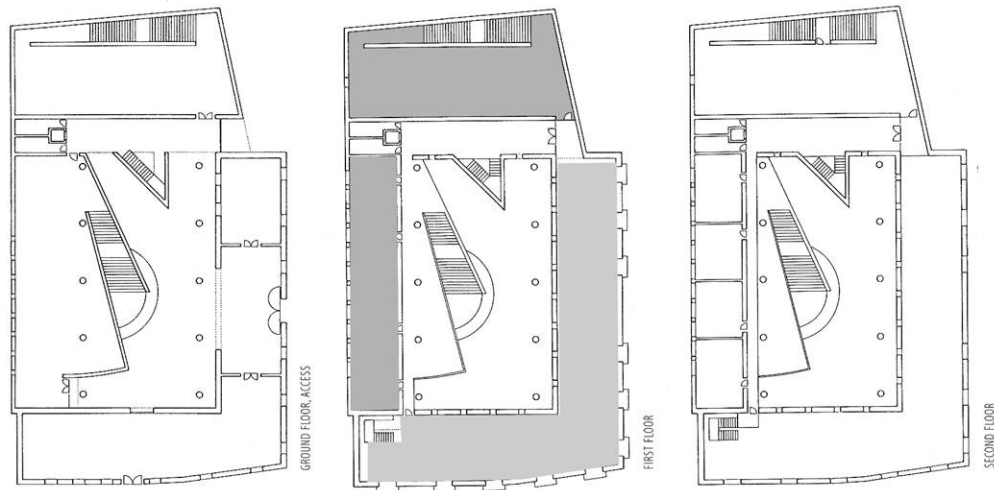
Architect: Alberto Campo Baeza

Location: Orihuela Spain

Dates: 1985-1986

The form is generated by the relationship of two L shaped pieces. The first contains two historic facades with elements made out of stone with horizontal striations and deep windows that respond to its immediate context. The other piece is treated with polished stone and with openings flush to its surface; it communicates a more contemporary language without disengaging with the rest of the building's vocabulary. The positioning of the two volumes generates a central and intimate open space that incorporates the use of a sculptural staircase as its main formal element. A white painted metallic structure is placed above the central space to shelter it from the elements and provide an effect of soft diffuse light over the space.





**Figure 84. Floor Plans. (Adapted from Campo Baeza)**

The historic portion of the building is shaded in light grey, while the darker shade indicated the contemporary area of the building. The space created by both pieces is shown in white.



**Figure 85. Exterior and Interior views. (Campo Baeza)**



**Figure 86. Interior Views of Main Space. (Campo Baeza)**





**Figure 87. Aerial view, Murcia Town Hall (Croquis, Moneo p.77)**

Project: Murcia Town Hall

Architect: Rafael Moneo

Location: Murcia, Spain

Dates: 1991-1998

The building was to fill the void left by the demolition of a rundown baroque style house on one of the sides delimiting the Cardinal Belluga Plaza in Murcia. The problem called for a building that fulfilled the role of spectator in the plaza but that still represents the power and authority of the citizens of Murcia. With an upfront contemporary language, the building's main facade is placed facing the existing Cathedral, its balcony rests on the same horizontal plane as the central balcony of the Piano Nobile of Cardinal Belluga Palace- both the same height. Subtle strategies such as these knit the building to its historical context even though its language is radically different. Its lateral facades are more discrete, with simple openings that are adapted to the dimensions of the streets.

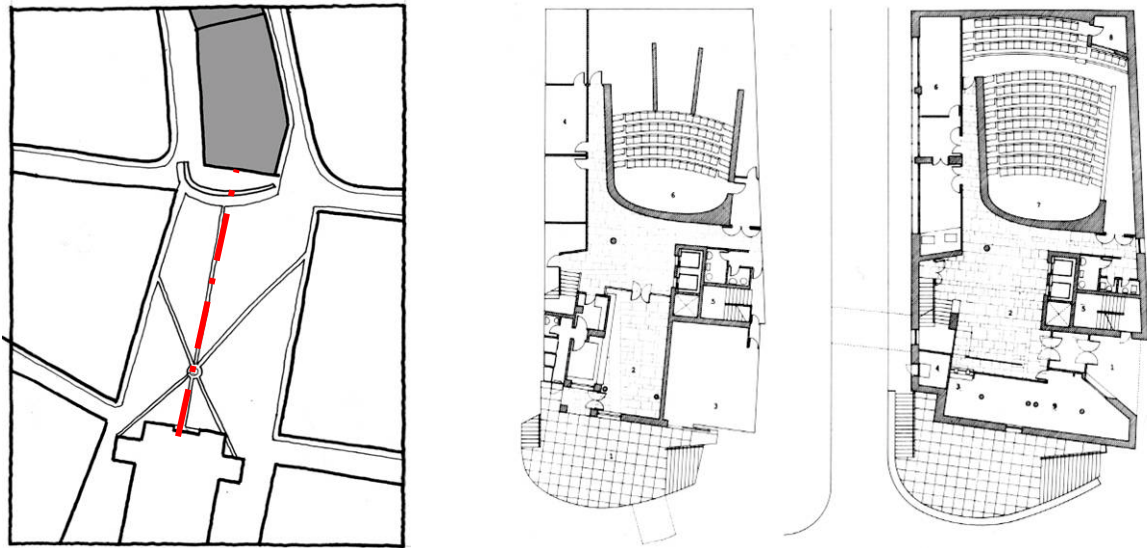


Figure 88. Relation with Cathedral. (Author's Drawing)



Figure 89. From the left, East and South facades. (Croquis, Moneo p.78-79)



Figure 90. South Facade and view towards cathedral. (Croquis, Moneo p.78-79)



**Figure 91. San Antonio Commons, Interior courtyard. (Design for Living)**

Project: San Antonio Commons

Architect: Michael Pyatok

Location: Oakland, California

Dates: 1991-1994

The restoration of a main boulevard in a deteriorating neighborhood starts to take shape in the form of this mixed use affordable housing complex by Michael Pyatock. Family dwellings contain three and four bedroom townhouses located around courtyards above parking and smaller units with one and two bedrooms are located in a four story building facing the street. Civic uses such as a marketplace, a community center and a daycare are also accommodated at street level; these are accessible from the street as well as from the on-grade courtyard. In addition to the active participation of the community in the design, the architecture is enhanced with various artistic contributions from ethnic groups in the neighborhood in order to encourage the sense of personalization and co-operation in the community.

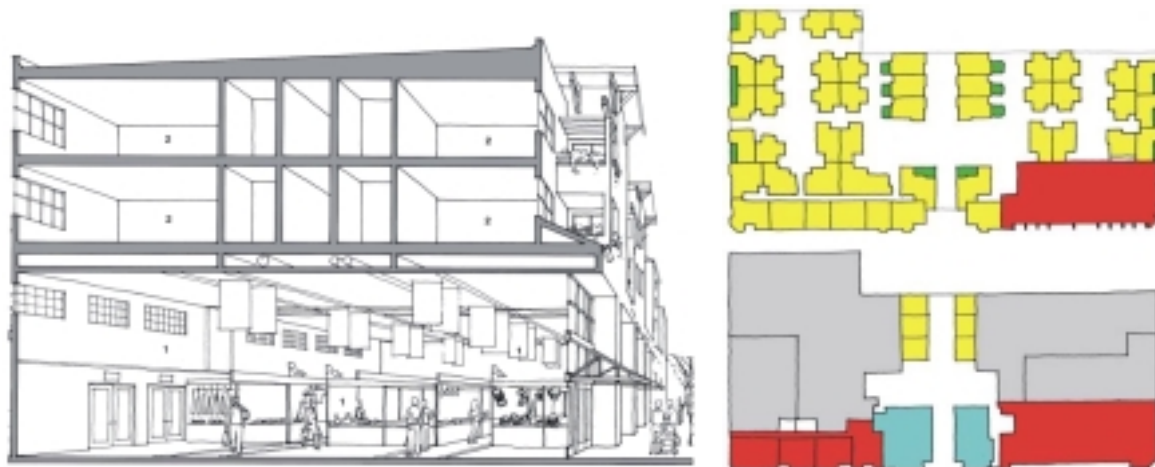


Figure 92. Section through market and use diagram. (Salmon) (Drawing by Author)

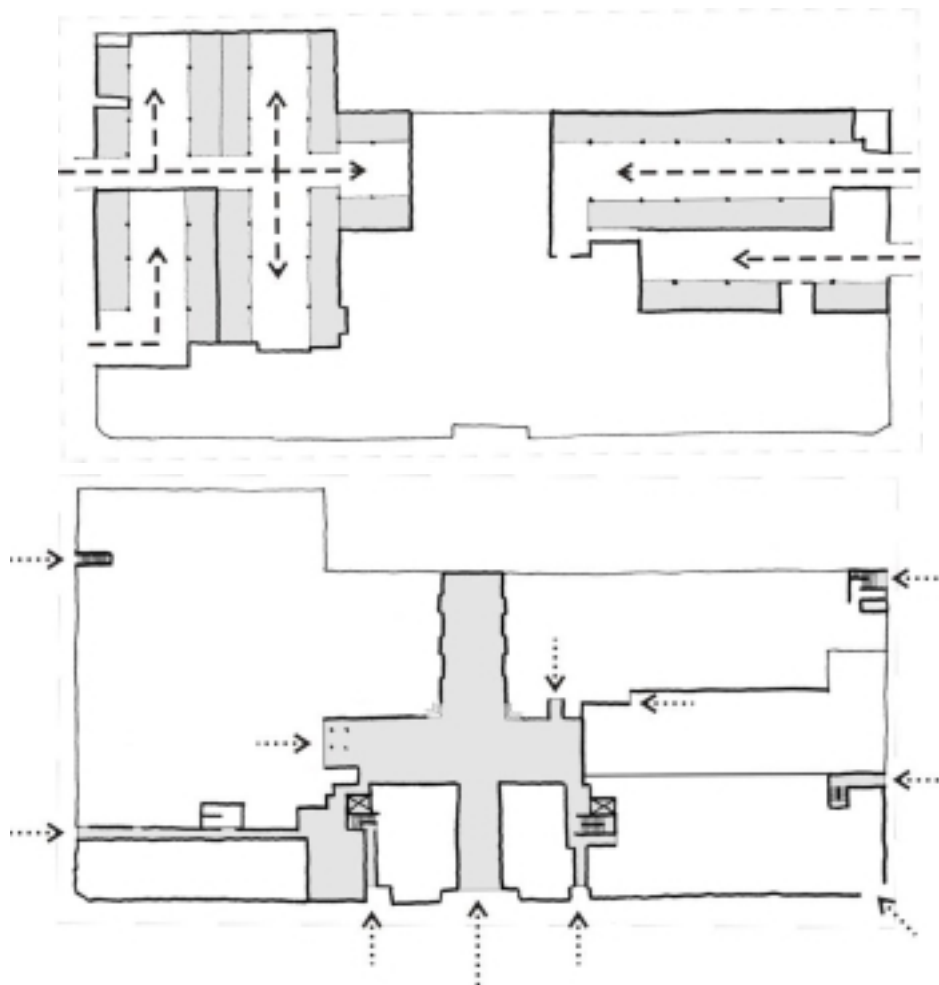


Figure 93. Top, vehicular circulation. Bottom, pedestrian access. (Drawing by author)



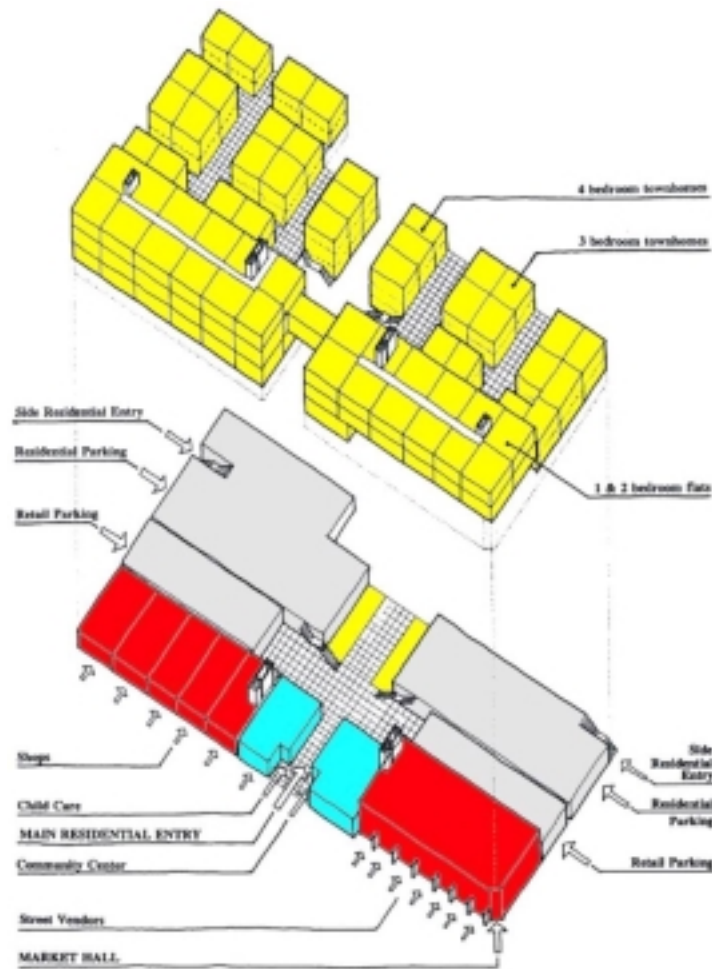


Figure 94. Axonometric/Use Diagram (Design for Living)



Figure 95. Exterior Perspective (Pyatock)



## Chapter 7: Design Strategies

### Site Interventions

Given the historical character of Old San Juan, the possibilities for site intervention around this thesis proposal are somewhat reduced. However a subtler approach was employed to explore the possible effects that this project could have at a larger scale on the historic city. Four of the most utilized pedestrian and vehicular routes that give access to the site were studied and proposals for improving their conditions as part of a sequence were made. The site intervention could be summarized as one overall intervention but for purposes of understanding and documentation was divided into the areas that follow. Specific additions or changes of uses are indicated in grey in the drawing below.

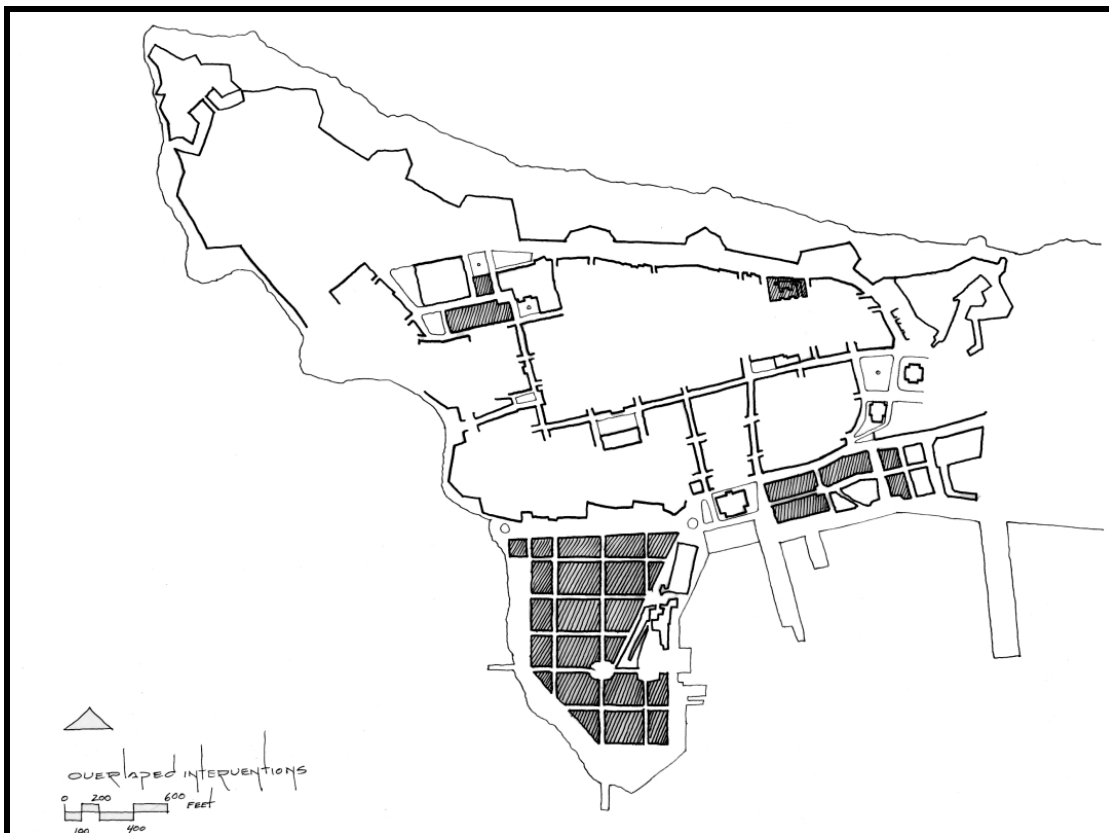


Figure 96. Diagram of overall site intervention. (Drawing by author)



Figure 97. San Cristobal sequence diagram. (Drawing by Author)

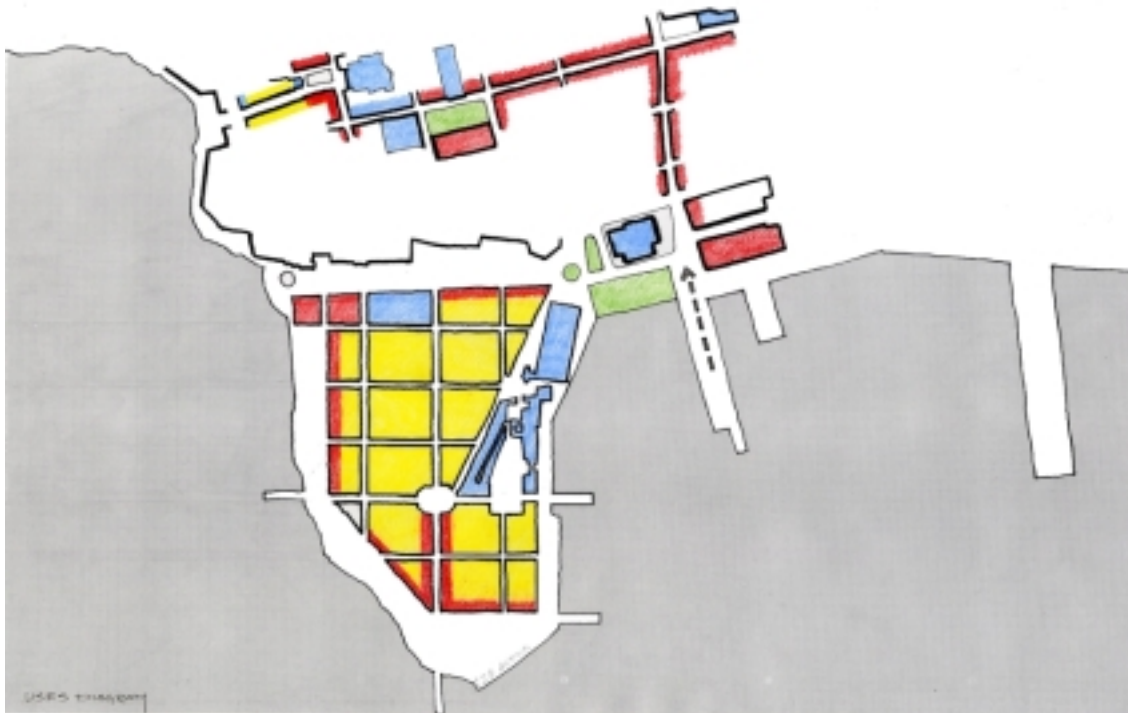


Figure 98. Plaza Darsenas and la Puntilla sequence. (Drawing by Autor)

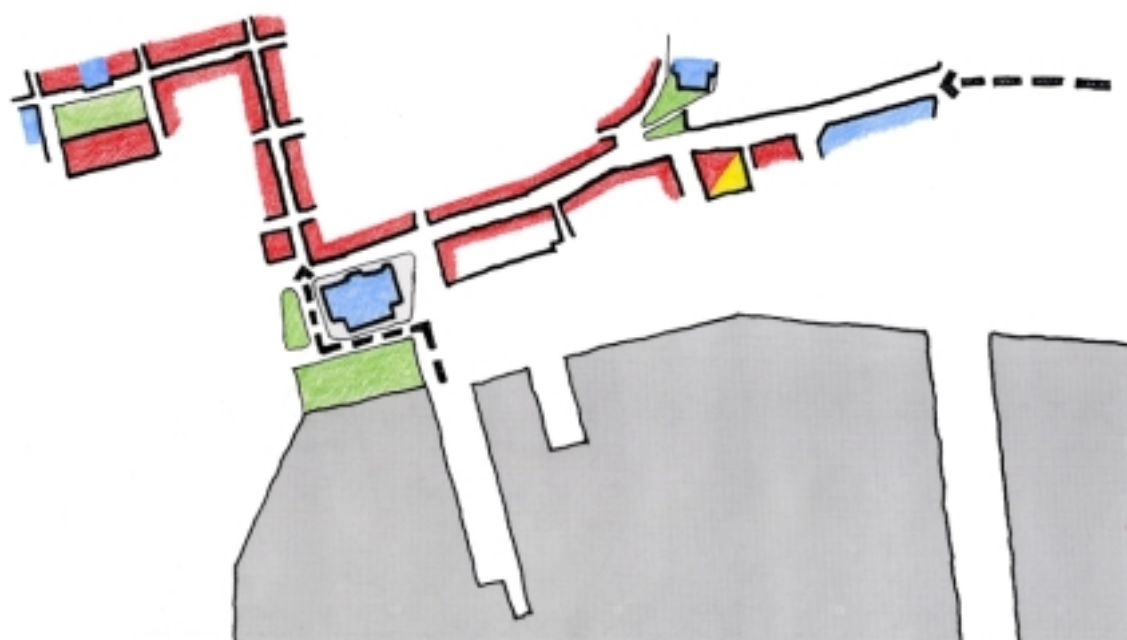


Figure 99. Recinto Sur Street sequence. (Drawing by author)

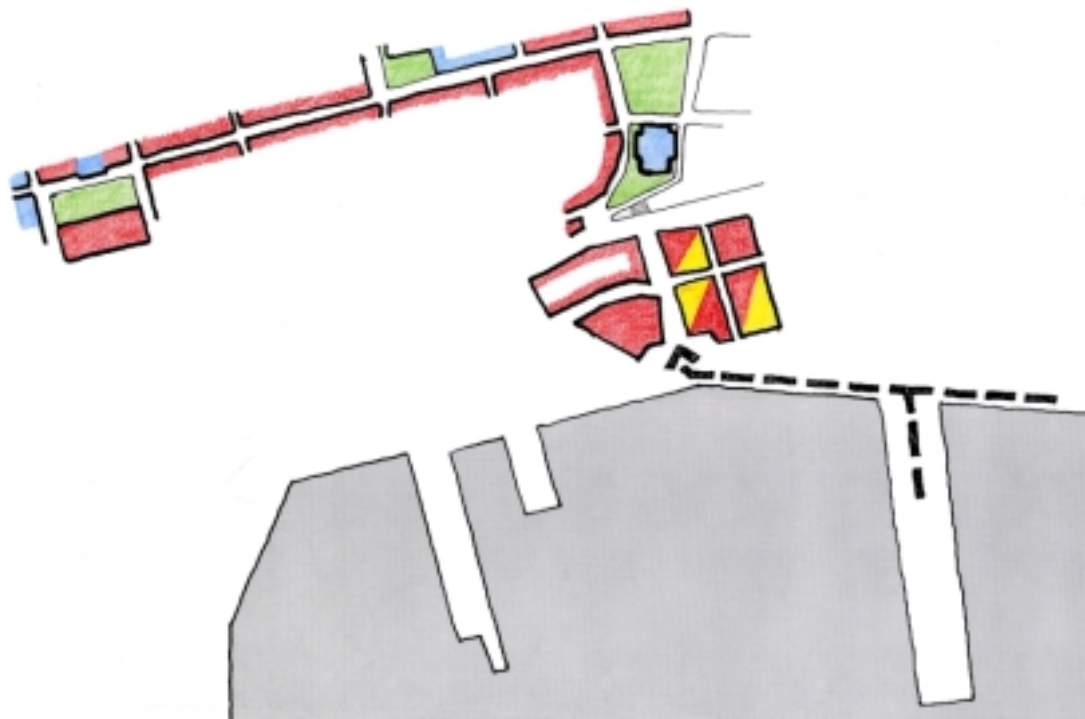
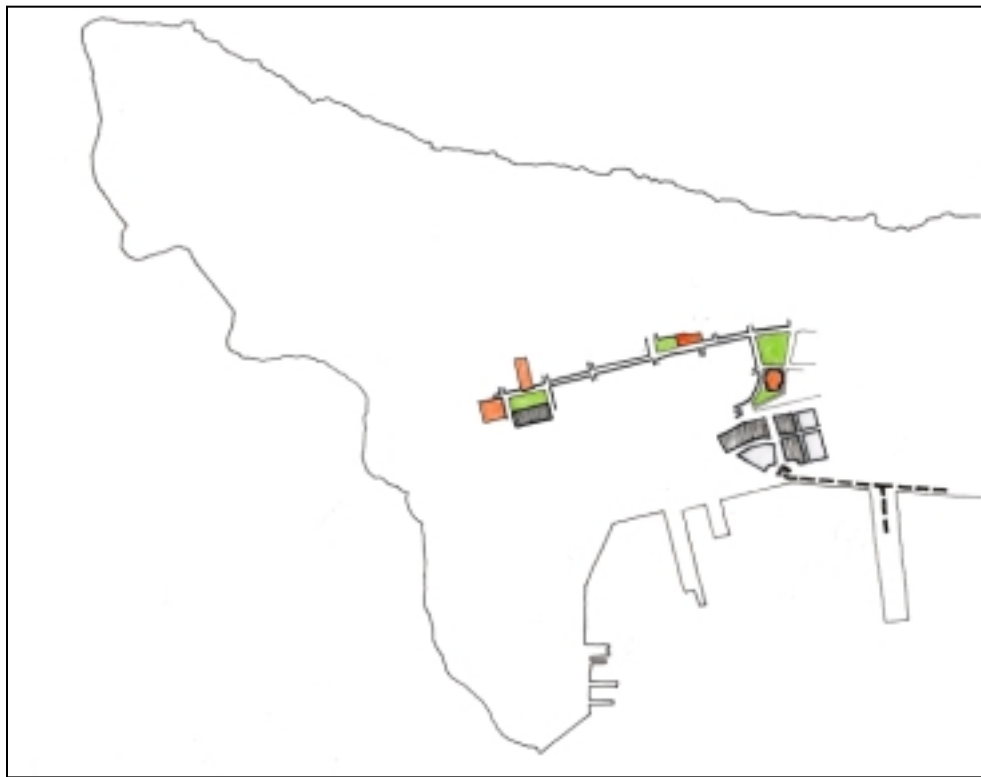


Figure 100. Tapia Theatre sequence. (Drawing by author)



## **Building Design Strategies**

The building parties for the marketplace are based on providing public, retail and market uses at ground or underground level (below the Plaza) and residential spaces on the second and third floors of the building.

The strategies that are proposed are aimed to solve

- The scale and spatial relation of the building itself with the Plaza de Armas and Fortaleza St. (south of the proposed building).
- The distinction of entrances for public uses such as the marketplace and galleries and entrances for the residents above.
- The supply of natural light and air to every residential unit in the building.
- The general formal attributes of the Plaza de Armas in order to relate it to the new building and the existing context.

The following guidelines are essential for any variation of the schemes presented for the Artisan's Marketplace:

1. Use a critical regionalist approach for the formal and spatial development of the building.
2. Keep a character that achieves harmony with the historic context.
3. Sponsor a more active use of Plaza de Armas as cultural, commercial and recreational public space.
4. The creation of pedestrian oriented facilities, spaces and surrounding streets and promoting the improvement of public transportation inside the city.

### Scheme One: Double Wall Parti

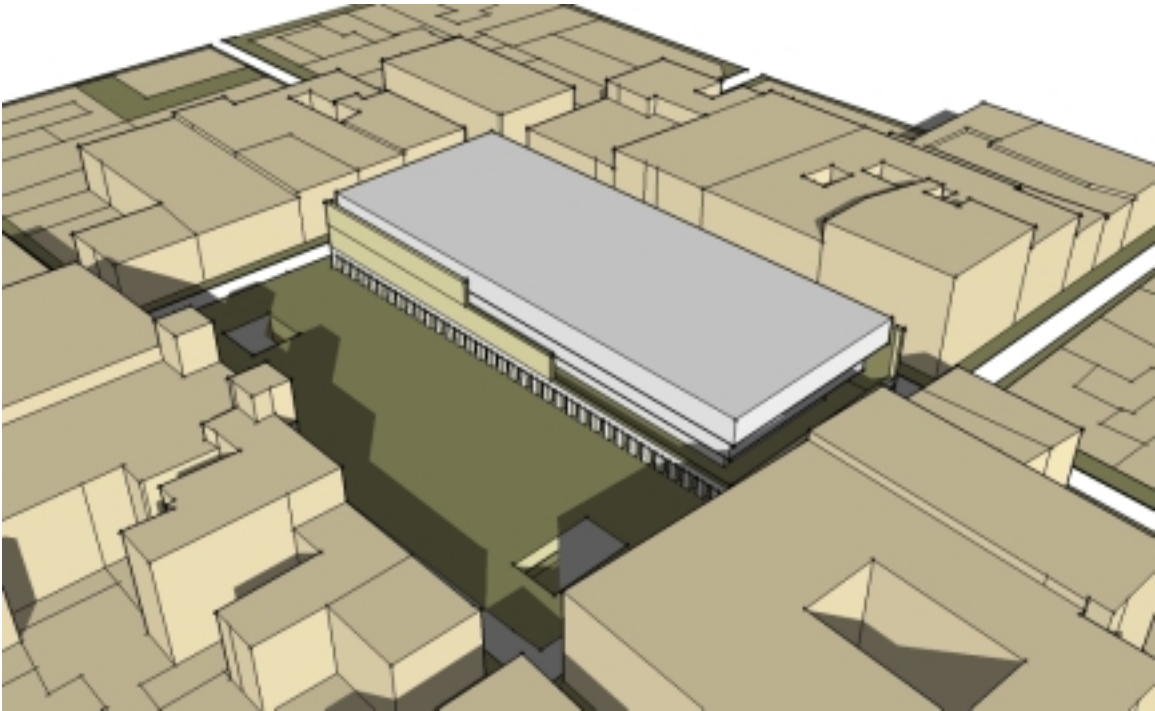
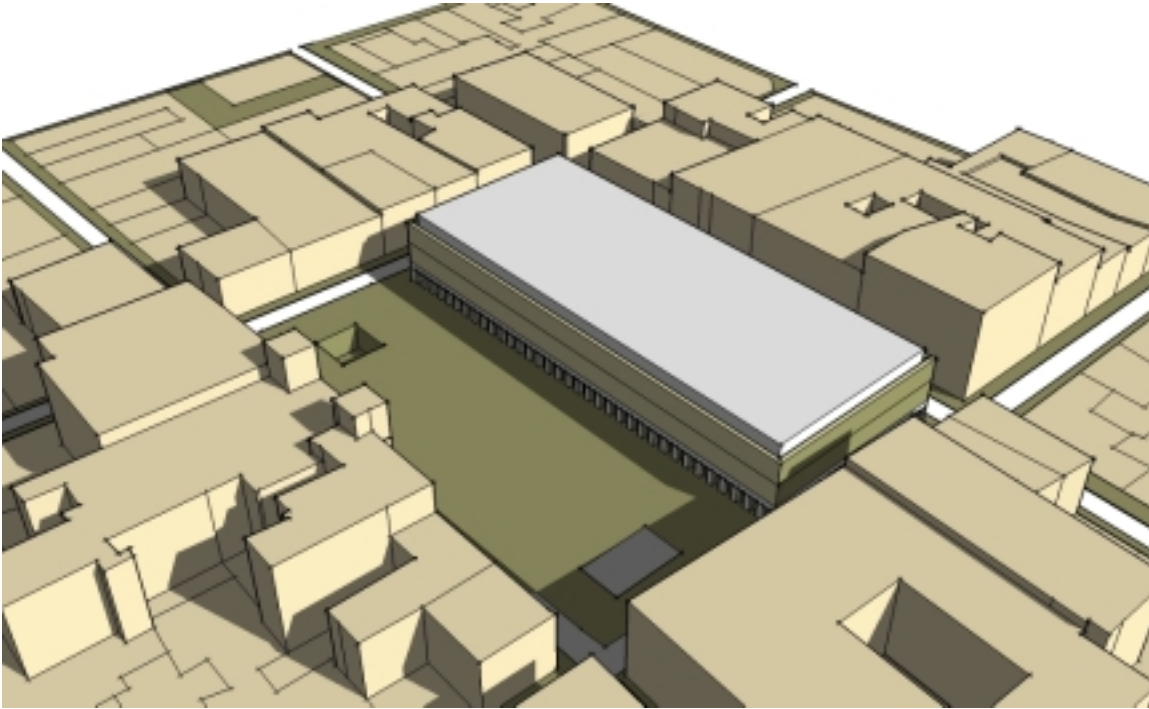


Figure 101. Axonometric diagram and site plan (Author's Drawing)



**Figure 102. Axonometric view. (Author's Drawing)**

This scheme introduces the idea of creating an outer “skin” that wraps around the building itself. With a very uniform character on the outside it conceals the inverted setback of the building inside. This inverted setback provides larger open spaces closer to the ground floor, while providing larger enclosed spaces on the upper floors. Natural ventilation and lighting will be provided by the semi transparent nature of the outer wrapping. The market is linked to café and gallery spaces located below the ground level of the Plaza, which prevents these from disrupting its spatial perception but still allows them to participate in the public scene.

## Scheme Two: San Juan Block Parti



**Figure 103. Plan view. (Drawing by author)**

This scheme incorporates the idea of employing the nature of the San Juan typical block in order to achieve a varied but unified character for the building. The building will be composed of multiple units that although serving the same purposes, will create different spatial configurations in accordance to the practical needs of its occupants (different kinds of artisans get different types of units). Variety will not only be achieved by means of color but with alteration of proportions, materials and architectural elements. The Plaza becomes a main entry for the marketplace which is located below it. Several perforations on its surface will provide light and air to the space and at the same time will visually connect both spaces. Gallery, café and administration spaces could be located on the ground floor level.

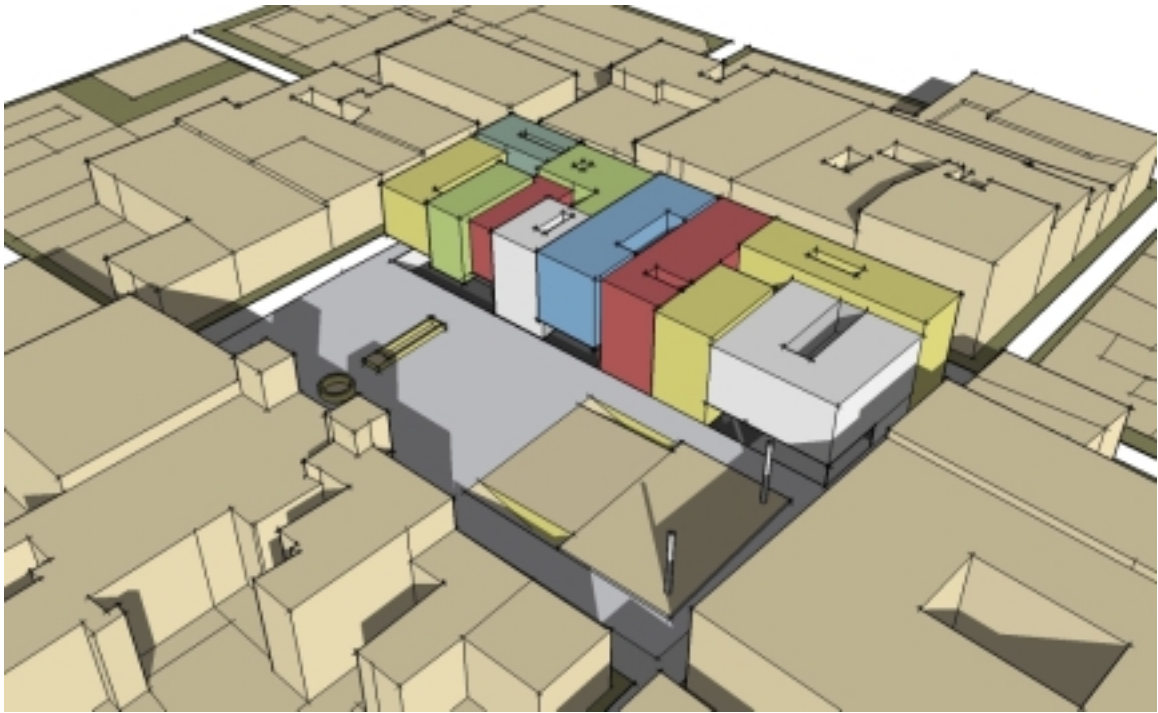


Figure 104. Axonometric/perspective view. (Drawing by Author)



### Scheme Three: One Courtyard Parti



Figure 105. Plan View. (Drawing by author)

This solution incorporates the use of a single courtyard to provide light and air, while creating a unified and private space for the artisans' community. The courtyard will be raised above ground level in order to separate it from the public traffic. Perforations on its surface can bring natural light to the marketplace on the ground level below. The café is left on the Plaza's surface, while the gallery is sunken below ground level and incorporates interior and exterior exhibitions open to the space above. Private Access to the units above is provided on the east and west sides of the building, leaving the most important sides available for retail spaces and for access to the marketplace.



Figure 106. Axonometric and perspective views. (Drawing by author)

#### **Scheme Four: Entry Courtyard Parti**



This solution employs the use of three courtyards. The central courtyard is to a certain degree shared by public and residents; this meaning that residents circulating above through open air corridors can see and be seen from the open portion of the marketplace below. This courtyard is also located in a way that it provides a main entrance to the marketplace and also serves as a gateway to Plaza de Armas. Two more private courtyards provide the means for ventilation and light. The main entrance fronts Fortaleza Street in order to preserve the hierarchical order established by the city hall. The Plaza is kept in its actual state except for the closing of Cordero Street (located between the plaza and the block) in order to provide a more unified relation between the building and the plaza.

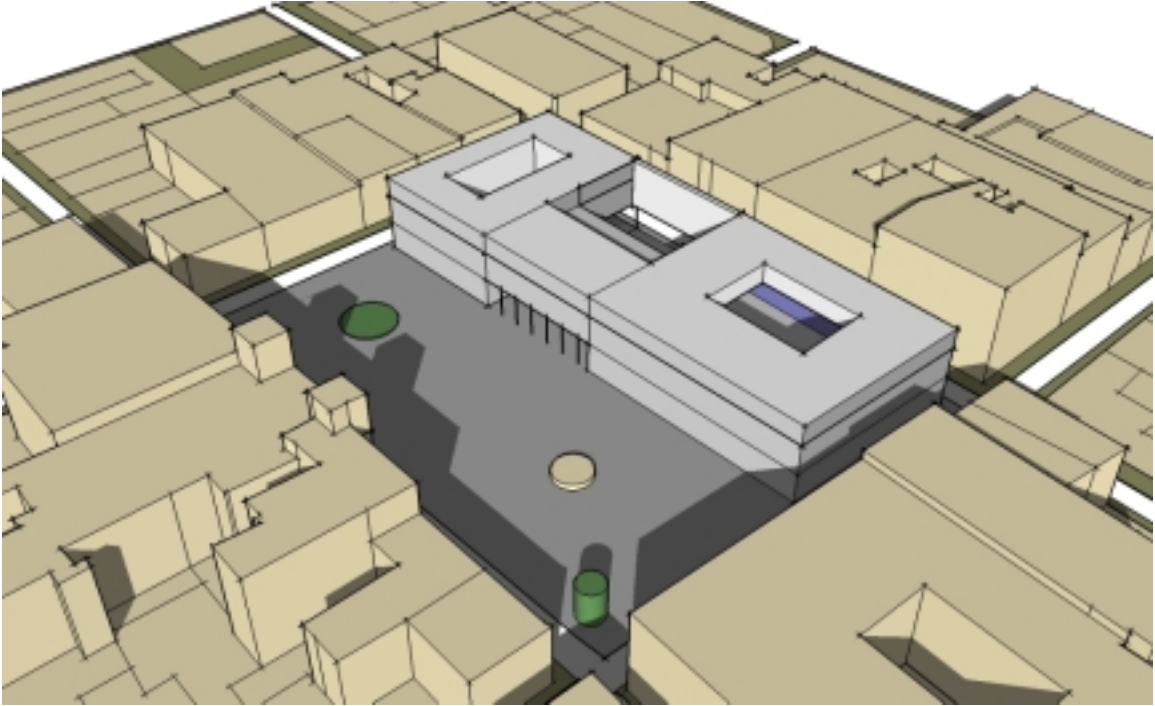


Figure 107. Axonometric view. (Drawing by author)

## Chapter 8: Process

The process consisted mainly of the implications of the program at all scales. The exploration led to numerous realizations that affected the original program both at the urban and building scale. How to deal with the public-private relationships and how to keep the building at a scale that rhymed with its neighbors? These were ever present challenges that heavily influenced the final outcome of this project.



Figure 108. Artist studios precedent studies studies.

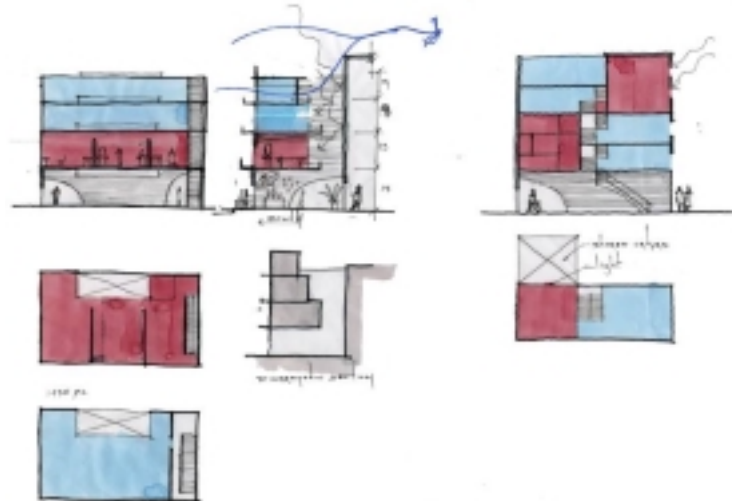


Figure 109. Preliminary studies of studio layouts.



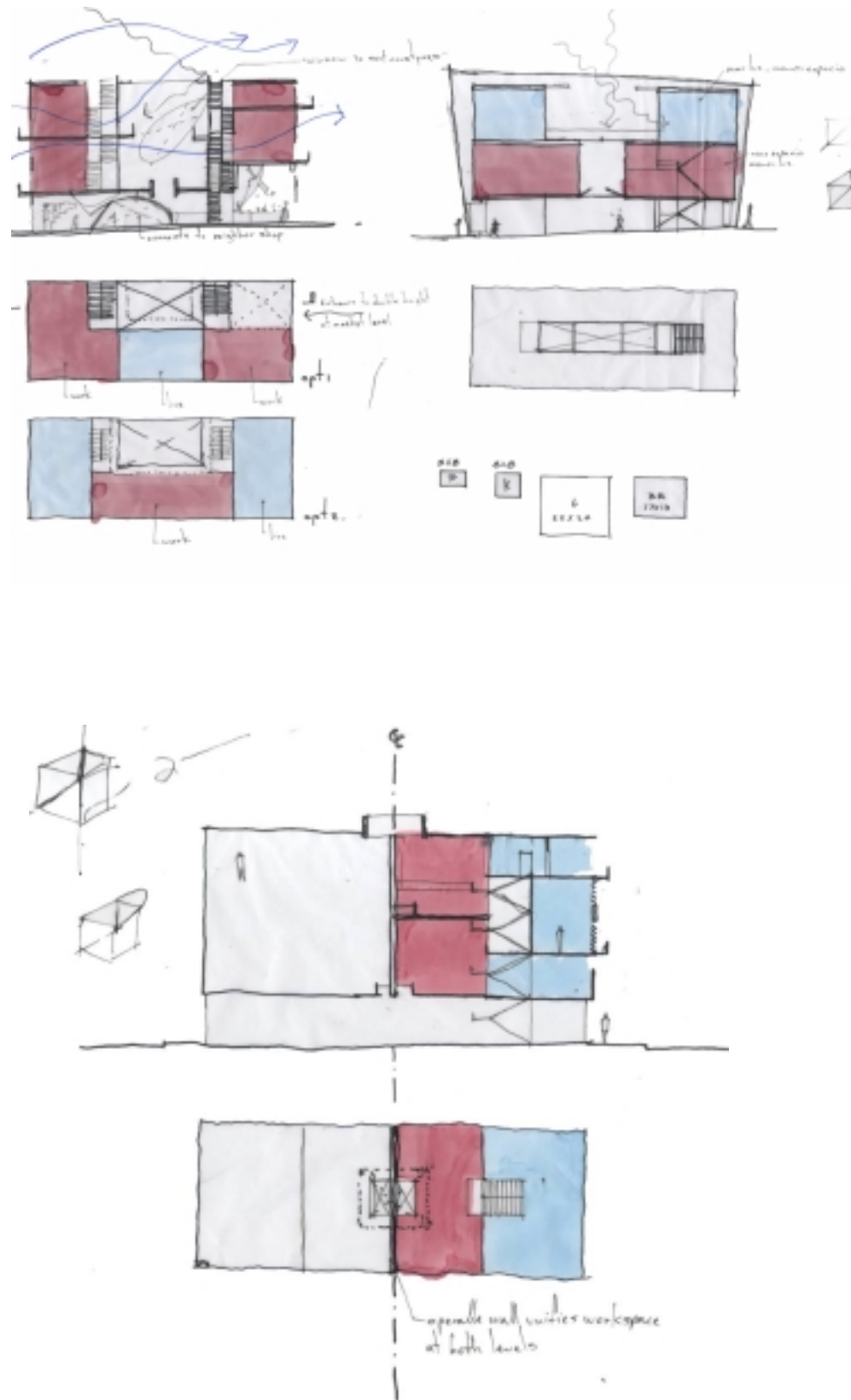


Figure 110. Preliminary studies of studio layouts

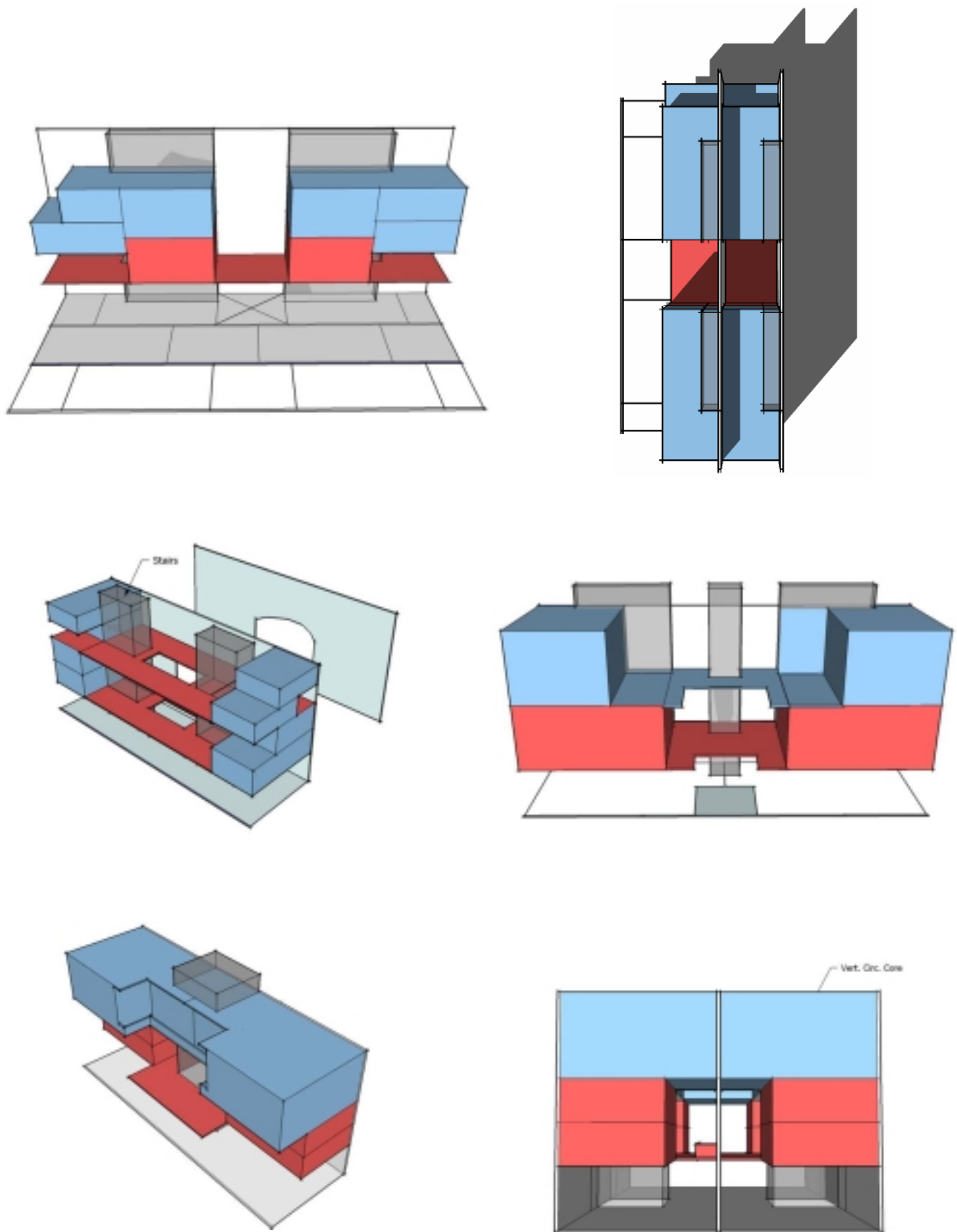


Figure 111. Live/work unit spatial distribution diagrams.

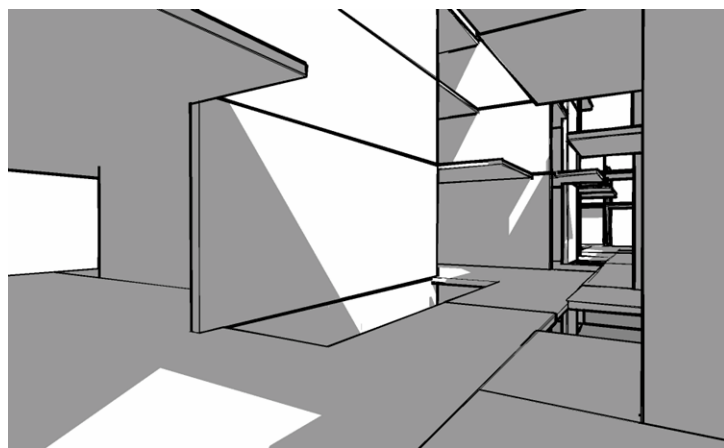
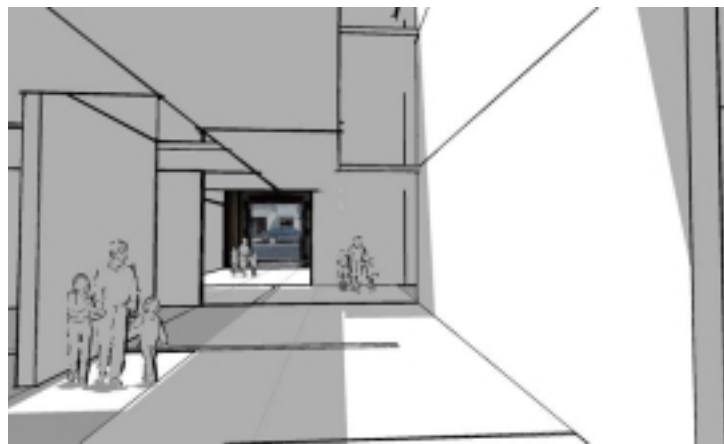
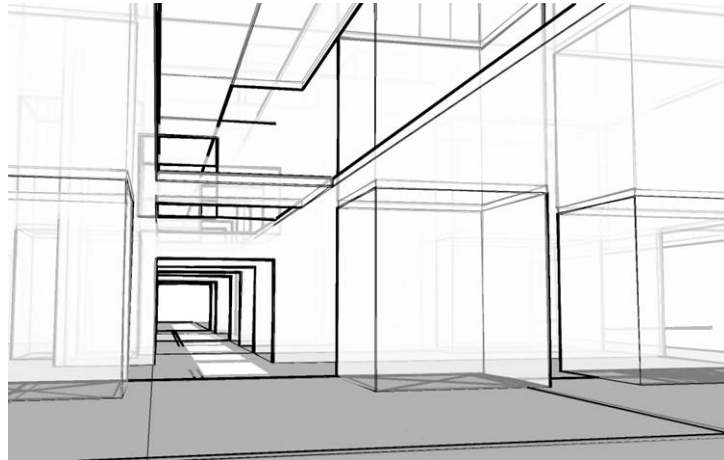


Figure 112. Sequence studies.




















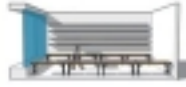




























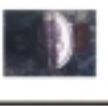













Space, Light and Ventilation Matrix		SPACE NEED 	VENTILATION NEED 	NATURAL LIGHT NEED 	TECTONICS & CHARACTER 
BLOW GLASS 					
STAINED GLASS 					
MUSICAL INSTRUMENTS 					
FURNITURE WOODWORKING 					
POTTERY 					
WOOD CARVING 					
LEATHER ACCESSORIES 					
MADE PAINTING 					
WEAVING 					
JEWELRY MAKING 					
WOOD PAINTING 					
WIDJARA CARVING 					

Figure 113. Artisans' Space, Light and Ventilation need Matrix.





## **Chapter 9: Design Conclusions**

Several ideas from the original partis were incorporated in the final design. The ideal concept of every artisan unit having an individual courtyard evolved in order to accommodate a larger number of units. Double height spaces were employed in almost every unit in order to provide appropriate ventilation and lighting for its occupants. Internal connections between the working and living spaces, both physical and visual, enhance the perception of spaciousness while maintaining a close relationship of the art work production and the residential aspects of the units. The common courtyard for the units becomes a social and working space for the artisans; in conjunction with the gallery it also provides the public the opportunity to see the artisans during the production of their work at certain times during the day. The ground level provides a porous façade that grants access to the block from all of its sides. The courtyard and the alley provide orientation throughout the shopping and gallery sequences and at the same time provide the necessary light and air to the interior of the block. The gallery becomes the civic piece of the block which in the manner of the City Hall and The Treasury Building, stands out from the rest of the block not only in façade but spatially as well.

The elements that conform the Plaza Mayor were reconsidered in order to create a more flexible public space, but without altering the underlying principles that pervade the plaza. The elements' location remained the same while their quality of objects was changed to one of better integration and interaction with the space. The following images illustrate these conclusions.



Figure 116. Building Plans and Facades.



Figure 117. Facade and site/building sections



**Figure 118. Longitudinal section and section perspective.**



Figure 119. Unit types



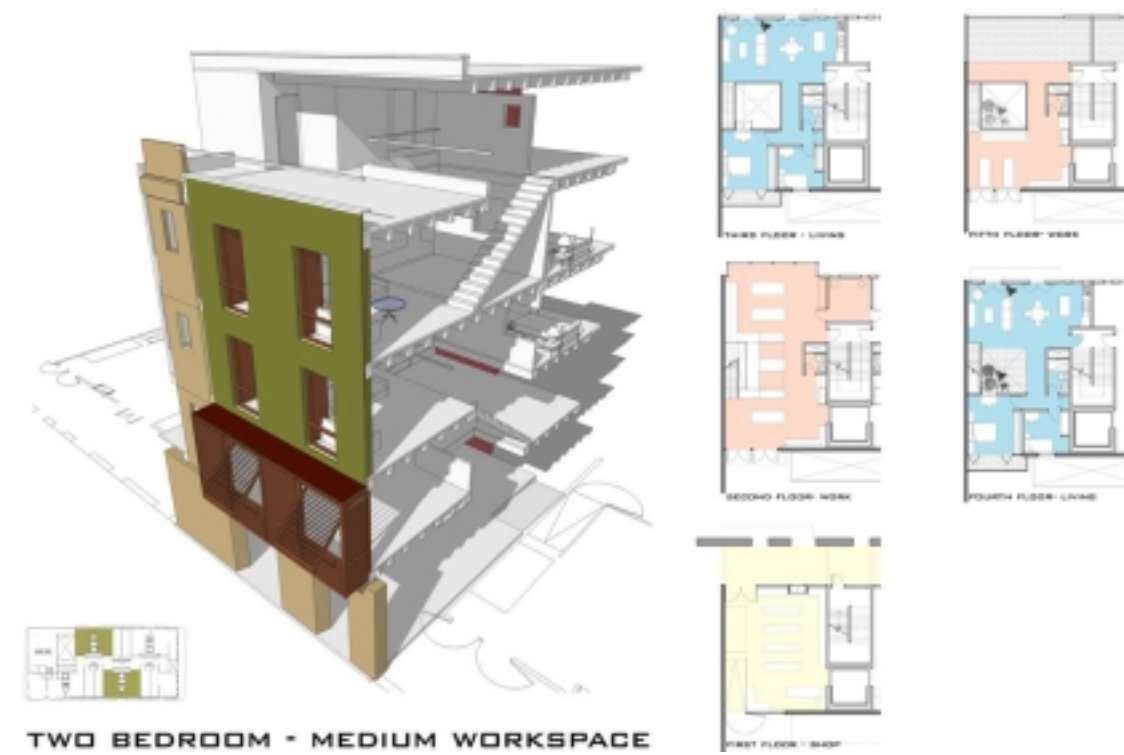
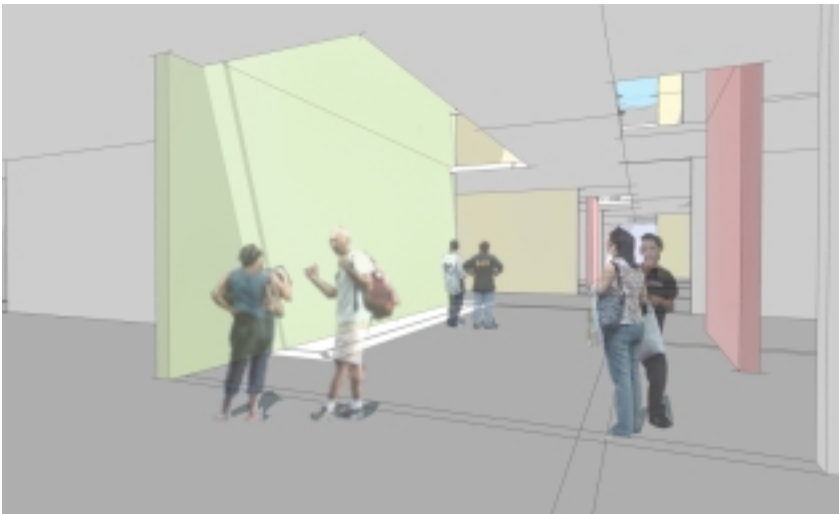
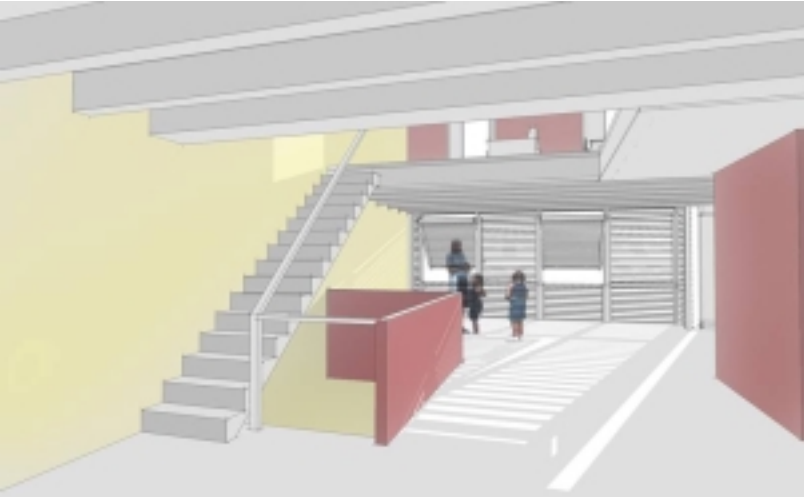


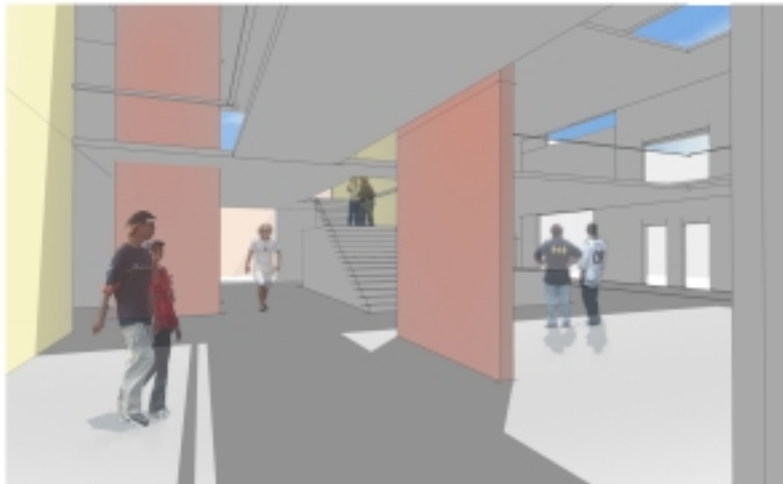
Figure 120. Third unit type and typical wall section.



**Figure 121. MAjor public Spaces- Plaza, Shopping Alley, Working Alley**



**Figure 122. Interior Views of Units**



**Figure 123. Views of public spaces**

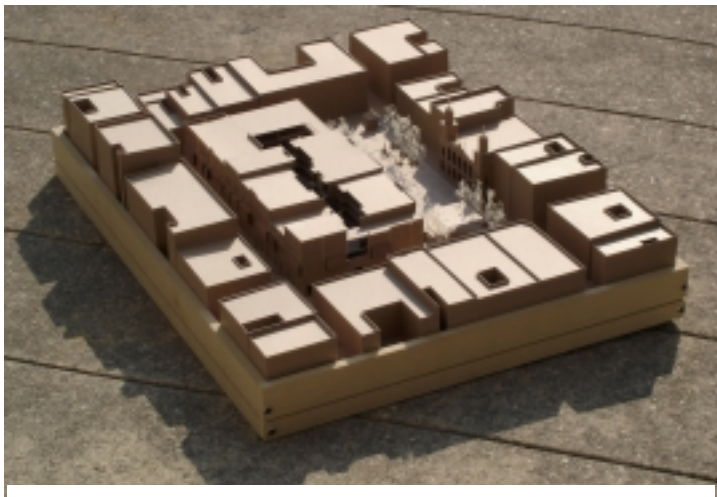


Figure 124. Building Model Views.



## End Notes

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- <sup>2</sup> Frampton, Keneth. Towards a Critical Regionalism: Six points for an Architecture of Resistance. p.18
- <sup>3</sup> Ibid p.10
- <sup>4</sup> Ibid p.10
- <sup>5</sup> Ibid p.20
- <sup>6</sup> Kelbaugh, Dough. Towards an architecture of Place: Design Principles for Critical Regionalism. p.3
- <sup>7</sup> Frampton p.16
- <sup>8</sup> Ibid p.16
- <sup>9</sup> Vicens, Francisco. Artesanía, Craftmanship, Art Populaire, Volkskunst.  
Barcelona, España: Ediciones Polígrafa, 1968 p.22
- <sup>10</sup> Ibid p.22
- <sup>11</sup> López, Ramón. El Valor Histórico de la Artesanía Puertorriqueña  
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- <sup>13</sup> Periódico El Mundo 29 de abril 1990 p.1-2 “De Aquí pero made in Japan”
- <sup>14</sup> Bednar, Michael J. Interior Pedestrian Places  
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- <sup>15</sup> Ibid p.91
- <sup>16</sup> Ibid p.92
- <sup>17</sup> Ibid p.94
- <sup>18</sup> Ortiz Colom, Jorge. Esbozo de Arquitectura Histórica en Puerto Rico  
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- <sup>20</sup> Ibid p.1
- <sup>21</sup> Ibid p.1
- <sup>22</sup> Ibid p.2
- <sup>23</sup> From interview with Architect Jose Silvestre (Institute of Puerto Rican Culture ICPR)
- <sup>24</sup> ICPR p.4
- <sup>25</sup> Colom p.4
- <sup>26</sup> Ibid p.4
- <sup>27</sup> ICPR 2003 pp.22-26
- <sup>28</sup> Frampton p.20
- <sup>29</sup> Berdnar, p.30

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