

**THE WATER'S EDGE:
A POINT OF TERMINATION
A POINT OF CONTINUATION
A POINT OF GENERATION**

BY

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MASTER OF ARCHITECTURE

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(ABSTRACT)

The design of a mixed-use market, incorporating three axes of influence was studied on a site at the end of King Street in Alexandria, VA.

A semicircular form was developed that terminated the main circulation axis down King Street, continued the free form edge of the Potomac, and acted as a visual beginning to the "new world" of Washington, DC across the river.

While the marketplace still remains as an enduring and appealing image of the city, it has diminished in recent years. Climate controlled indoor malls and shopping centers sprawl across the country, and many of the real marketplaces have fallen into disrepair, physically and symbolically losing their traditional role as a forum for the people.

There has, however, been a resurgence of interest in the markets in the past decade. As people grow tired of impersonal service, the poor quality of goods and produce, and the often nondescript atmosphere, many of the older markets are being reinhabited by farmers, artists and others seeking to sell their products. Around many urban centers, people are rediscovering the simple premise of the market which serves as a canvas for the explosion of colors, sights, sounds and smells it contains.

ACKNOWLEDGEMENTS

I would like to acknowledge the help of Professor Greg Hunt who is intelligent enough to ask questions with many answers, Professor Jaan Holt who is curious enough to see the wonder of things, and Professor Gene Egger who is wise enough to wait to see how things reveal themselves to you.

I would like to thank John and Marjorie L.; without your collaboration all of this would have been impossible.

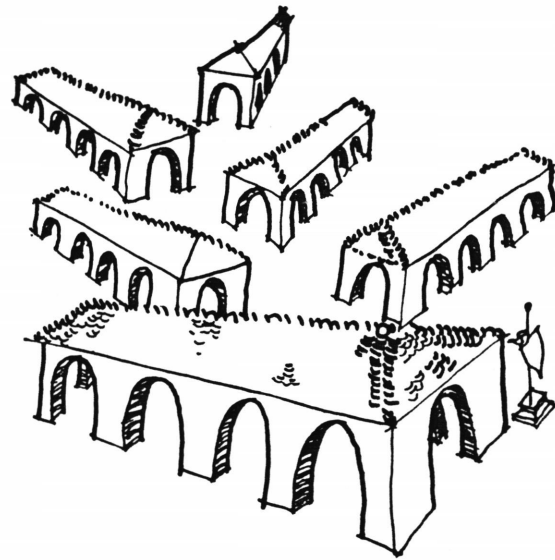
I would like to thank Scott for having the patience to withstand the storms of a thousand seas and finally, getting the hang of it.

..I would answer you: the Ocean knows it-the arc of its lifetime
is vast as the sea-sand, flawless and numberless.
Between cluster and cluster, the blood and the vintage, time
brightens
the flint in the petal, the beam in the jellyfish;
the branches are the threshold in the skein of the coral
from the infinite pearl of the horn.

I am the net waiting emptily-out of range
of the onlooker, slain in the shadows,
fingers inured to a triangle, a timid
half-circle's dimensions computed in oranges.
Probing the starry infinitude,
I came, like yourselves,
through the mesh of my being, in the night, and awoke to my
nakedness-
all that was left of the catch-a fish in the noose of the wind.

-Pablo Neruda¹





The origins of municipal planning can be traced, in virtually a direct line, to the marketplaces of antiquity. The market, and the commerce and prosperity it represented, was the common thread that brought diverse peoples together to buy, sell or simply to be a part of a very interactive form of community.

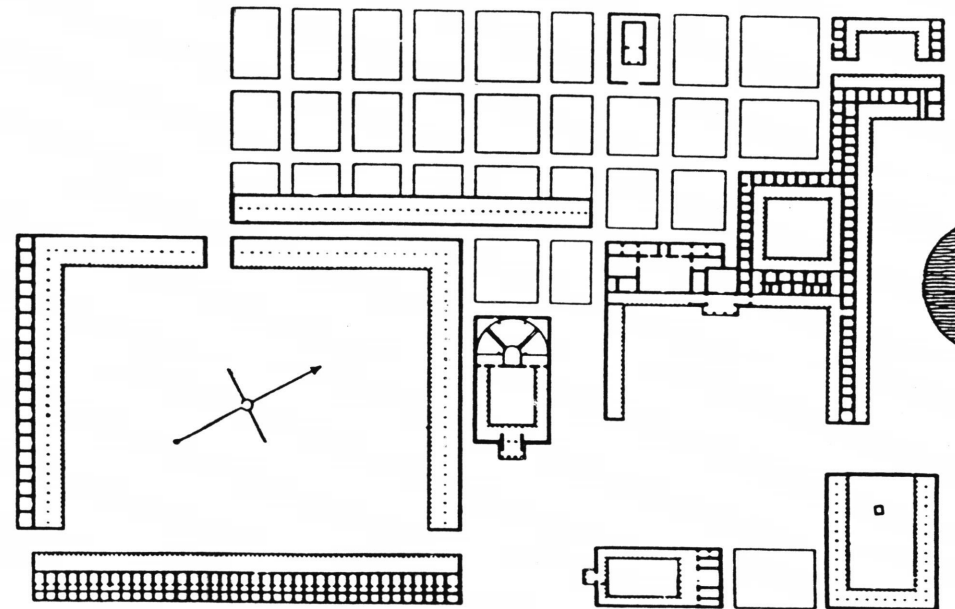
These early examples of urban life represented a "melting pot" which often displayed the best of the surrounding native cultures of a

particular region. They grew to possess unique urban and architectural qualities which are an important part of the many layers of urban experience. The markets not only supplied the tangible necessities for existence; comestibles, clothing, housewares, etc., but also became the place for other types of interaction; discourse, gossip and companionship. The marketplace became, both literally and figuratively, the heart of the city.

Reduced to simple, representative forms, the "City" began as a cross within a square or circle. The circle represented the outer wall, which protected its inhabitants; the cross, the intersection of the main arteries of travel. It was at this critical junction that the market was located. Here was an always chaotic gathering of booths, tents and stalls, where people traded goods, information and culture.

The market typology with which we are perhaps most familiar, developed

from the Greek agoras. For the ancient Greeks, the agora was the core of city life. All roads converged on it, and here began the organization of the city. The agora became the center which gave urban life focus. The original configuration of these agoras used large, central courtyards surrounded primarily by stoas and various public buildings. Moving outward from the center were residences and public buildings of lesser import, where density decreased as distance from the center increased.



Plan of Miletus ²

The Ionians were the first to alter the linear configuration of the stoas by making L-shaped or U-shaped walkways which more formally enclosed the open market with areas of shelter. These stoas allowed business to continue even in inclement weather. The agora at Assos and Miletus (fig. above) are examples of such development.

Beginning around the 5th century, large, dignified halls were built to house the markets themselves. These new public buildings were still in

the basic form of stoas, and still clustered around the agora. They brought some of the vendors indoors, while many chose to remain with their stone tables and tents outside in the open.

Coastal city planning emphasized the placement of the agora on the landbreak of the harbor in order to take advantage of ships' cargos and fishing boats daily catches. The harbor building provided facilities for the merchant population, and the remaining buildings clustered around

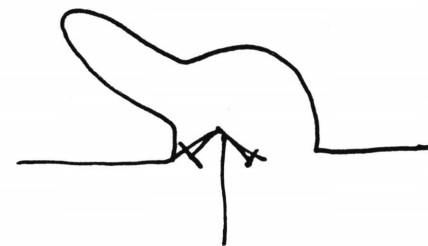
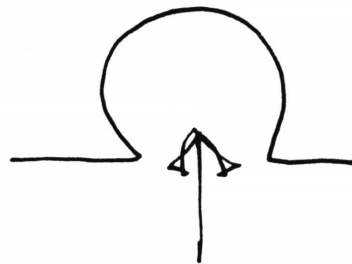
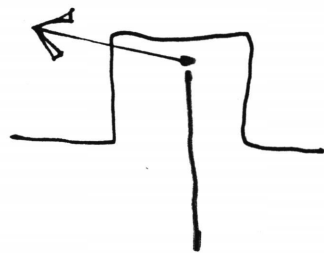
it in a semicircular, theater-shaped configuration.

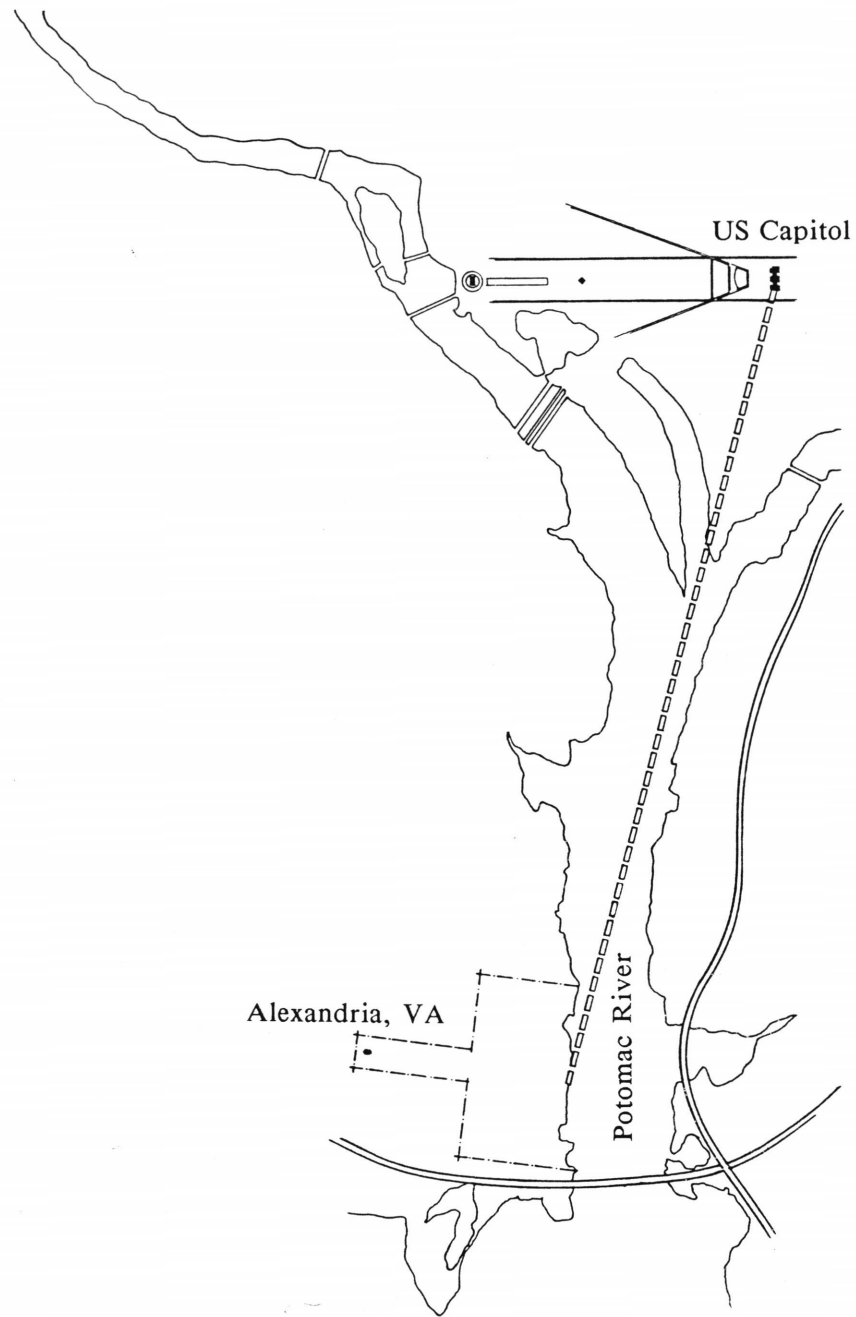
This basic approach, with many variations over the centuries, was mimicked by the colonists and settlers in America, as the first markets were simply fields where farmers unhitched their wagons near prospective customers. As some permanence developed, awnings were incorporated. Later, simple buildings with a central aisle and stalls on each side were built to house the markets. This system was

adopted by almost any sized town, and the street which the market was built on became known as "Market Street".



SITING





The site chosen for the development of a new marketplace is on the Potomac River in Old Town, Alexandria, just south of Washington, DC. It will be placed on the edge of the existing riverbank and a portion of it will be built on fill to carry the site farther out into the Potomac. It has a unique identity in that its surrounding vistas include the Washington Monument and Capitol Building in Washington, as well as the Masonic Temple in Alexandria. It is therefore able to capture the

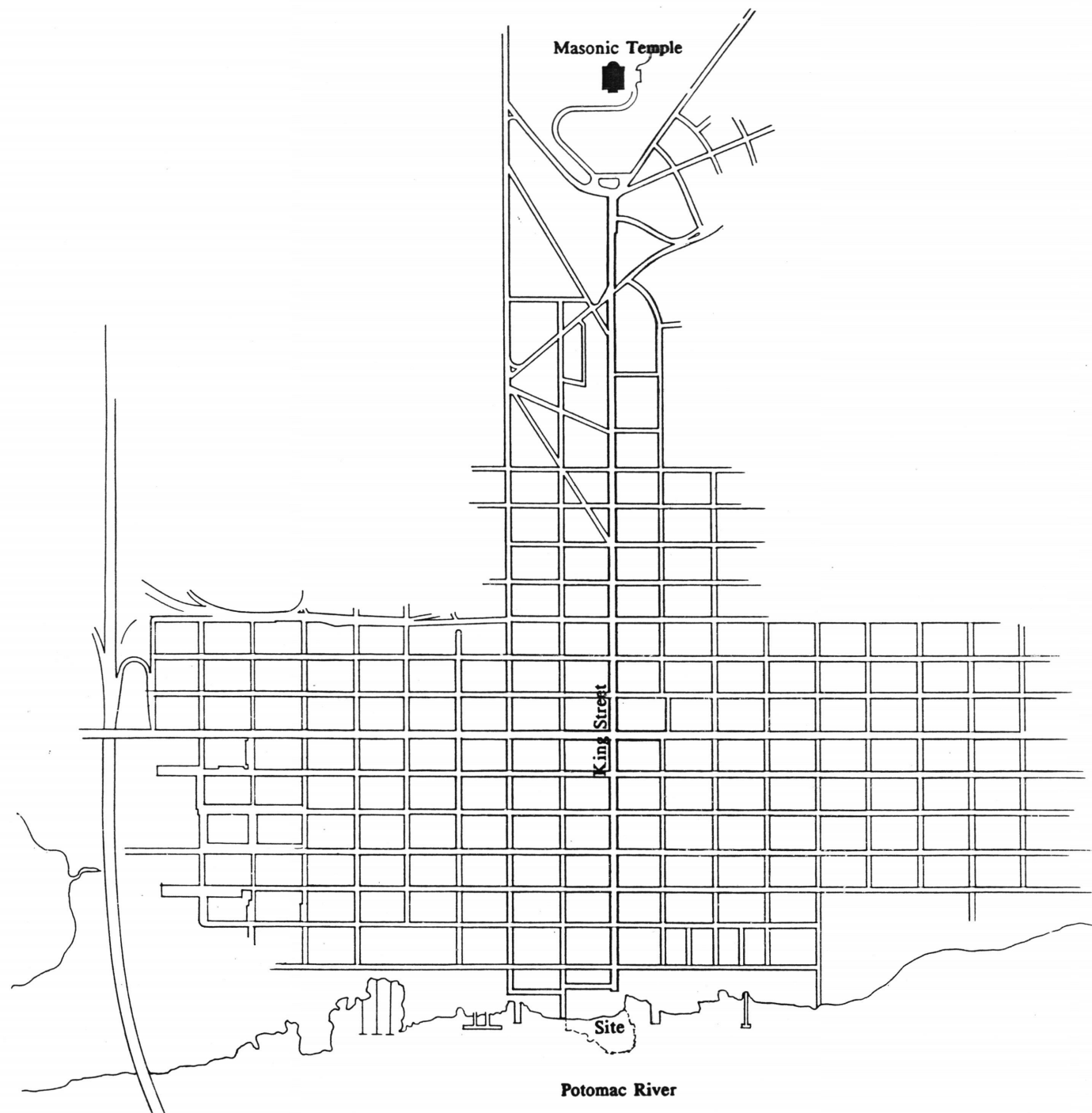
symbolic elements, by view, of both its macro and micro surroundings.

The site enables the market to have a clear and powerful expression of civic identity connected to features of the natural forces surrounding it, while also responding to the man made environment it is connected to. As well as the primary access by land, the market may be served by water. This, in essence, enables the market to become a double-nucleus link between Alexandria and Washington.

Alexandria's streets are arranged in an orthogonal grid and so sets off the natural edge of the waterfront, which winds and undulates towards the Mall in Washington. The major axis in Old Town is the nodal procession from the Masonic Temple, eastward down King Street, to the water's edge and market site. The "nodes" of this procession begin with the Temple, and continue with figurative elements, either visually or aurally: the bell tower on N. Henry and King Streets or the Courthouse

Plaza. These mark points of memory along the procession.

The cartographic strength of this axis, combined with the elevational descent to the water, visually telescopes the scale of the buildings from the monumentality of the Temple to the human scale of the water's edge and the market. This effect is magnified as one notices that at the rammed earth pedestal, which the Temple occupies as a monumental object.



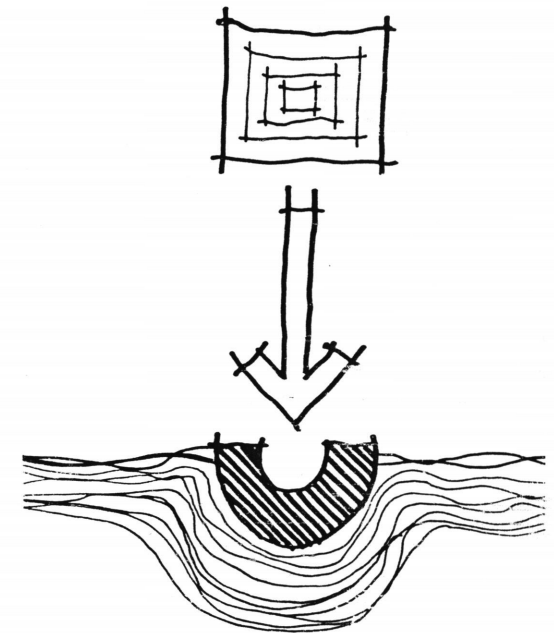
Here, the adjacent buildings are larger, and the streets and sidewalks wider. There are fewer retail stores and restaurants and more office buildings. While there is a higher occurrence of automobile traffic, the Metrorail system is a natural source of pedestrian traffic. As one nears the waterfront, it is noticeable that the density of the buildings becomes higher as the street widths decrease. All of these things act together to pull the scale down to a more personal

size as one proceeds down King Street. Window displays and vendors' signs catch the eye of pedestrians who slow down to window shop or read a restaurant menu board. The pace slows as the street facade closes down and embraces the people who walk along it.

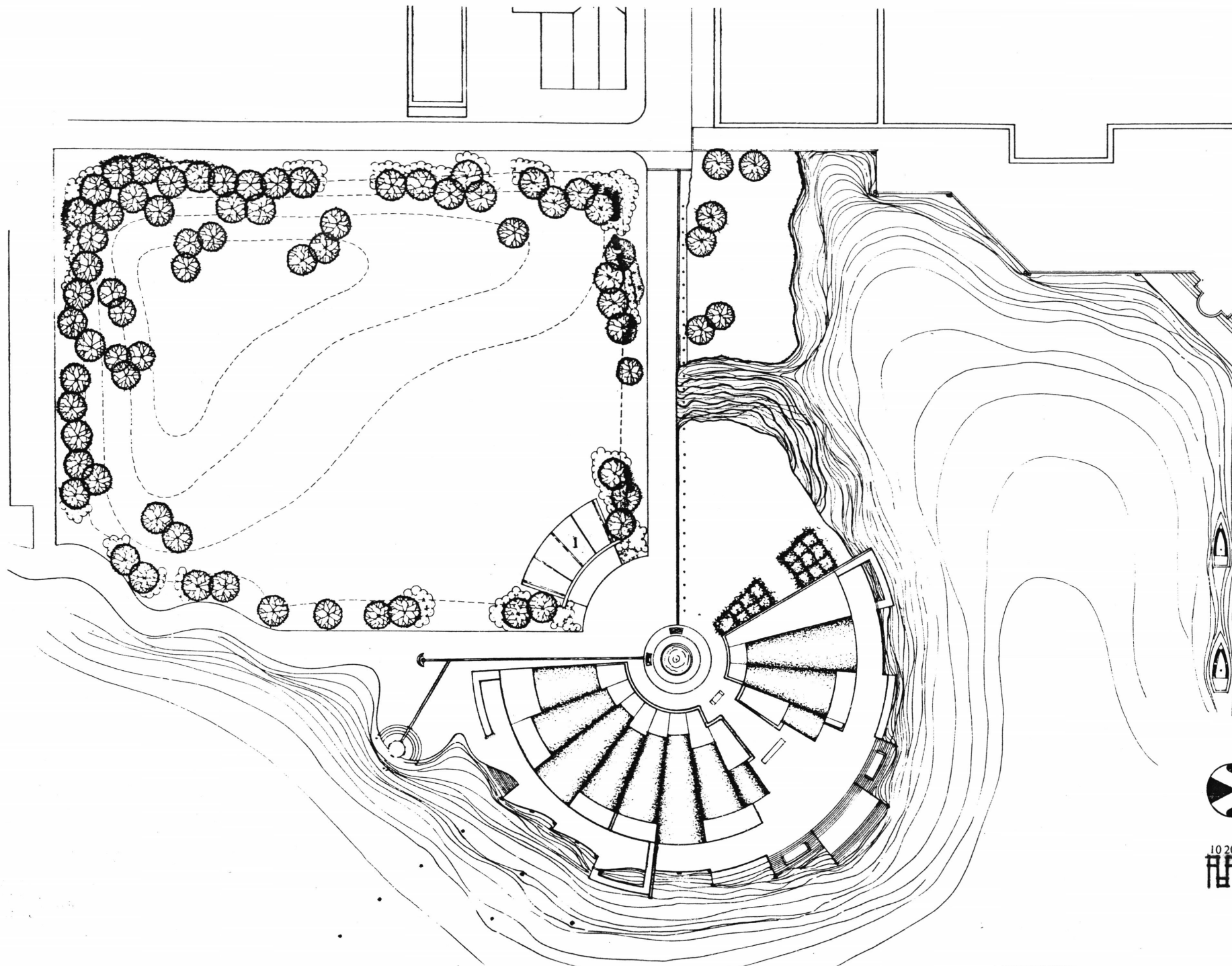
As one finally reaches the Market at the end of the procession, the facade world of the street expands into the piazza, which contains and slowly releases the energy built up

from the procession.

Another important element to the axis/procession down King Street and its articulation of scale is the occasional interruption of the rhythm which is set up along it. This is done by the introduction of either a larger building or an open public space, which serve to punctuate the rhythm further. As one approaches the site, that pulse of rhythm is continued by a single row of columns on the left of the walkway. The experiential energy of



"spilling off" of King Street is allowed to dissipate into the concert meadow space at right, and the water wall on the left. One's attention becomes focused on the market building at the end of the columns. The shifting from the elevation world of the street to the contained world of the piazza serves to make that piazza more significant as a transition place because the space itself becomes more significant than the wall containing it; until that wall is penetrated.



Key

- 1. Band Shell
- 2. Water Wall
- 3. Meadow
- 4. Fountain Court
- 5. Market Building
- 6. Mooring Posts
- 7. Promenade
- 8. Inlet

The piazza stands as an entity of its own strength; it augments the scale and tension of the surrounding buildings by creating a more relaxed space and combining the human scale with a less restrictive feeling. The great fountain at the center and its marble and terrazzo paving is a point of rest and reflection; an area to view the action and activity before entering into it. There is a small water vein which runs from both splinter fountains at the piazza's core to the edge of the site and to the water wall. This is

used as a defining element, as if to say, "Water is the heart of the market, its foundation and its boundary."

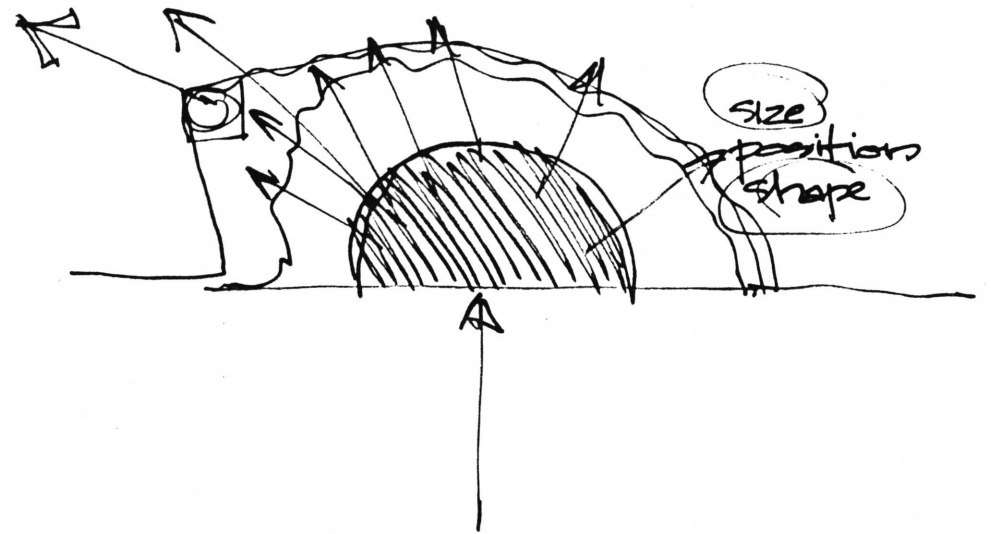
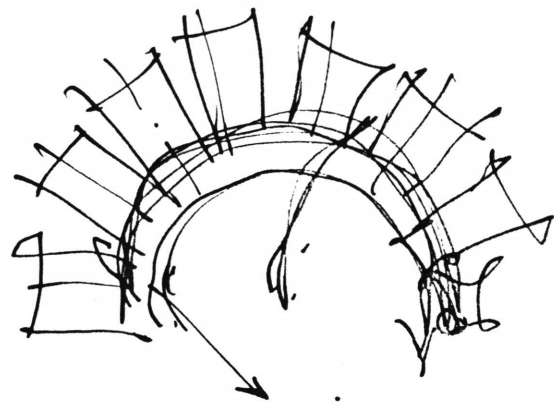
The form of the piazza is not completely finished and reflects the melding of influences from the formal end to King Street and the direction of the water's edge. The way to acquire a positive is to contain a negative; a complete form appears static and rigid while an incomplete form allows for growth and movement.

"Without allowance for growing, creation will stop functioning."³

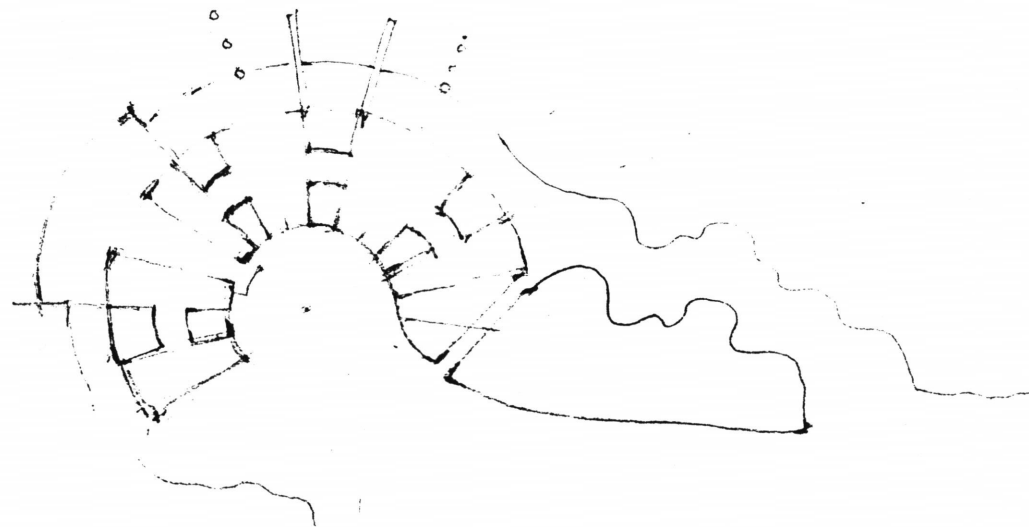
There is a schism in the market building form to allow the visual axis towards the Mall. The telescoping portals in the break frame the view of the Capitol and serve as a formal "entry" to the new world across the river. The numerous level changes afforded at the water wall and around the rear promenade offer many edges for sitting and viewing, not only to sights beyond the building, but also

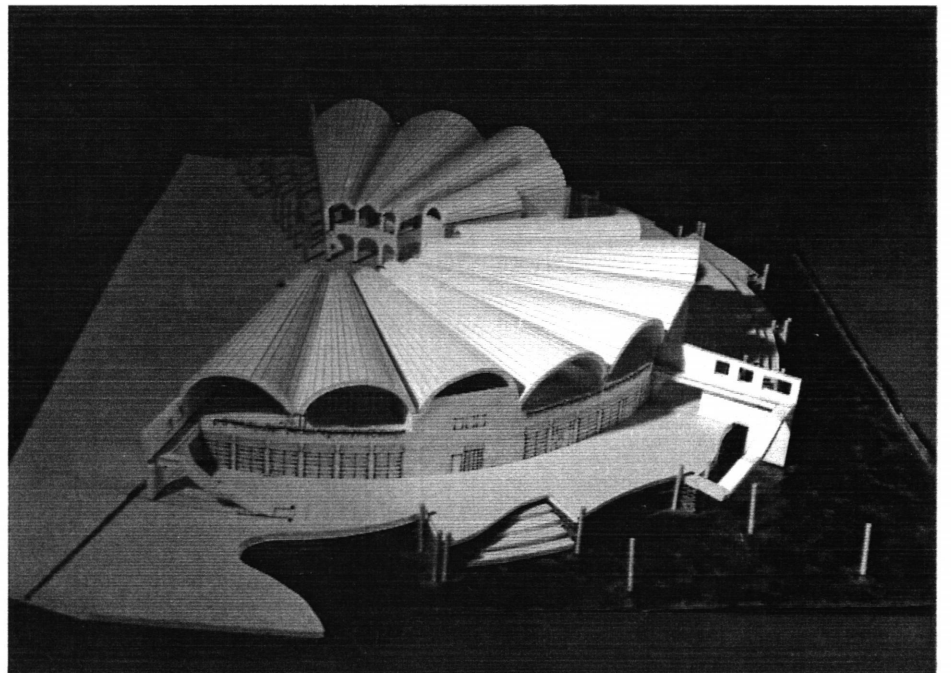
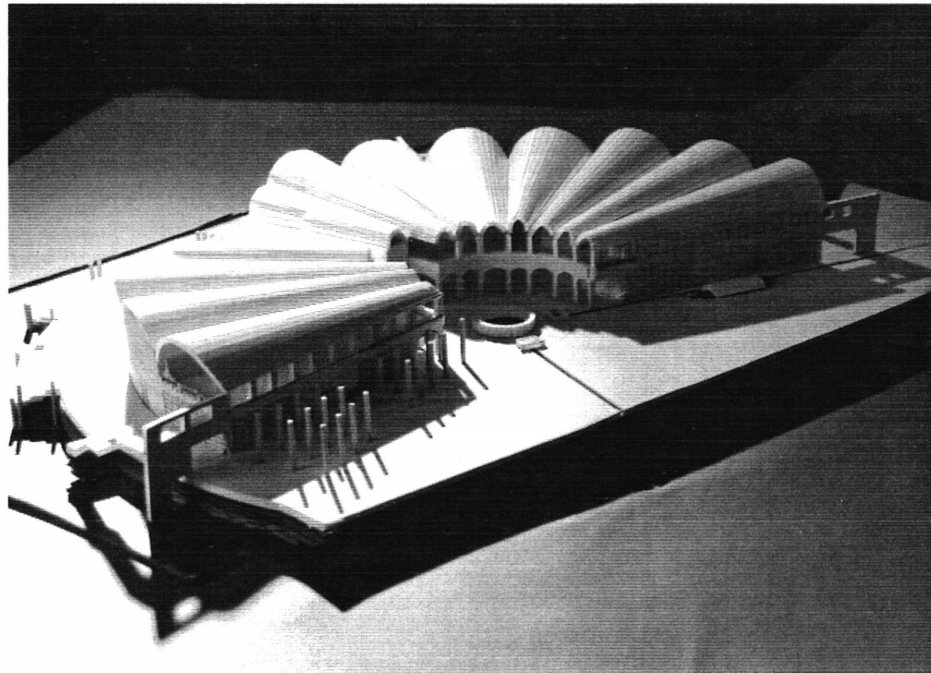
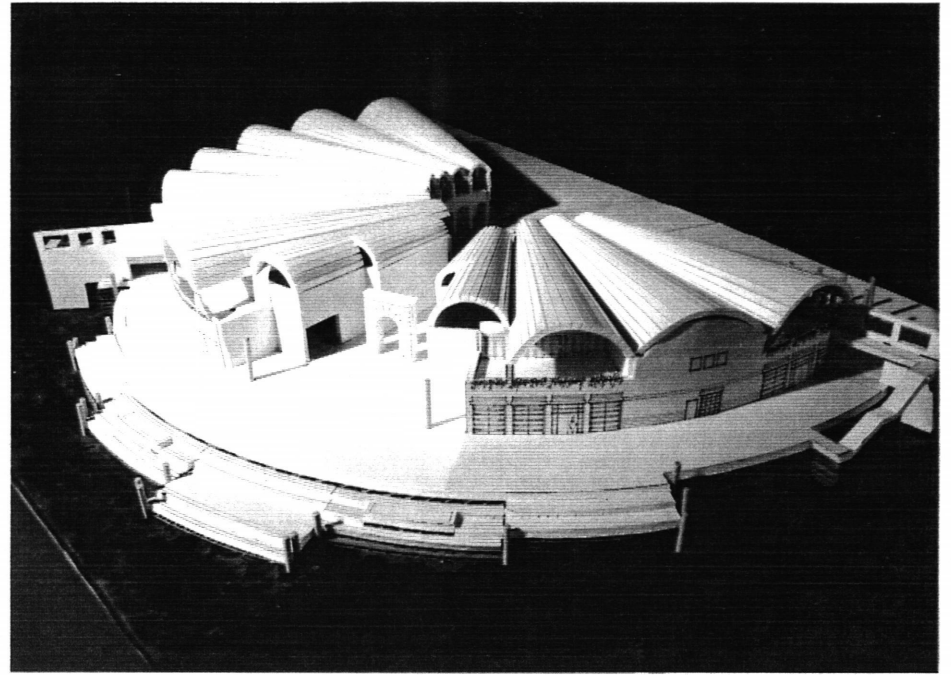
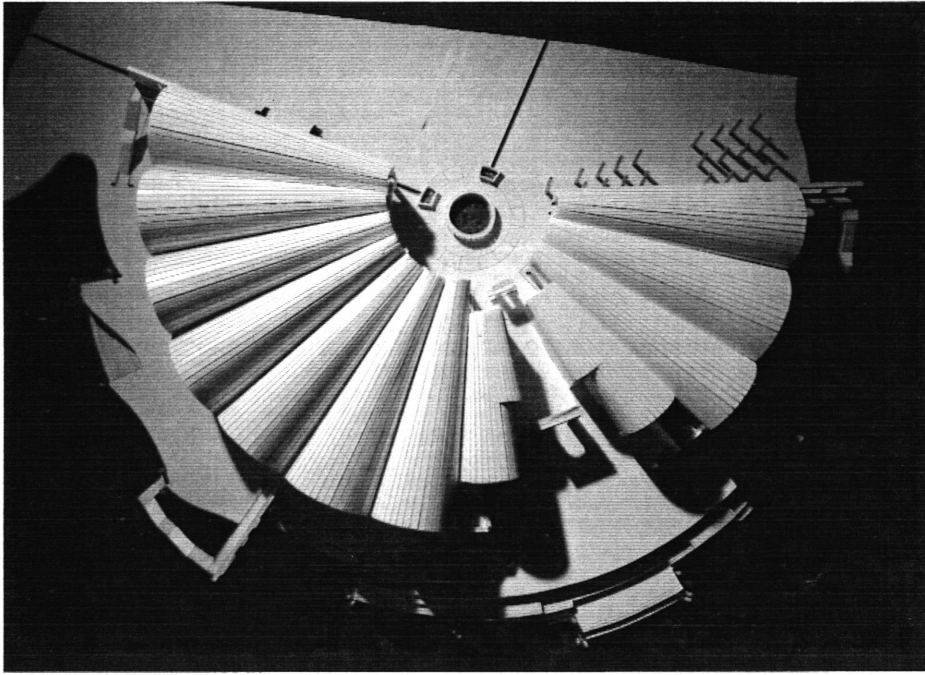
back toward it.

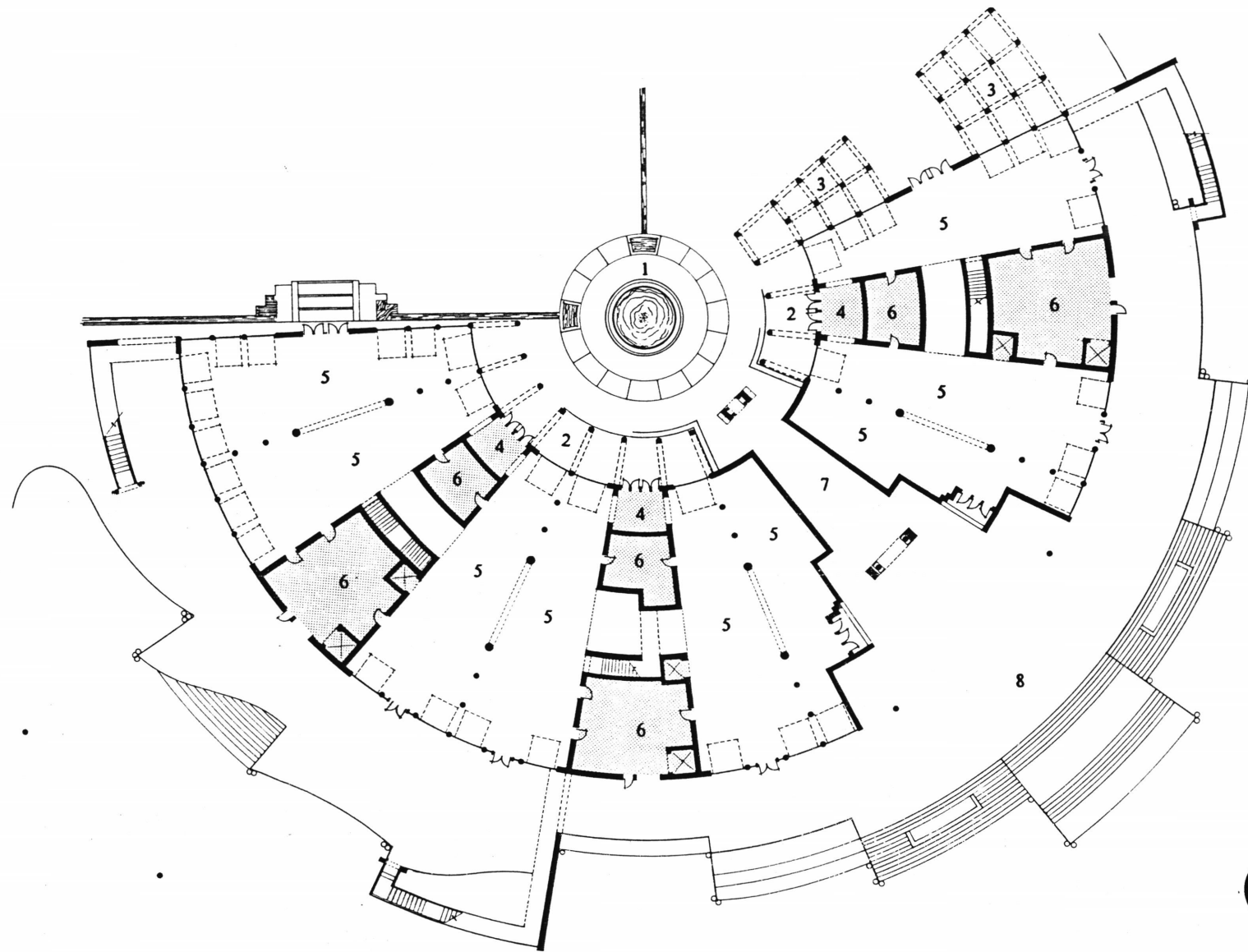
It is at this point that one sees the site as an End, in the literal ending of the King Street axis; as a Link, physically to the water's edge; and a Beginning, as a visual starting place to Washington, DC and the Mall beyond.



PLAN







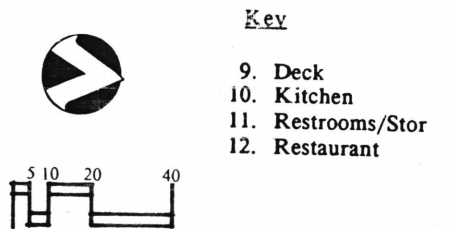
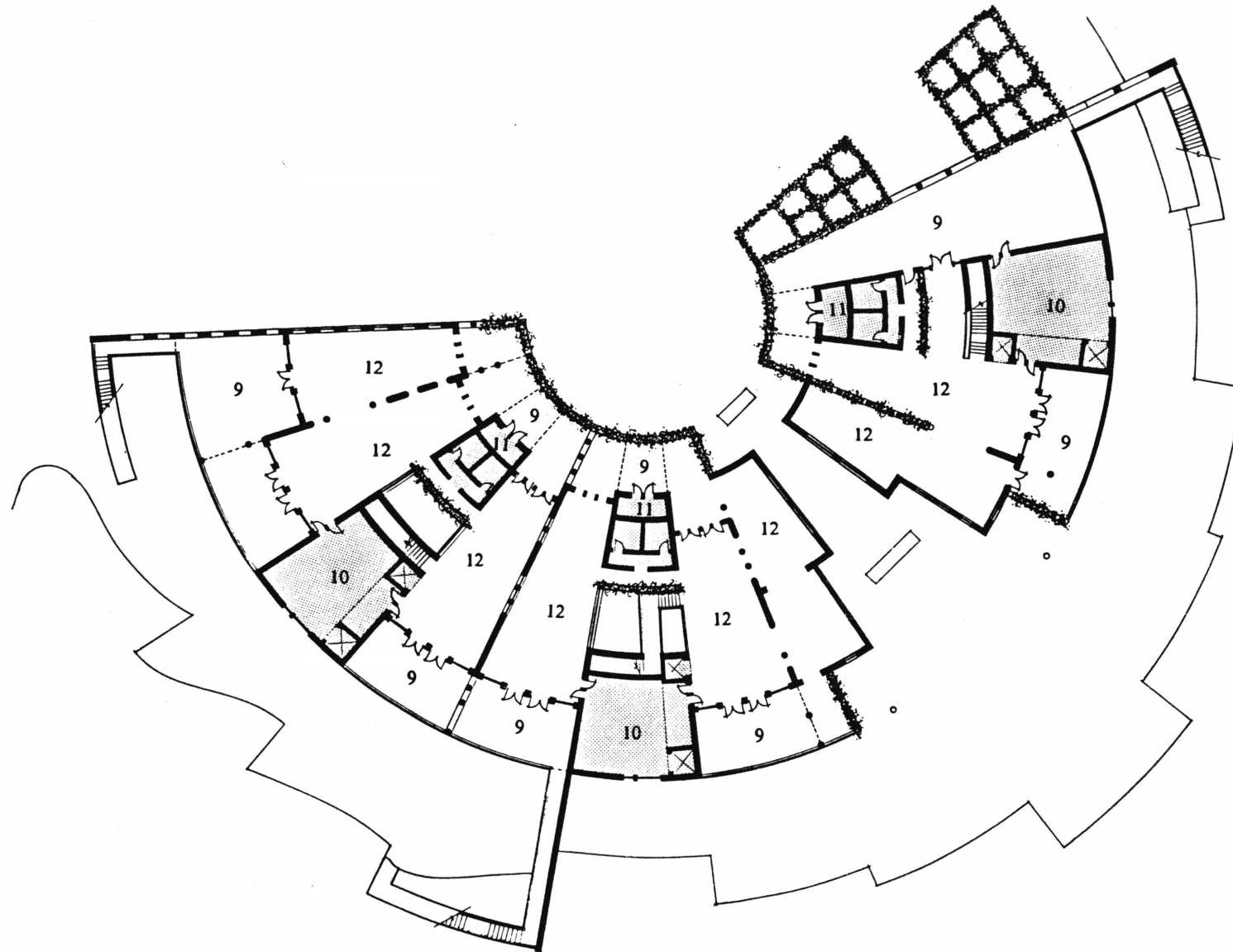
Key

- 1. Fountain Court
- 2. Entry Stoa
- 3. Trellis
- 4. Entry Vestibule
- 5. Market Space
- 6. Refrig/Prep
- 7. Portals
- 8. Promenade

By combining the natural forms of curving and oblique lines from the water's edge with a diagonal spatial recession and geometric forms, the Market is able to evoke the dynamic movement of the river, while relating to the more rigid world from which the traveler has emerged.

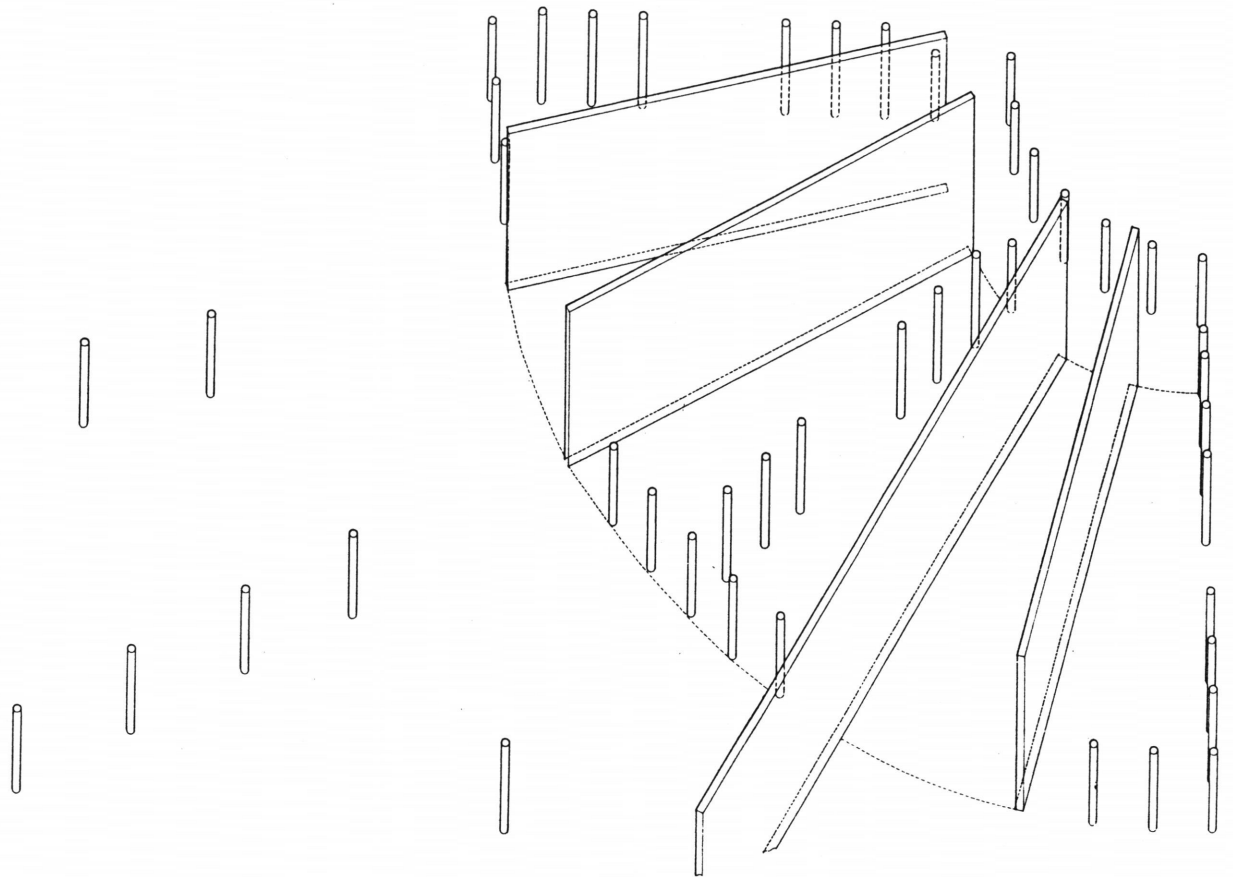
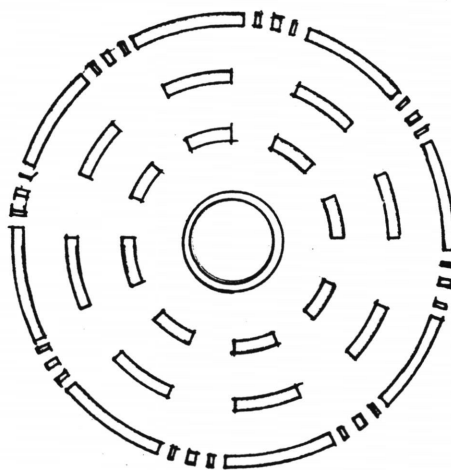
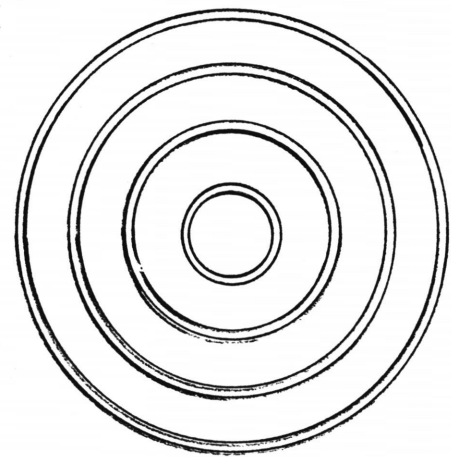
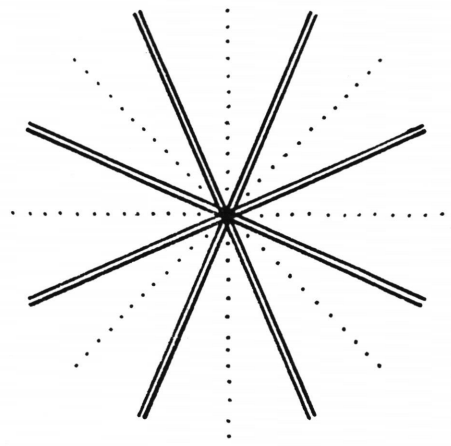
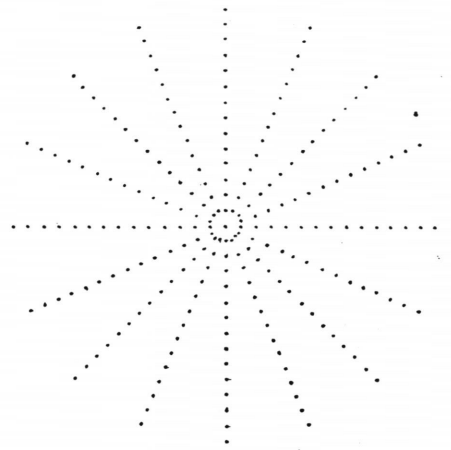
The semicircle of the plan takes its cue from the character of the land around it; the sinuous contours of the water's edge and the strong axis of King Street. By chambering the building into radiating bays,

the lines of energy from the procession down King Street are transferred to these bays, and radiated outward from impetus to field. The hemicycle allows for directional flexibility; beside and opening into these radiating axes are clearly defined volumes which direct and contain. The axes are relatively short; brought either to turns, or intersected by other minor axes that branch away at various angles, enabling a number of paths; symbolic of the variety of choices in the urban experience.



The medium for this variety of experience is a plan which speaks of simplicity, clarity and spaciousness through its placement of sculptural forms. The structure of the first floor relies primarily on load bearing walls and columns to set up clear and distinct spaces for the market areas. The columns penetrate intermittently through the first floor and continue beyond the building into the river. In this way, the columns alternate from being elements which define space to elements which as objects in space.

In the past, markets were typically arranged with a center aisle running throughout the length of a space, bordered on either side by vendor's stalls, with crossing aisles at regular intervals. The vendor's stall remains an important scale regulating element. Because the stalls are a source of defining the circulation space in the market area, their height, in relation to the width of the aisle, has the potential to control the human balance in the space.

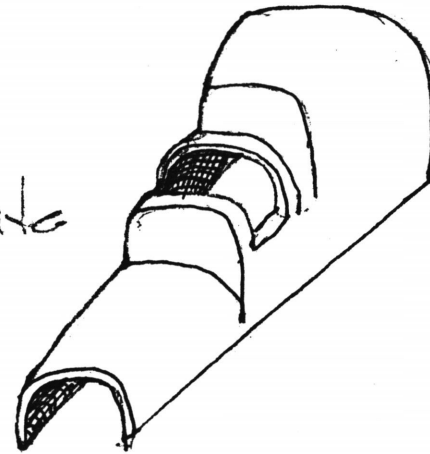


As one proceeds upward, the structure grows heavier to define the more private spaces of the restaurants. The walls begin to close down, the spaces grow more intimate. Throughout the building, planes are punctured to permit access in the concentric direction. This is carried out to the first and final planes in this direction which use overhead doors that are pulled up, weather permitting, to enable direct access into the market spaces. Openings in the radiating direction are more limited so as to

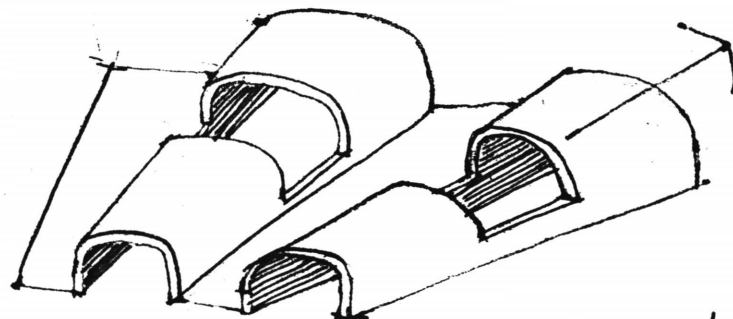
control the circulation to the semi-public and private spaces.

This layering of planes, reinforced by the repetition and rhythm beginning with the colonnaded stoa, sets up a diapheneity which enriches the experience of passing through these planes and entering new spaces. There is a completeness which comes from a layering of transparencies, yielding different spheres of character.

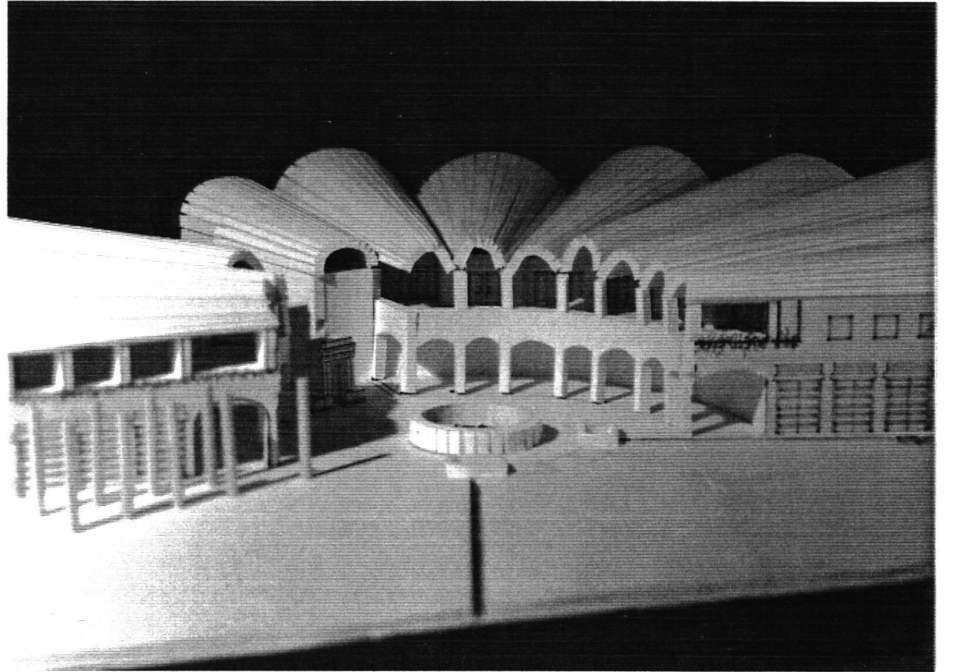
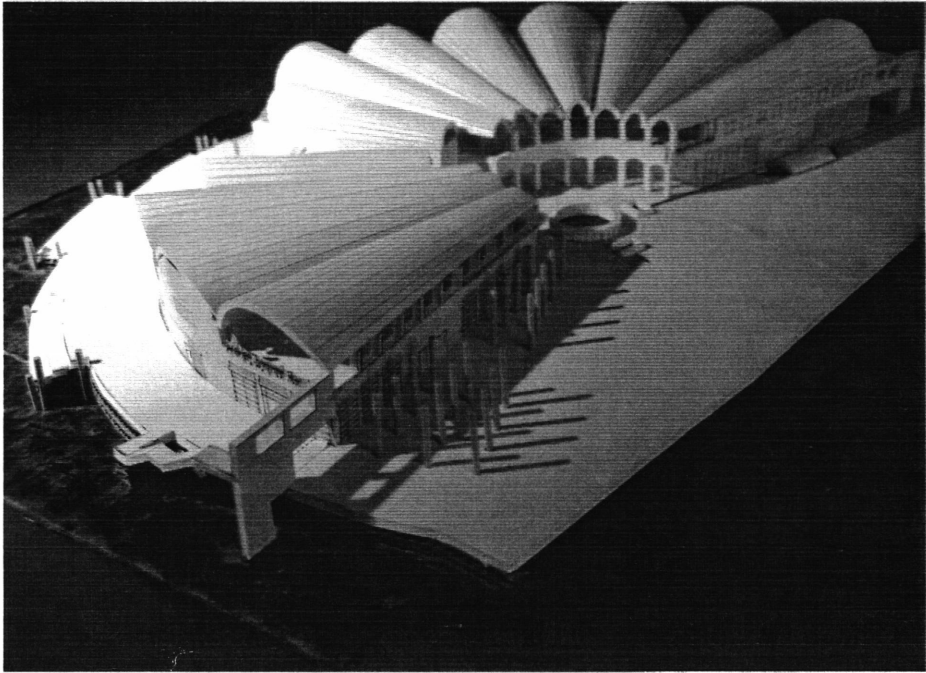
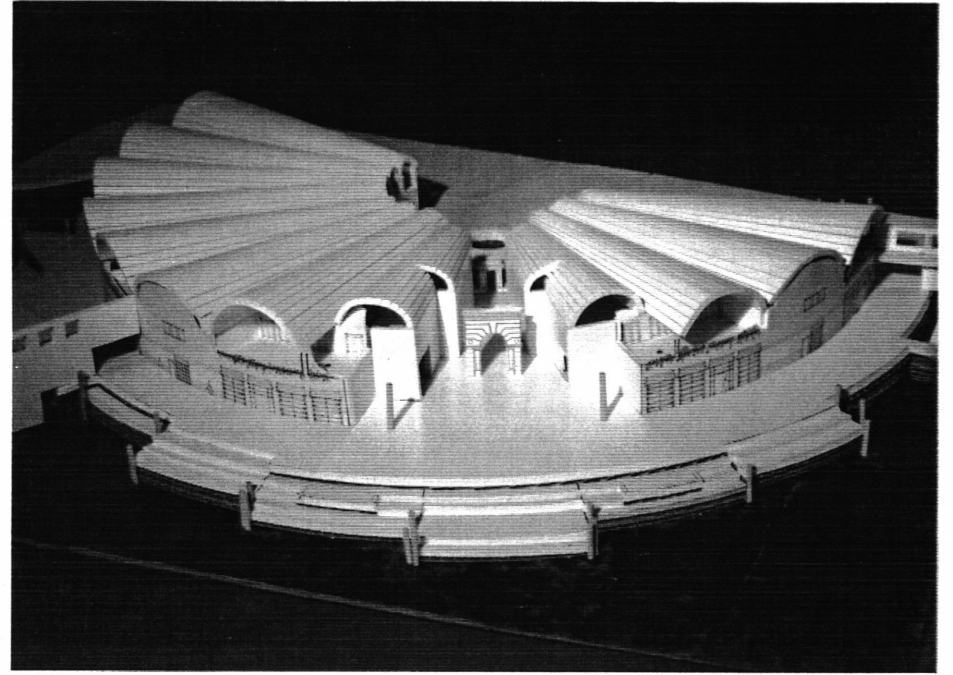
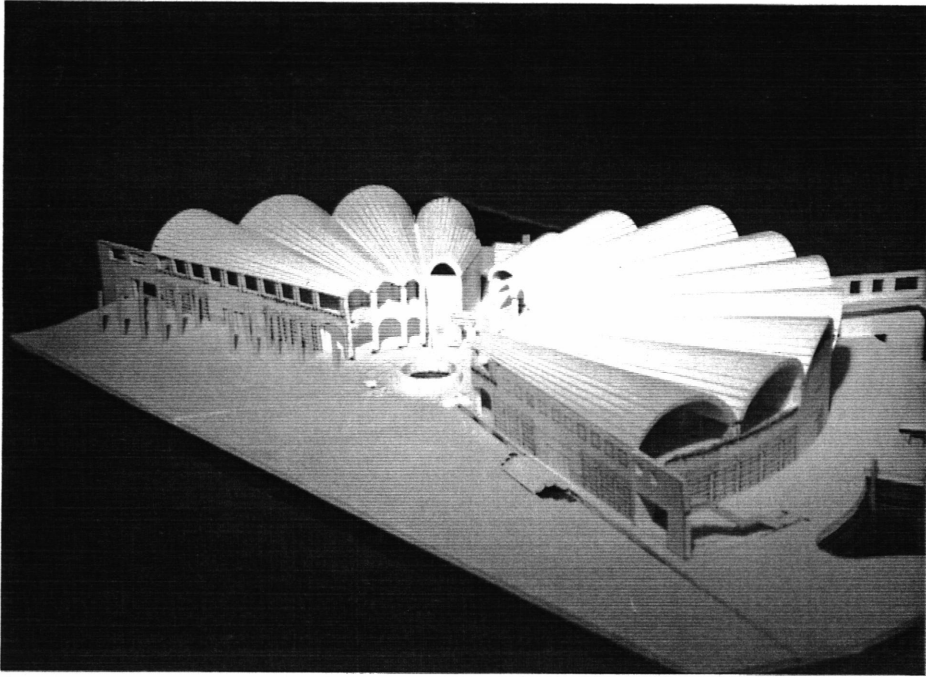
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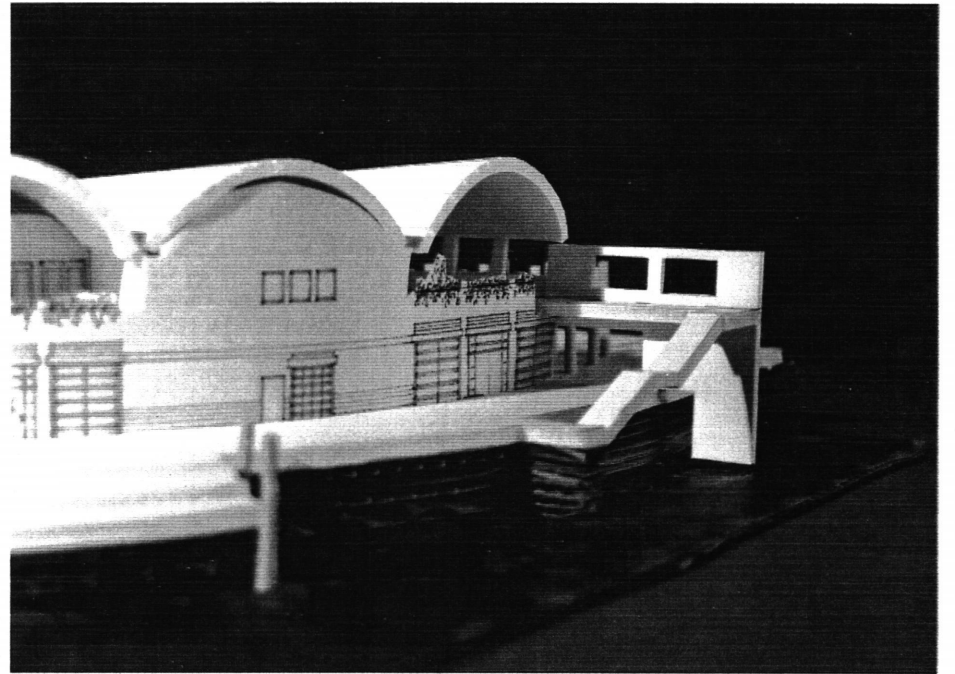
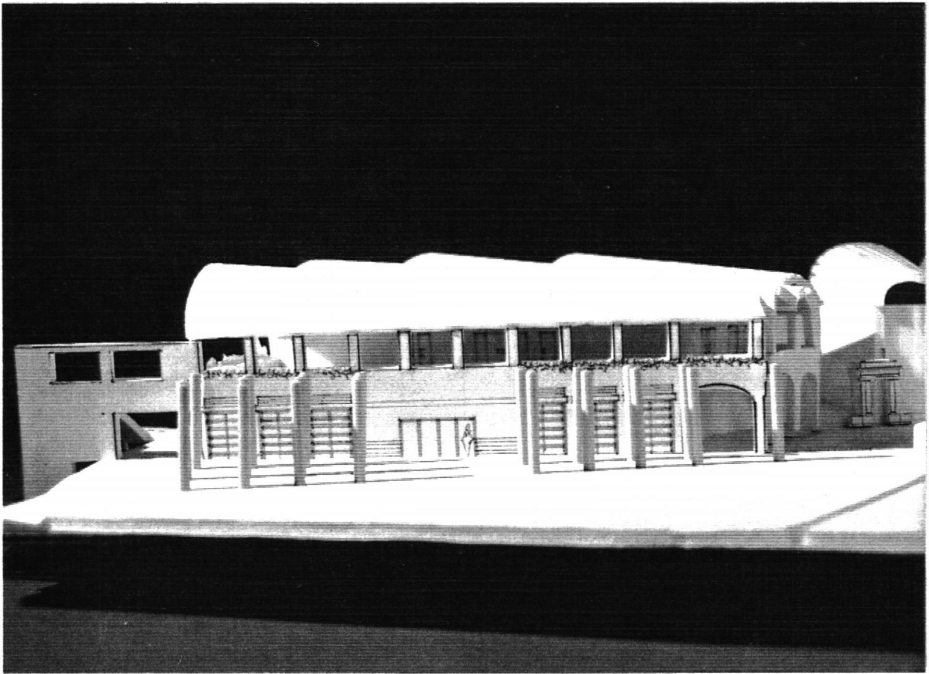
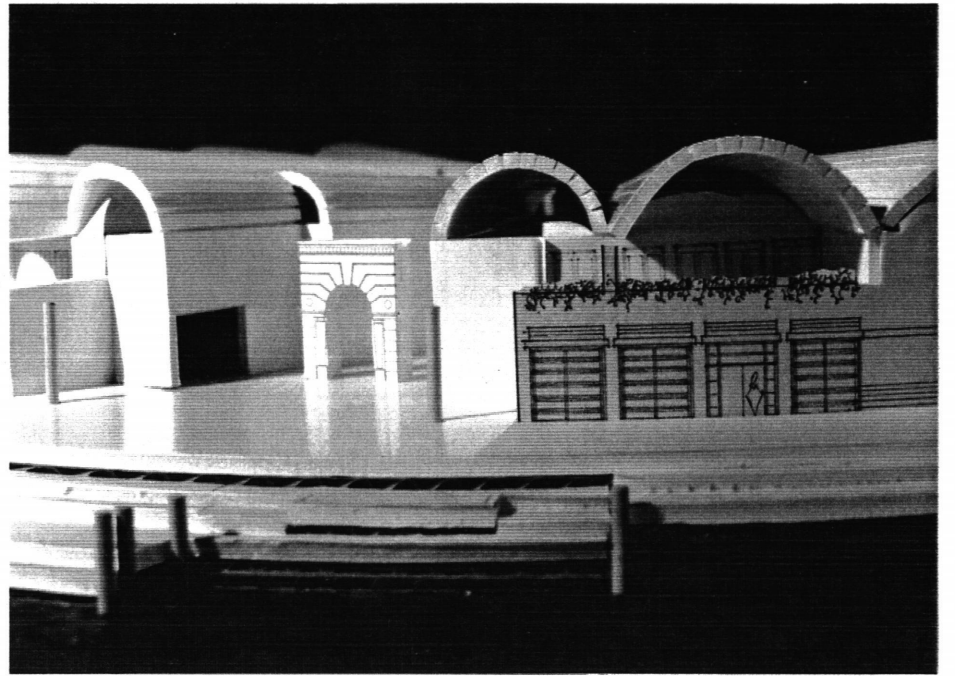
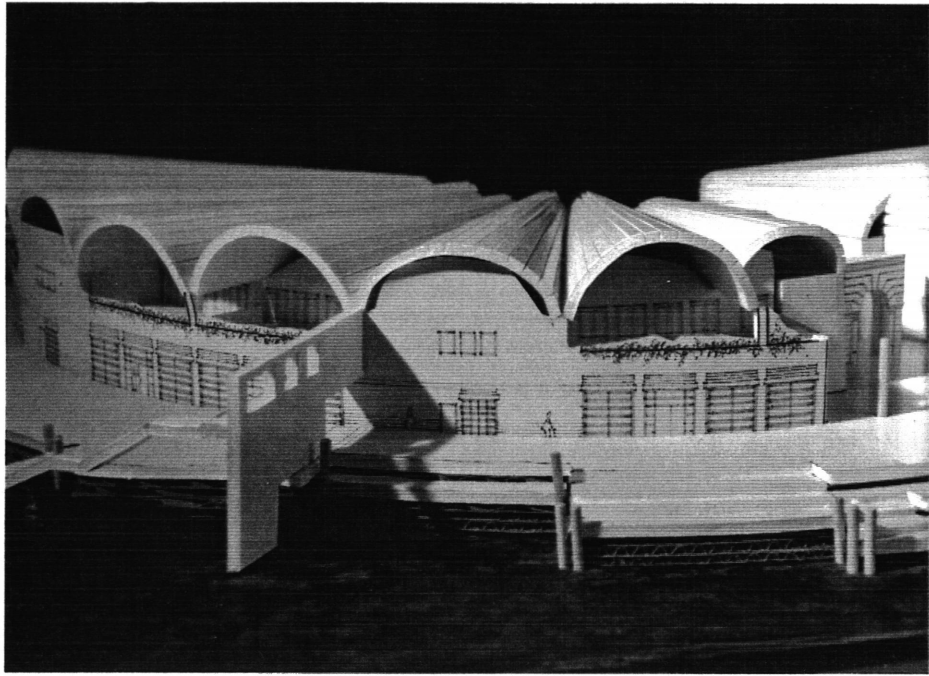


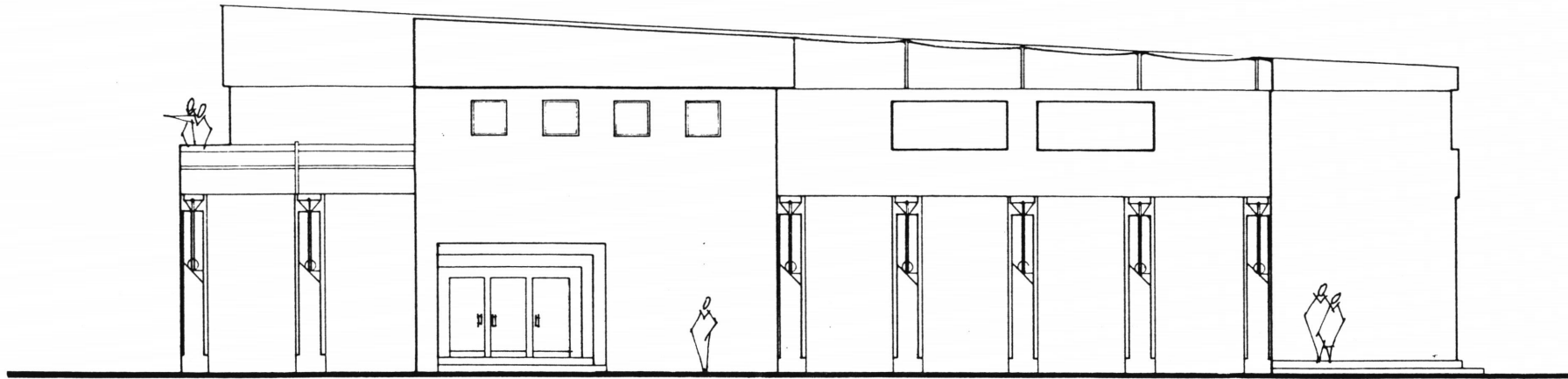
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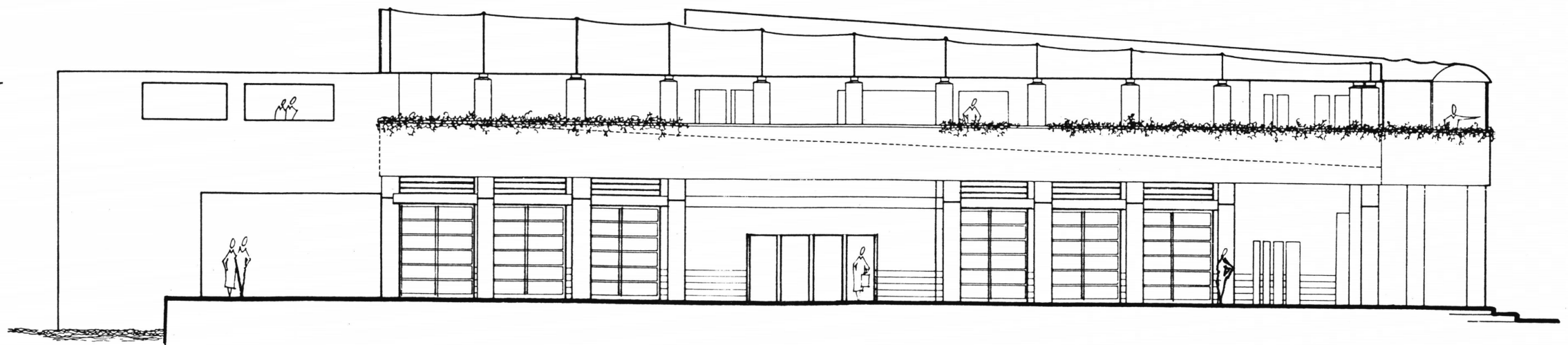
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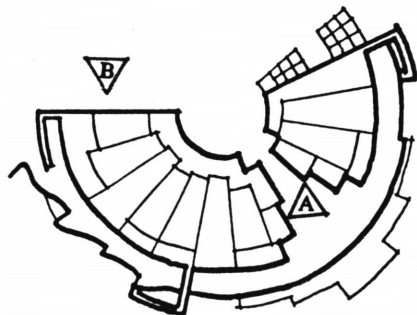




Elevation A-A



Elevation B-B



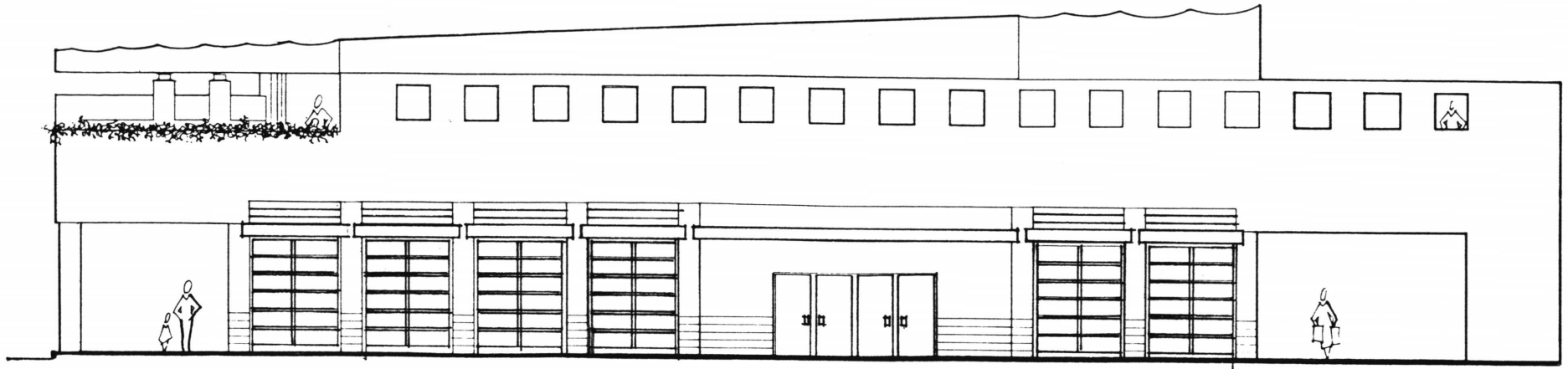
The market's exterior alludes to a ship docked at the land's edge. On the plaza side, the stoa acts as a gangplank; a transitional screen which bridges one world for another. The concrete vaults transform into canvas awnings, beyond the second story walls, which echo the vault form, but can be retracted or placed in position as the weather dictates. The vaults and the colored fabric awnings are spinnakers that billow and luff, indicating the wind's strength. At the water's edge, the rise and fall of the tide is marked

by the stages of the marble and terrazzo steps, as a shipside ladder does. The flying bridges which carry the outward thrust of the building's plan capture the gesture of line that is offered in a ship's bowsprit, while allowing people crossing the bridges to be seen at a glance as they pass the punctures in the walls. The terracing on both sides of the Market allows almost omni-directional views in the same manner of a ship's deck.

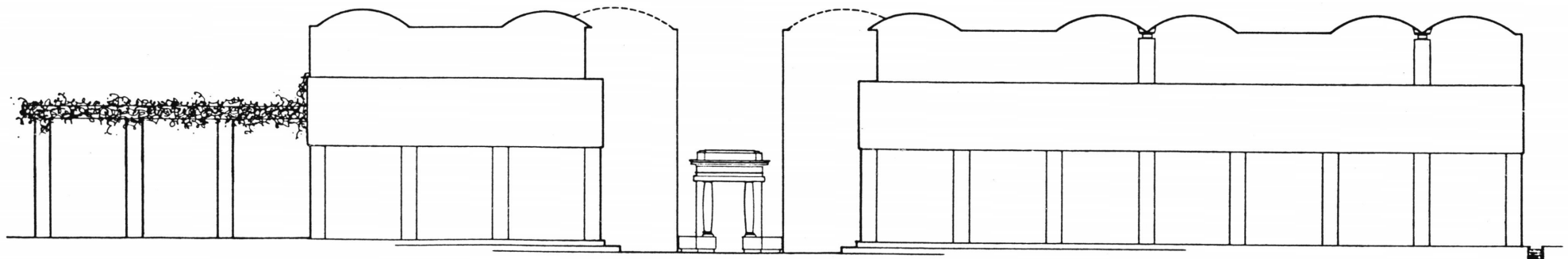
In the water, the columns which

are continued away from the building as a dissipation of the plan's circulatory energy, are used for mooring boats, much the same way as the brightly colored gondola poles of Venice. At a future date, a large water sculpture should be built toward the Maryland shore to augment the axis in that direction.

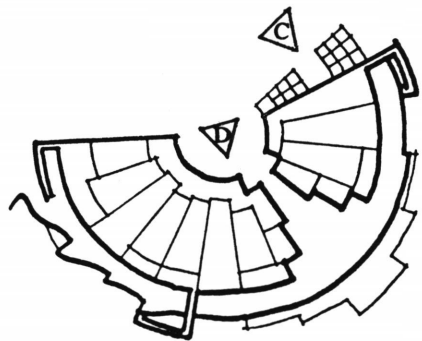
The building's mass is a series of telescoping bays, made of pigmented concrete with split-faced concrete masonry unit detailing.



Elevation C-C

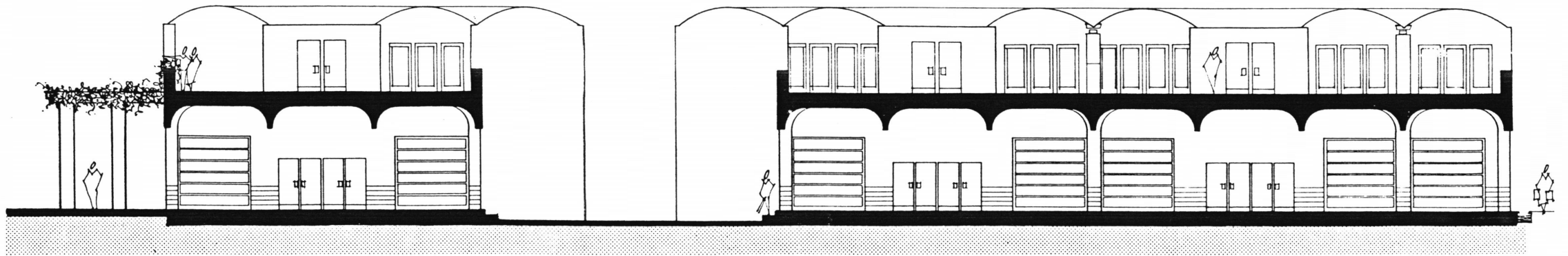


Elevation D-D

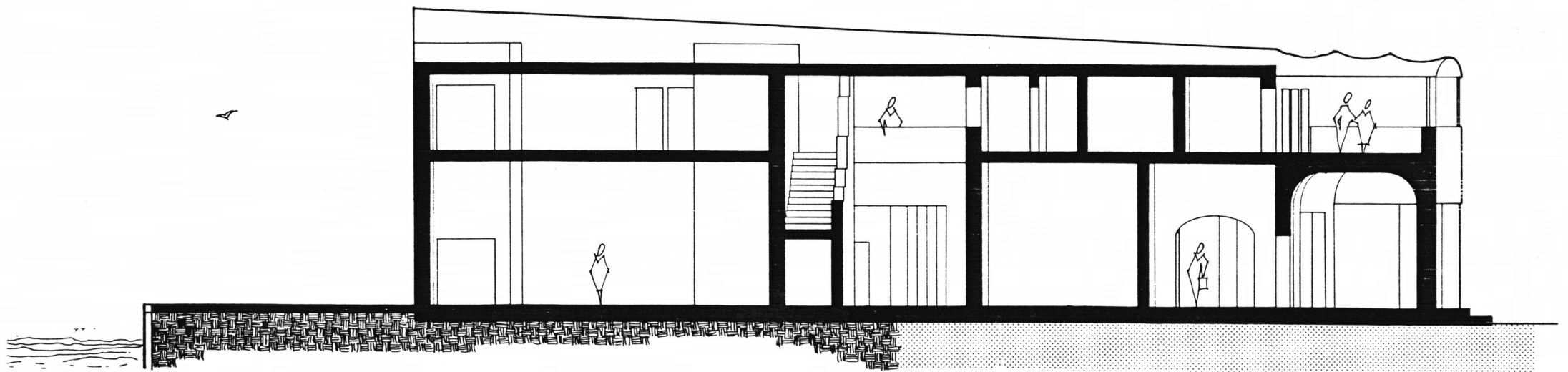


These bays translate the scale from the contextual continuance of King Street's end to the two-story rear promenade. The facade on the piazza side is a familiar, human scale which makes the Market appear comfortable and inviting as it continues the dialogue of King Street, drawing visitors to the water's edge. A rigid proportioning without a comparative relationship to the human scale would lead to apprehension and distrust of so large a structure. Therefore, the upper story is

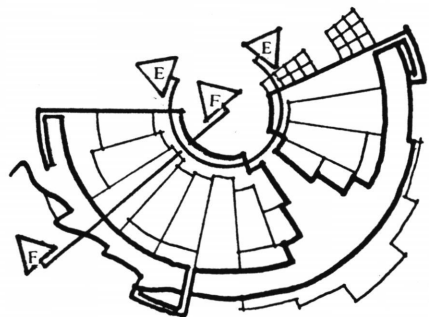
stepped back, and the colored fabric awnings are used as a gradual introduction to the larger scale of the promenade side. In this way, the scale grows to its conditions without being intimidating. The undulating of the vaults and the directional push which they illustrate should convey to the pedestrian a sense of continuity in the expression of energy as it is reflected in the form-force.



Section E-E



Section F-F

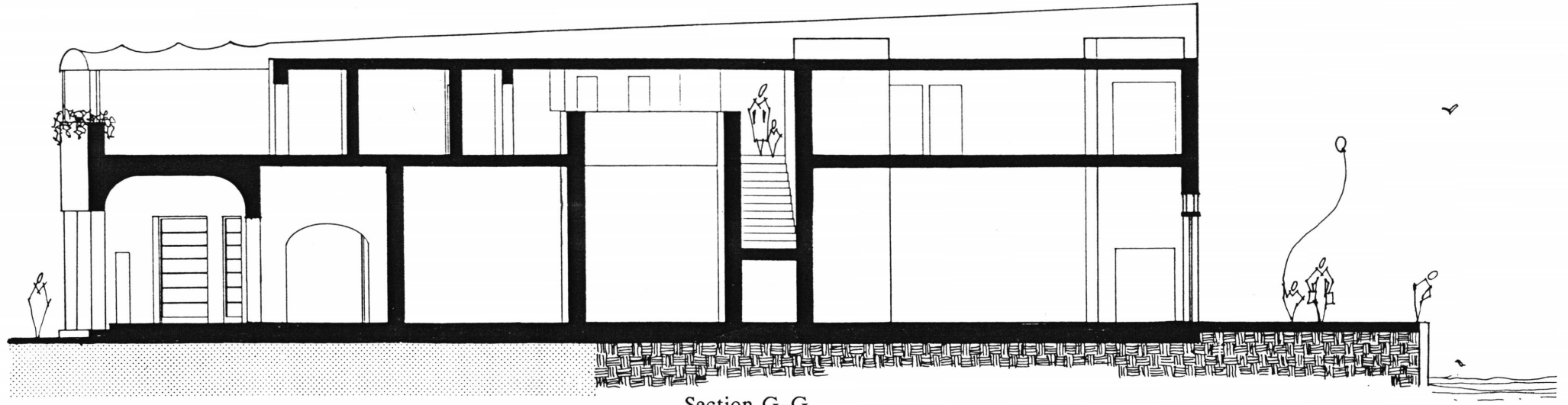


The market's interior makes use of its ample light, by allowing it to be experienced in a number of ways. Light at the back of the market flows in in great sheets through the overhead doors and the glass block transoms above them. On the upper floor, the light is reflected around the vaults and bathes the spaces in a gentle glow which allows that abstract contour to express the body in its movements as the sun moves across the sky.

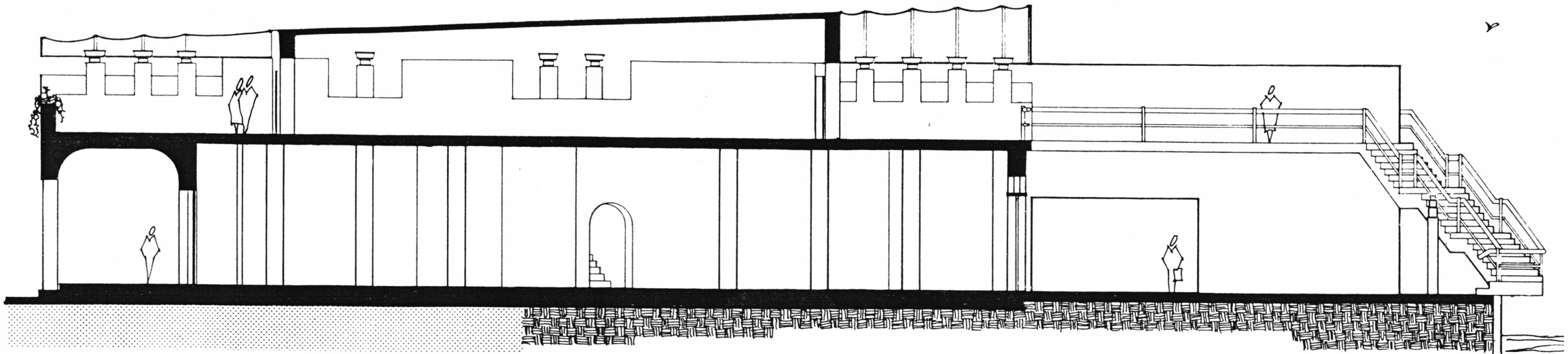
By breaking the circulation on the second level out of the building by way of flying bridges, that circulation becomes a stage for the movement of the objects which pass over them. Those passing over the bridges are offered various perceptions of the different spatial relationships around them as the spaces move and flow with the changing of the light and of position. The pedestrian can understand their location in the complex through the memory of the previous space

and anticipation of the next area. We become aware of our own progression by the reference points which must be reinterpreted as we proceed. The challenge is to make the expression of this movement graceful and dynamic.

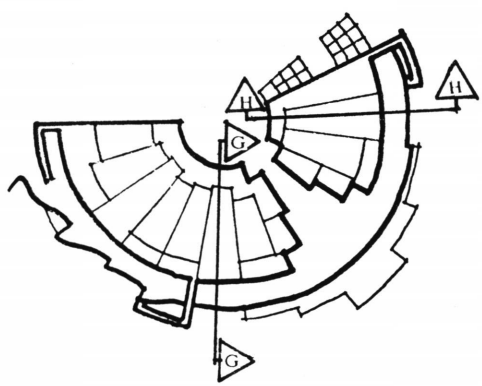
The large openings on the water's side, release the interior spaces from any sensation of being encased by an overbearing weight. The contour of the vault allows for a gentle enclosure without the sensation of being trampled down.

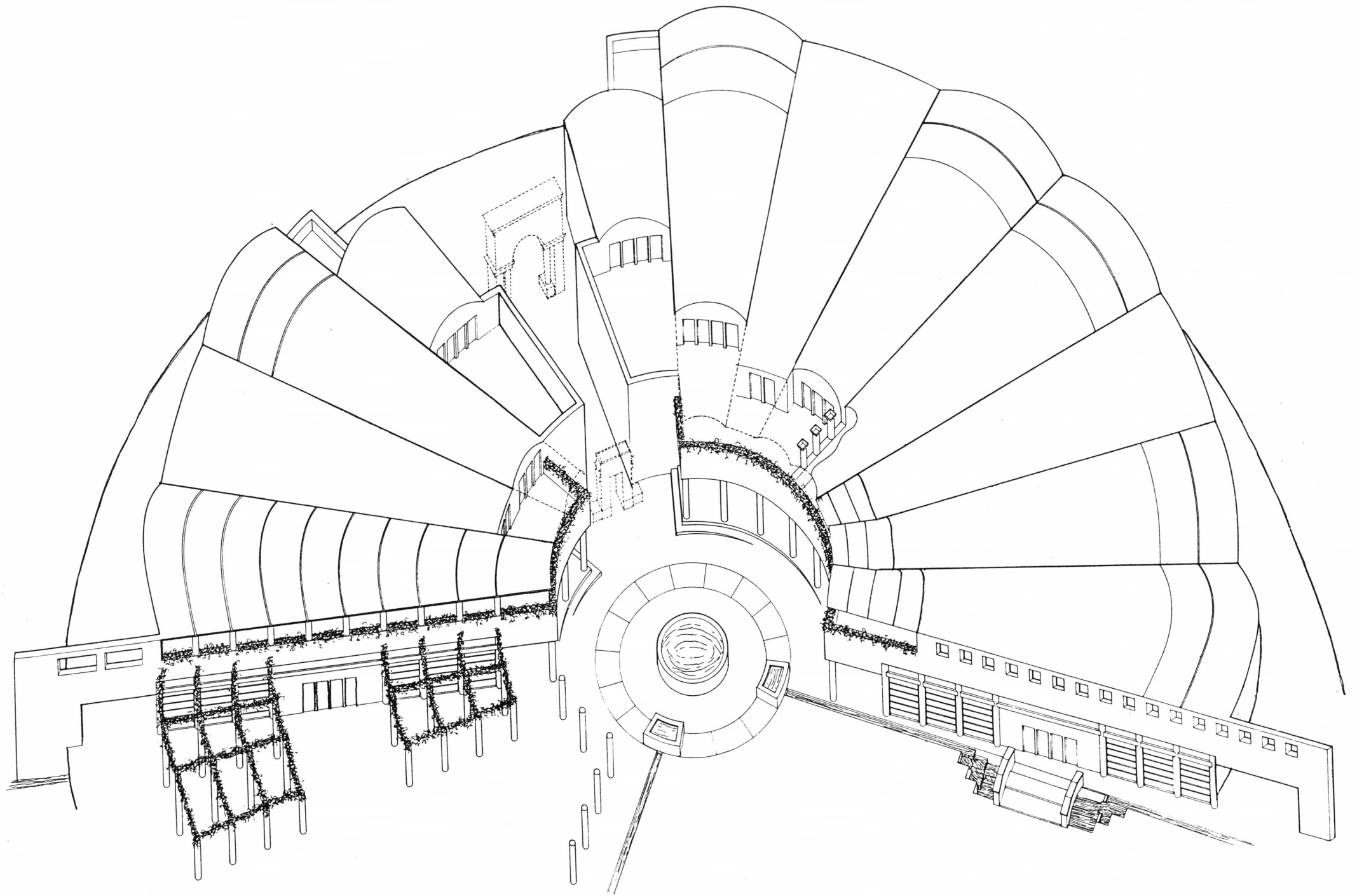


Section G-G



Section H-H

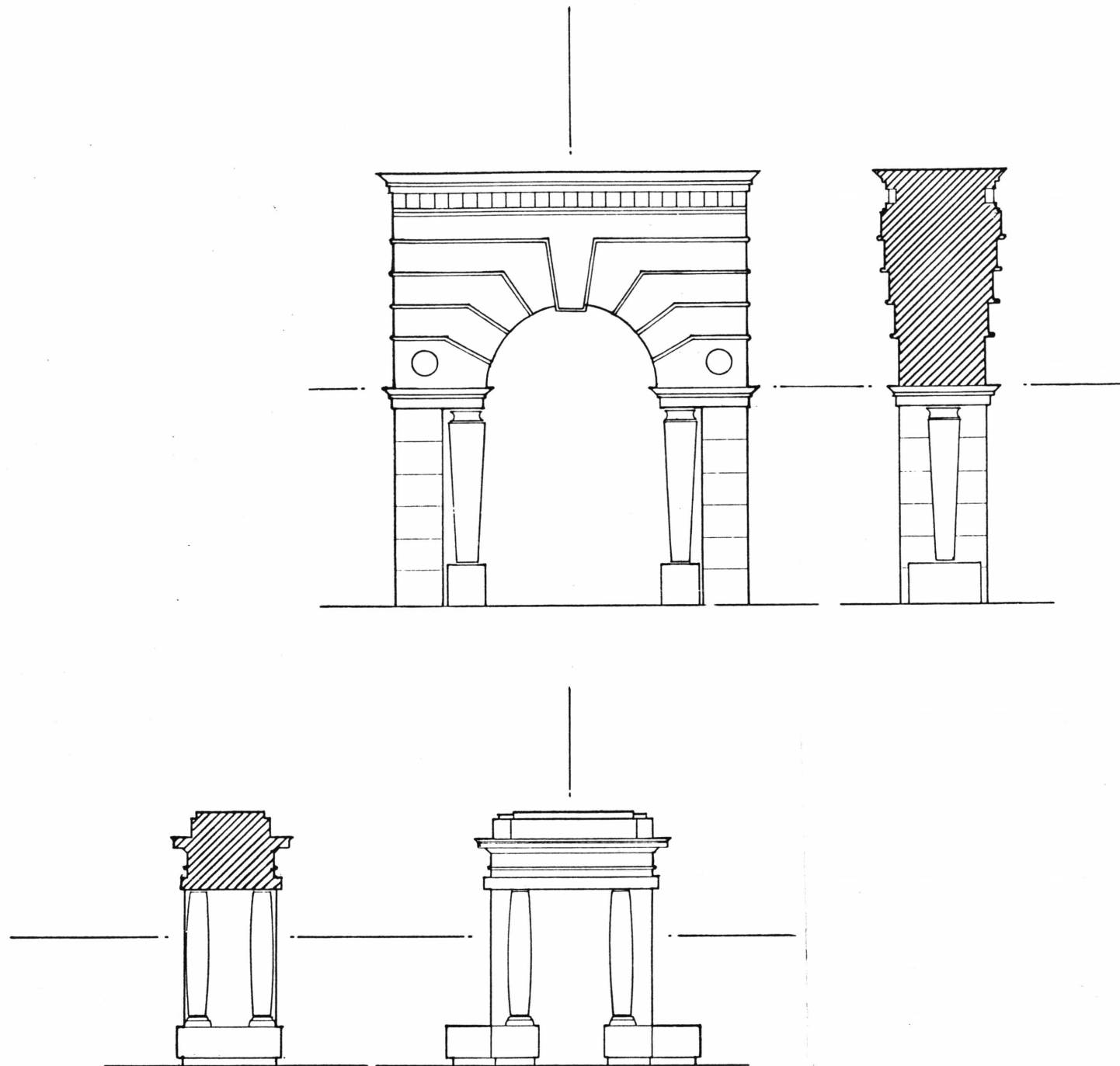




The sculptural being of the market evolves in the space created by the depths of the volumes and the way in which they rise against the water. The grouping of rising, sweeping curves above tall, prismatic masses joined at different angles allows the form to be read in a state of action. The telescoping vaults which crown them speak of a spiral dynamism evocative of a centrifugal force impressed upon them. This form-force expresses the potential of a living form changing and moving as one approaches and

possibility of a virtual explosion of the container as the latent energy in the form is shown. The sinuosities, discontinuities, the burst of straight and curved lines according to the form-force allows the form to achieve different meanings from different angles of sight. The irregular skyline, curving and turning of the enclosures and the changing vistas, offer the continuous impression of movement. Each receding line; the rising of the vault, the perspective pull of the centrifugal lines, is

unimpeded by strong transverse horizontal lines, and they are all lifted upward by the rounded surfaces of the vaults.



The portals located in the schism are proportioned so they grow in height and width to relate to the telescoping of the Market walls as they stretch toward the promenade. The portals frame the view of the Capitol and the Mall which is the third major axis of the project. Because this axis is visual, one may sit on or around the portals and still be able to realize the connection. Indeed, the schism is a place to relax and stroll while taking in the wonder of the monuments of the Capitol.

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FOOTNOTES

¹ Neruda, Pablo, Five Decades: Poems 1925-1970 (New York: Grove Press), p. 272.

² Scranton, Robert L., Greek Architecture (New York: George Braziller, Inc.), p. 100.

³ Tzu, Lao, Tao Te Ching (New York: Penguin Books), p. 103.

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