

THE REPLACEMENT OF PALAZZO DEGLI UFFICI DEL
COMMUNE AND THE RESTORATION OF THE EAST
END OF THE BASILICA, VICENZA, ITALY

by

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CHAPTER I

INTRODUCTION

Restoration is controversial because of the several different approaches that can be taken. One of these is adaptive reuse. Through this thesis, the author hopes to show that not only is adaptive reuse an acknowledged part of restoration, but that it is a viable and often best choice in the restorative process, be it a building or a historical area.

Ellen Soroka suggests that "restoration is an exacting science...but also an art form."¹ Before architecture was considered a "science," buildings were restored in the current contemporary voice. This method of restoration was strongly opposed by John Ruskin who believed in the authentic fragment and E. E. Viollet-le-Duc who called for historical study before restoration and then restoration or even addition in the same voice. Carlo Scarpa, Aurelio Galfetti and Michael Hopkins are examples of architects who have dismantled old structures to find the intentions and expressions of earlier cultures which they then highlight with unabashed modern detailing and reworking of the plan.

Through a detailed study of Carlo Scarpa, the author seeks to demonstrate her hypothesis that modern interpretive interventions in historic structures and areas,

¹Ellen Soroka, "Restauro in Venezia" *JAE* 47/4 (May 1994): 224.

contrary to the philosophy of Viollet-le-Duc and his current followers, heightens the significance and meaning for today's and future audiences.

By learning what Scarpa achieved and how he approached design, various opportunities deriving from this approach will be identified and discussed for a world renowned historic site in Vicenza, Italy. Through this study it is anticipated that a process will readily become apparent and act as a guideline for this and future projects, whether in the context of a building, historic district, and/or urban planning.

CHAPTER II

THEORY

There are several approaches to restoration, but in order to discuss the different theories, one needs to understand exactly what restoration is. Webster defines it as "bringing back to, or putting back into a former position...(the) act of giving back something to one deprived of it; putting back into an unimpaired or much improved condition."² Restoration, therefore, could be said to deal with change, as each part of Webster's definition includes the word "back." From this, one could conclude that restoration is directed backwards, rather than forwards. With this definition of restoration, the issue can be challenged in several different ways. Discussed below are the three main theories.

There are a variety of terms for restoration: rehabilitation, preservation, conservation, revitalization, and revival to name but a few. The first theory to be discussed can be labeled "preservation." Preservation is "keeping something in existence, or from decay."³ This means that nothing is done to a historic building except that which is needed to keep it in existence. Unlike the definition of restoration above, the object is not to take something "back" as rather wanting to preserve what is left. John Ruskin, who championed this method, thought that to restoration which

²Websters New International Dictionary, rev. ed. (1941), s.v. "Restoration," 2125.

physically altered a building, even a restoration that was supposed reveal former glory, took from it the effects of a natural life span.⁴ Not only would the building be denied the ability to change and evolve over time, but any restoration would be seen to erase the original craftsman's "hand" from the stones.⁵ Ruskin looked at a building as a "representation of nature...an analog for the natural life process."⁶ He would rather "conserve the authentic fragment" than try to recreate something that he felt could not be created again.⁷ An example of preservation is the coliseum in Rome. This is indeed an "authentic fragment" that has not been restored to its original condition yet has been preserved so that it does not decay further, or at least as quickly.

The second theory of restoration is one of "rehabilitation." Rehabilitation is defined as "the restoration of something damaged or deteriorated to a prior good condition."⁸ This approach is the closest to the first definition of restoration in that it takes the building "back" to an approximation of its original condition as can be seen by the use of the word prior. E. E. Viollet-le-Duc, a proponent of this method, saw this type of restoration as the "scientific use of historical study, which recognized and

³Ibid., s.v. "Preservation," 1956.

⁴The Lamp of Memory, ed. Michael Wheeler and Nigel Whiteley (New York: Manchester University Press, 1992), 12.

⁵Ibid.

⁶Soroka, 226.

⁷The Lamp of Memory, ed. Michael Wheeler and Nigel Whiteley, "Ruskin and Tradition: The Case of French Gothic," by Alison Milbank (New York: Manchester University Press, 1992), 19.

⁸Webster, s.v. "Rehabilitation," 2100.

revitalizes the various period styles."⁹ Not only should the building be restored to its prior style but it should also be studied so that the structure is restored as it once was or once should have been. He advocated a "case-by-case intelligent rendering of principle, putting emphasis on the integrity of the original design."¹⁰ He felt that there was a place for everything and that this could be found through extensive study of the building. Once the building was scientifically analyzed, it could be returned to its prior state in a correct manner. In rehabilitation, there is no room for individuality or interpretation. An example of this method in action is the restoration of Brunelleschi's Dome at S. Maria del Fiore in Florence. The major emphasis of this theory is that we can learn from seeing these structures as they were. If they remain untouched and fall to decay, then the full impact cannot be seen and appreciated.

The third theory discussed here, is contained in the term "adaptive reuse."

Adaptive reuse is defined as modifying something so that its existence fits better into the conditions of its environment.¹¹ In other words, as the building no longer functions in its current form an adaptation is used as a restorative method so that the building returns to being active while retaining its historical image. Through such a restoration the building is retaining its past while simultaneously looking forward. This can be better explained as a process of evolution, or more correctly, emergent evolution. Emergent evolution is "the appearance, at successive stages, of new types of realities,

⁹Soroka, 225.

¹⁰Ibid.

essentially unpredictable by the laws of preceding stages."¹² When something is first built it reflects the reality of that point in time. As time goes on, however, reality changes, and therefore, so must the building. The past can be reweven into a new fabric, making the fabric more varied and richer due to its presence. Adaptive reuse incorporates this idea through addition. An addition is "anything added; something added that increases value or improves."¹³ However, there cannot be addition for additions sake. Adaptive reuse must be sensitive to the past and its lessons, while simultaneously establishing a modern vocabulary. With this method of restoration, what is given back is the building's ability to gain function and use.

Though the main ideas here have focused on buildings, the subject of the restoration can also be the historical setting. If a restoration through adaptive reuse "gives something back to one deprived of it" then this can be true for all aspects of architecture, building or urban renewal.¹⁴ In the adaptive reuse process the past is restored, not as Ruskin would have as a result of decay, or as Viollet-le-Duc demanded through recreating its prior condition, but through using the layers of the past to fashion a better future.

Adaptive reuse has been selected as the philosophy to adhere to for further study in this thesis for a variety of reasons. First of all, the past has value. The author

¹¹Webster, s. v. "Adaptive," 29.

¹²Webster, s. v. "Emergent Evolution," 837.

¹³Webster, s. v. "Addition," 30.

¹⁴Webster, s. v. "Adaptive," 29.

is in agreement with Ruskin who felt that while the past is important, it cannot be duplicated. Adaptive reuse, however, takes the past into account while looking forward. The past becomes an integral part of the future. The echo from the past enhances the future rather than being resurrected to recreate something that it once was and now is gone. Through the definition of adaptive reuse applied here, with the layering comes honesty. The past layers cannot be restructured as they once were because the manner in which those materials were dealt with and joined, that is, by the hands of craftsmen, is now expensive, time consuming, and an increasingly lost art. While this is regrettable, as Richard Austin, the author of a book on adaptive reuse said, "change is an inevitable part of life and it should be celebrated rather than regretted. Change does not require a total abandonment of the past."¹⁵ Even Ruskin said "we may live without architecture...we may worship without her, but **we cannot remember without her**"¹⁶ (emphasis added).

Ruskin proposed two solutions, one allowing the building to fade gradually away, the other by saving "the architecture on paper because both restoration or destruction ruined the building" as the mark of the original craftsman is gone.¹⁷ The author would like to elaborate further. With adaptive reuse there is no destruction and

¹⁵Richard L. Austin, Adaptive Reuse: Issues and Case Studies in Building Preservation, (New York: Van Nostrand Reinhold Co., 1988), vii.

¹⁶The Lamp of Memory , "Ruskin and the tradition of Renaissance Historiography," by J. B. Bullen, 62.

¹⁷Austin, 81.

the restoration is approached in such a way that there is a new hand upon the stones, and this hand is the hand of a craftsman also.

Furthermore, in choosing adaptive reuse, the author shares with Viollet-le-Duc his opinion that many subjects of proposed restoration were created over time and therefore have layers which need to be studied and reconstructed. The author wonders why this layering should stop. Who can decide at what point in history such a decision should be made? How can one propose that only up to a certain point what has been created is worthy of preserving, that nothing good will happen from that point on. Is it possible that it is through a general lack of confidence in the era in which such authors are alive that they develop such backward looking theories? Through adaptive reuse the structure can continue to grow and adapt to an ever changing environment, as it always has. Richard L. Austin in his book Adaptive Reuse makes a viable point:

Old structures...have been adapted to provide stimulating construction...(this) should not be confused with a tendency to copy the old in the hopes of recreating the past. Compatibility between old and new demands an in-depth knowledge of previous methods and materials of construction, a sensitivity to the original design ethic, and a professionalism that may sometimes require the "new" and "old" to be foils to each other.¹⁸

¹⁸Ibid., ix.

A third point regarding why this method has been selected is the fact that humans are unique in the way that they think, reason, and make sense of the world around them. Because of this, the method of adaptive reuse and its concentration on retaining the past while having confidence in the future to allow a structure to grow honestly adds a new dimension. This notion will be discussed in greater detail in Chapter III.

The above discussion is best summarized by David Poinsett in his article, "What is Historic Preservation?"

Historic preservation has existed, in its traditional sense, for three purposes.

The first is education...a person gains insight into the life and times of previous individuals and groups.

Secondly...the purpose of recreation. It is fun to visit historic sites, to see the unusual, quaint and often difficult ways in which people lived in an earlier age.

Thirdly...for inspiration...better insight into who we are as a people and nation, whence we came and where we are headed.

Fourth...the putting of historically and architecturally valuable sites and buildings to economically viable uses. Such uses are often different from, and yet compatible with, the original function of the structure.

Historic preservation means building new structures that reflect our time yet blend with the old...the new should complement the old, not copy it.¹⁹

¹⁹Norman Williams, Jr., Edmund H. Kellogg, and Frank B. Gilbert, Readings in Historic Preservation: Why? What? How?, "What is Historic Preservation," by David Poinsett (New Brunswick, New Jersey: Rutgers, 1983), 60-61.

Ruskin's restoration can be seen as an educational tool, whereas Viollet-le-Duc falls into the category of preservation for inspiration and, albeit tongue-in-cheek, perhaps of recreation. Adaptive reuse, as Poinsett states, can make a building economically viable. He is correct in saying that the new does not have to replace the old but can complement it; "this is not an either/or debate".²⁰

Before looking at the case studies below, the "1964 Venice Charter" should be addressed. This document is Venice's answer to the controversy of restoration. Here are several key points.

Article 1...not only the single architectural work but also the urban and rural setting in which is found the evidence of a particular civilization, a significant development or an historical event.

Article 6...preserving a setting which is not out of scale. Wherever the traditional setting exists, it must be kept. No new construction, demolition or modification which would alter the relations of mass and color must be allowed.

Article 9...(the) aim is to preserve and reveal the aesthetic and historic value of the monument and is based on respect for original material and authentic documents. It must stop at the point where conjecture begins, and in this case, moreover, any extra work which is indispensable must be distinct from the architectural composition and must bear a contemporary stamp.

Article 13...Additions cannot be allowed in so far as they do not detract from the interesting parts of the building, its traditional

²⁰Ibid.

setting , the balance of its composition and its relation with its surroundings.²¹

French Proposal to Amend the Venice Charter
for the Conservation and Restoration
of Monuments and Sites

Article 14. The aim in conserving and rehabilitating historic towns and villages is to ensure the continuing life, unity and continuity of human settlements in town or country, which are of value for their plan or their architecture, and which bear witness to a political, social, economic or cultural structure. To this end, any functions maintained in or introduced into...must be compatible with the structure and with the character of the buildings and with the open spaces and settings of which they are a part.

Article 15...attention should be paid to the rights of the existing inhabitants whose economic activity and social relationships often depend upon the physical structure of their surroundings.

Article 16...effective integration into the physical framework of social life, to which they can offer a vital sense of the past as a factor in cultural identity.²²

²¹Williams, "The Venice Charter," 198.

²²Ibid., "French Proposal to Amend the Venice Charter for the Conservation and Restoration of Monuments and Sites," 284.

Case Study: Castelgrande
Bellinzona, Switzerland
Architect: Aurelio Galfetti

In order to justify the position taken by the author for her thesis, several case studies are investigated to support adaptive reuse. In each case the historic buildings have been enhanced by sympathetic adaptive reuse.

In Switzerland, slightly north of the Italian border, is the town of Bellinzona. Bellinzona is unique because it has not one, but three castles perched on the hills that surround the town. Fifty meters above the plain sits the oldest of the castles, aptly named Castelgrande.²³

There are many castles in Europe and a problem that faces them has long been what to do with them. They have "lost their role as defensive barriers, they are more a source of maintenance problems than anything else, and in many cases are simply abandoned to the ravages of time."²⁴ Therefore, should they be allowed to fall down, be restored to their former state, or adapted into something new. Swiss architect Aurelio Galfetti has used the adaptive reuse restoration method to transform Castelgrande into a public park and promenade, banquet area and exhibition halls.²⁵

²³Gerardo Brown-Manrique, The Ticino Guide, "Bellinzona and Carasso" (New York: Princeton Architectural Press, 1989), 31.

²⁴Tino Bolliger, Rolf Lauppi, Jose Ormazabal, and Valentino Mazza, "Luoghi per la Citta: Castelgrande a Bellinzona," Abitare 253, (March 1987): 164-173.

²⁵Ibid.

The town of Bellinzona has greatly benefited from this restoration. The castle, instead of sitting on the hill slowly eroding, "has cast off its former romantic isolation, becoming an integral part of the life of the town."²⁶

Castelgrande sits on an enormous rock outcrop that ascends vertically from the valley floor. Galfetti chose to accentuate this by removing existing vegetation from the north rock face. This has the effect of playing "down the romantic overtones of the site to underline its geological and historical connotations."²⁷ On the southern side, he has planted horizontal, geometrically aligned rows of grapes. While this echoes the areas history as a wine making region, it also "affords the castle a breathing space...which gives the terrain a neat look and enhances the impact of the castle itself."²⁸

To reach the castle above, the visitor enters an "enigmatic crack in the rock face" that leads into a long tunnel which ends in a cavern.²⁹ This cavern is illuminated by a grill covering a 2 X 2 meter opening in the walkway of the castle yard forty meters overhead. This gives the effect of being in the "bowels of the earth."³⁰ From here, the visitor can choose stairs that wrap around the lightwell or an elevator which rises to the castle yard. Galfetti has designed the yard area so that it is "a skillful blend of

²⁶Ibid.

²⁷Ibid.

²⁸Ibid.

²⁹Ibid

³⁰Ibid.

stone and cement, towards a new, gently sloping pathway between the walls leading up to the castle rooms."³¹

In 1890 a connecting block was built between two wings of the castle. Galfetti removed any existing superstructure from the block and opened it up into an impressive lobby which was "used by the designer as a fulcrum around which the new functions and spaces of the complex are arranged."³²

Even though it has been dissected here, Galfetti's restoration cannot be looked at in a piecemeal way, as the old versus the new or the interior versus the exterior. He has created "a complete organism comprising a variety of different parts."³³ From the moment one enters the tunnel through the rock face there "begins the dialogue envisioned between old and new, between city and fortress, between man-made objects and nature."³⁴

Galfetti's restoration has been executed so skillfully that the past is not lost among the new, nor is the new overshadowed by the old. There is a perfect harmony and balance. In no way does the visitor feel deprived from not seeing the castle exactly as it once was. This is the level of adaptive reuse that the author would like to stress. Galfetti has shown that he understands the past and can use what he has learned to create a new modern architectural language. In The Ticino Guide, Gerardo Brown-

³¹Ibid.

³²Ibid.

³³Ibid.

³⁴Brown-Manrique, 33.

Manrique writes that "Castelgrande is a demonstration that proper restoration consists in translating the relics of the past into the language of today."³⁵ One has to look very carefully to determine whether the object under scrutiny belongs to the past, the present, or the future.

Case Study: Bracken House
London, England
Architect: Michael Hopkins

Bracken House is located in an historic area of London near St. Paul's Cathedral. This building, originally designed by Sir Albert Richardson, was used as a printing works. The original design had two office wings flanking the central printing area. Architect Michael Hopkins was commissioned by the owners, Obayaski Corporation of Japan, to turn it into an office building "suitable for use by a financial institution."³⁶

At the time that Hopkins was awarded the project, Bracken House had been listed as a historic building.³⁷ In order to alter a listed building in England, the architect must: One, report on the importance of the building; Two, report on the buildings features; Three, report on its setting, and Four, any advantages it has to the community.³⁸ Because of its listed status, Hopkin's treatment of the restoration was to

³⁵Ibid.

³⁶Collin Davis with essays by Patrick Hodgkinson and Kenneth Frampton, Hopkins: The Work of Michael Hopkins and Partners (London: Phaidon Press Limited, 1993), 145.

³⁷Ibid.,

³⁸Lecture by John Tempest, Vicenza, Italy, June 1995

"respect both Richardson's building as well as the sensitive urban site."³⁹ He accomplished this by keeping Richardson's office wings as structures in their own right, not just as facades, and through his choice and use of materials. Through his restoration, Hopkins was able to transform a building that had outgrown its practical use into a building that again served the community.

For any architect, important decisions are made when materials are chosen for a project. For Hopkins, this is especially true as his aim was to join the old and the new, or rather the past and the present. He opted for materials that were found in the sections of the existing building -- Hollington sandstone, bronze and glass. However, while the materials are essentially the same, on the exterior he joins them to a technology that is "far heavier...(which) provides a grace that is breathtaking."⁴⁰ In the interior he used bare concrete that was "hand pummed lovingly to give it the svelte look of English gray flannel."⁴¹

In this aspect of joining the old and the new, Hopkins' choice of a curved central area was appropriate because the outer wings are set at different angles. The use of the curve allowed Hopkins to join the two wings fluidly by creating recesses so that the old and the new were not seen as separate parts, but viewed together as a harmonious whole.⁴²

³⁹Davis, 145.

⁴⁰Ibid., 167

⁴¹Ibid., 164

⁴²Ibid., 150

Collin Davis, in his book Hopkins: The Work of Michael Hopkins and Partners, wrote that the total effect between this joining of Richardson old and Hopkins new is "like the massed tutus of a corps de ballet...with the bookends as a flying Fonteyn might have been caught - only hands touching - by a Nureyev, with more than a touch of class. This clasp is made to seem inevitable."⁴³ The use of the word inevitable is a telling one, the adaptation of the printing works is, like Galfetti's Castelgrande above, a harmonious whole.

Hopkins treatment of this restoration highlights many of the previously stated issues of adaptive reuse. He was able to look at what Richardson had accomplished, and using the same materials, transform them into a modern language. That he was able to do this without sacrificing the past on the alter of the present is testimony to his ability to achieve "a new enlightenment, from an appropriately interpreted past."⁴⁴ He has shown that not only can both be present, but they can join to such a degree that it seems effortless.

⁴³Ibid., 167

⁴⁴Ibid., 168

CHAPTER III
CONSCIOUSNESS VERSUS UNCONSCIOUSNESS

Why is the theory of maintaining the past yet allowing it to move onward considered important in this thesis? This discussion starts with an analysis of what it means to say we are human and therefore separated from other forms of life. This part of us that we could say sets us apart, is sometimes called soul, spirit, emotion or consciousness. Whatever name we attach to it, it results in an advanced ability to think. What, however, is it to think? Thinking has been defined as "to exercise the power of reason, as by conceiving ideas, drawing inferences, and using judgment."⁴⁵ Why do we think? How do we think? There has been much research done on these questions. In 1637, the philosopher Descartes, said "I think and therefore I am."⁴⁶ With this statement he placed the thinking process outside of the body and brain. However, it has been documented that this is not the case. Whether this "thinking" phenomena is called consciousness, emotion, or awareness, it is something that is manifested inside us through the interaction of the body and brain.

⁴⁵The American Heritage Dictionary of the English Language, Third Edition (1996) s. v. "Think," 1864.

⁴⁶Antonio R. Damasio, Descartes' Error (New York: G. P. Putnam's Sons, 1994), 248.

The Bicameral Man

Julian Jaynes, the author of The Origin of Consciousness in the Breakdown of the Bicameral Mind, has theorized that early man did not have a consciousness, instead, his awareness was split into two parts. One part was man who was able to act, and the other part Jaynes called "god."⁴⁷ These two separate parts of the brain he called bicameral. In this theory, bicameral man functioned without a consciousness until an event happened which caused stress that would activate the god side of his brain. This god would advise him on what action to take.⁴⁸ The example that Jaynes uses is that of driving a car. We get so used to the process of driving that it becomes an unconscious function. However, when an unusual event happens such as a wreck ahead, we suddenly become conscious about what we are doing and make decisions about how to proceed. The bicameral man, however, would not be able to be conscious in the sense that we are; his "voice of god" would advise him in the way our power of consciousness does today. The "voice of god" was an auditory hallucination.⁴⁹ Jaynes believes that through time these two areas have merged into what we now call consciousness through the joining of the two parts of our brain by the anterior commissar.

⁴⁷Julian Jaynes, The Origin of Consciousness in the Breakdown of the Bicameral Mind (Boston: Houghton Mifflin Company, 1976), 84.

⁴⁸Ibid., 203.

⁴⁹Ibid., 85.

Awareness and Analysis

Another theory on awareness is from Antonio Damasio. Damasio, for his explanation, looks at patients with anosognosia. These are people with right hemisphere damage of the brain. This damage makes them ineffective decision makers because they don't have normal emotions and feelings.⁵⁰ When discussing one patient who was paralyzed, Damasio describes her as having a "mind not imprisoned in the jail of her mobility. Instead...there had not been much mind at all, no real thinking or reasoning."⁵¹ These patients he calls "uninvolved spectators."⁵² They could "sense how topics that had once evoked a strong emotion no longer caused a reaction."⁵³ They know but they can't feel. Damasio is talking about consciousness as what we experience at the moment, and unconsciousness as what he calls a somatic-marker. This somatic-marker is learned intuition that helps us reduce our options into a more manageable set. There is so much information for the conscious mind to take in that there has to be some way for us to analyze it; to recognize familiar patterns so that a decision can be reached. This he calls reasoning and likens it to a cost/benefit analysis that would never end if we did not have this unconscious somatic-marker or "gut

⁵⁰Damasio, 68.

⁵¹Ibid., 73.

⁵²Ibid., 44.

⁵³Ibid., 45

feeling" rule out options for us.⁵⁴ Damasio feels that we are conscious of everything, it is just our other senses distract us.⁵⁵

Though Jaynes and Damasio disagree on why the body and brain interact to produce awareness, they do agree on the location in the brain that this comes about. In most people the left hemisphere of the brain is dominant and it is in the right hemisphere that awareness is found.⁵⁶ How this part of the brain and the body interact is under debate. Whether explained by the central nervous system, or a process of neural and chemical signals, basically our brains and bodies work together in a complex system that allows us to be aware, whether we are conscious of this awareness or not. It is tempting to say that we are not aware when we are not conscious of it. But as has been explained above through the somatic-marker, this does not seem to be the case.

A part of this awareness is our ability to analyze. Analysis is the "separation or breaking up of a whole into its fundamental elements or component parts."⁵⁷ Because we are capable of analysis, we can perceive and make sense of the world around us. We constantly analyze the stimuli that comes to us from internal and external forces on the body. These forces are such things as "gravity, light, heat, wind,

⁵⁴Ibid., 173.

⁵⁵Ibid., 152.

⁵⁶Ibid.,

⁵⁷Webster, s. v. "Analysis," 94.

bodily processes and the obtrusion of other objects."⁵⁸ The result of these forces are that we create patterns, and these patterns allow us to see the world as coherent and regular.⁵⁹ They become an embodiment of "meaningfully organized experience."⁶⁰ In other words, internal perceptions from the external are what are able to be transformed and ordered. Not only do we create this structure, but these internal perceptions are modified over time through experience.⁶¹ These recurring patterns which we perceive and order either consciously or through the somatic marker are called image-schemata. The image-schemata gives us a plan of action when a pattern is perceived, but also a plan for action.⁶² This means that we not only perceive and then order by the image-schemata process, but that we also plan for what action to take to deal with these forces. This is an important concept, because in order to comprehend and reason, we need these patterns to "order our actions., perceptions and conceptions."⁶³ We consciously or unconsciously do this continually. An example of this is balance.

Balance is the way our body unconsciously orients itself to a force that is exerted on our bodies and affects our reasoning process. We constantly (although usually unconsciously) recognize it because the image-schemata process has recognized the pattern or structure of it, and therefore, relationships that have been

⁵⁸Mark Johnson, The Body in the Mind (Chicago: University of Chicago Press, 1987), 13.

⁵⁹Ibid.

⁶⁰Ibid., 19

⁶¹Ibid., 20.

⁶²Ibid., 21.

established refer us to an action.⁶⁴ To further clarify this, "understanding does not consist merely of after-the-fact reflections on prior experiences; it is more fundamentally the way (or means by which) we have those experiences in the first place...the way our world presents itself to us."⁶⁵ It is interesting to note that we even teach through patterns. In elementary schools, children are taught to recognize patterns in physical objects and abstract music (Appendix A.1).

How do we deal with this unconscious patterning of the world around us. The somatic-marker, discussed above, shows us how we rifle through all the stimuli and actually make decisions. But what about the changing ways that we pattern? This is from imagination. Here we are not talking about "the capacity for novelty", instead, imagination is the "ability to generate order."⁶⁶ For example, we learned above how image-schemata works when an object or force is perceived, how it affects us through our senses externally, and how we store these impressions. At some future point we need to recall and recombine them.⁶⁷ Imagination is what gives us this ability for recall and recombination, which is the basis for knowledge. It is the organization so that sense can be made out of it.⁶⁸

⁶³Ibid., 29.

⁶⁴Ibid., 75.

⁶⁵Ibid., 104.

⁶⁶Ibid., 140.

⁶⁷Ibid., 146.

⁶⁸Ibid., 148

Another area in this image-schemata concept is called "judgments of taste."⁶⁹ Here, there is a "free play of imagination" that affects the structure of what we experience. A illustration of this is the concept of beauty that we talk about as though "beauty consisted of properties in an object."⁷⁰ In other words, through patterning, not only are we able to connect concrete with concrete, but we are also able to connect an abstract idea to a physical object. The more experiences that we have, the more data we are able to order and structure through the image schemata process. This, in turn allows us more data for the imagination to restructure. An example is education. The more we learn, the more we can understand what is already structured, and conversely, be able to create and perceive new relationships of patterns. These new patterns, whether they were restructured consciously or unconsciously, lead to a new "judgment of taste." Once these new meanings are created we are able to "go beyond the confines of our established conceptual system."⁷¹

Architecture and Awareness

Architecture is a good medium on which to apply this patterning theory. But first, what is architecture? Architecture is defined as something that is built, either in the abstract or concrete form.⁷² In this definition the "concrete form" makes sense

⁶⁹Ibid., 160

⁷⁰Ibid.

⁷¹Ibid., 162.

⁷²Funk & Wagnalls, s. v. "Architecture," 76.

because that is how most of us think about architecture, the concrete structures. What about the notion of Architecture that can also be abstract? From the formal beginning of architecture the Greeks understood the notion of the consciousness and unconsciousness and how awareness relates to architecture. In the Greek language, the word kosmos (or kosmoi) means "the orders within (the) heavens...the generation for, not of, existing things."⁷³ This is the way that they explained their need for structure and the creation of patterns. They expressed these ideas through the notion of weaving. Weaving was important to the Greeks because the loom signified "stability and self-sufficiency."⁷⁴ The analogy of weaving is seen in city planning, dances, knowledge of the world through navigation of the seas, and architecture. A well woven fabric is regular and cohesive, if the fabric is not woven skillfully, it will have weak spots, which would be "the last thing the people who founded new Greek cities in strange often hostile lands would have wanted."⁷⁵ In Greek cities, therefore, streets were designed with a regular grid pattern like the "well-woven" cloth.⁷⁶ Their ships were built through a process much like weaving and the "topos...may have been understood...as a territory made to appear through a continual remaking, or reweaving of its encompassing surface, just as the world itself was made to appear when the

⁷³Indra Kagis McEwen, Socrates' Ancestor (Cambridge: The MIT Press, 1993), 13.

⁷⁴Ibid., 107.

⁷⁵Ibid., 84.

⁷⁶Ibid., 85.

colonists ships plied the seas.⁷⁷ The main emphasis of these woven ideas was the Greek episteme, or knowledge. They saw two kinds of knowledge related to this, the "skillful" kind of knowledge and the "seeing" kind of knowledge.⁷⁸ The skillful knowledge is the physical craft (the concrete) and the seeing kind of knowledge is that which is shown through the skillful craft (the abstract).

Marco Frascari in Monsters of Architecture, also talks about the concrete and abstract. He calls them the signifier and signified. The signifier is the function and the signified is the representation. Frascari feels that both are needed, for one does not work without the other. In order to explain this, Frascari begins with a tale by Seriman where his character Enrico Wanton visits the edge of the known world. In Wanton's travels, he discovers the country of monkeys and the country of dogheaded people. On one hand the monkeys merely ape what they see and this could be equated to function without representation, they see only the concrete without understanding the abstract. The country of the dogheaded people, however, indicate representation without function because they merely fantasize about riches without actually laboring. Here they dream about the abstract but cannot represent it in the concrete. Therefore, like the monkeys, no matter how skillful someone is at copying, it will never become a monument. There is a demonstration through the tangible, or in other words, the

⁷⁷Ibid., 82.

⁷⁸Ibid., 128.

abstract operates in the tangible.⁷⁹ What Frascari is talking about, relates back to the Greek notion that weaving creates a pattern so that those things which could not be seen before (the dance for example) can now be seen. Indira McEwen in Socrates' Ancestor explains it in this way: "...the weaving of the cloth is an unveiling insofar as the person veiled (Earth or the bride) only appears, properly speaking, after she has been clothed."⁸⁰ A dance is abstract, and the process of weaving brings it to life. In their native dances, the choros, or dance floor, was created by the weaving of patterns and rhythms.⁸¹ Another example is the placement of the Greek temples. While the structure of the pteron created the structure of the looms with their linked form, they were placed in three areas of the city; urban, suburban, and extraurban. These positions anchored the city "not (as) a vessel with a fixed form, but, like the appearing surface of a woven cloth."⁸² Both the structure and placement made the abstract concrete.

What, you may ask, does all this have to do with unconscious mind and awareness? As we learned above, awareness is both conscious and unconscious. It is the way that we relate to the world around us. For the Greeks, as today, there was a need for the patterning and structuring organization of their life. This gave them a cohesive manner of looking at the world and relating to others through it. The hardest

⁷⁹Marco Frascari, Monsters of Architecture (Savage, Maryland: Rowman & Littlefield Publishers, Inc., 1991), 38-42.

⁸⁰McEwen, 54.

⁸¹Ibid., 63.

concept of all is to grasp the notion that our unconsciousness is an important part of our awareness process not only in the physical but also in the symbolic, abstract realm. We try to be conscious of everything and have a need to mold our world as consciously as we can. What is hard to reconcile is that we "are conscious less than we think we are conscious."⁸³

Jonathan Hale in The Old Way of Seeing writes about what has gone wrong with designs today. He focuses on the fact that when we allow intuition (the unconscious mind) to play a larger role than the conscious mind, our judgment about such things as proportion are more accurate.⁸⁴ In other words, the unconscious has already placed the patterns that have been perceived into an ordering system, our unconscious then, has a better chance of "seeing" these patterns. Hale writes that "the underlying patterns are just beyond consciousness, like the intuition that created the design in the first place", and that if we "set out to consciously design a predetermined pattern we risk losing the connection with intuition."⁸⁵ The hard part in this process is bringing the unconscious pattern making into the conscious mind.⁸⁶ This again, is the difference between the skillful kind of knowledge and the seeing kind of knowledge

⁸²Ibid., 83.

⁸³Jaynes, 24.

⁸⁴Johnathon Hale, The Old Way of Seeing (Boston: Houghton Mifflin Company, 1994), 3.

⁸⁵Ibid., 8, 51.

⁸⁶Ibid., 25.

that the Greeks understood so long ago. Just as we saw through Frascari's stories, we need both the signifier and the signified.

When designing, an architect can affect awareness in the conscious or unconscious state of the viewer. Design decisions affect how people react, whether they are conscious of this or not. Frank Ching in Form, Space and Order talks about elements and principles of architecture. Two of these can be used to illustrate this. The first example is one of hierarchy. Hierarchy is about "real differences (that) exist among...forms and spaces. These differences reflect, in a sense, the degree of importance of these forms and spaces."⁸⁷ For example, you can make one part of a structure more "conscious" to someone by changing the size, shape or placement in relation to the other parts. If the structure is rectilinear, but then one part is skewed off of the grid, this part then commands more attention because we are conscious of this change. The second example is creating enclosure. You can define a space without enclosing it because our unconsciousness fills in the gaps. A row of columns defines a plane without actually being a wall.⁸⁸ Another example is the affect that Michelangelo created in the Laurentian library. He designed the entrance to the reading room in such a way that the weight of the structure looked like it was being

⁸⁷Francis D. K. Ching, Architecture: Form, Space & Order (New York: Van Nostrand Reinhold, 1979), 350-351.

⁸⁸Ibid., 170.

carried by elements that could not hold it.⁸⁹ This space, therefore, becomes an uncomfortable one whether you are conscious of the reasons or not. Ching writes "as the elements and principles (of architecture) become more familiar, new connections, relationships, and levels of meaning may be established."⁹⁰ Here again, is the notion of imagination changing the structure of the patterns into new meanings.

⁸⁹Lawrence Wodehouse and Marian Moffett, A History of Western Architecture (Mountain View, California: Mayfield Publishing Company, 1989), 247.

⁹⁰Ching, 7.

CHAPTER IV

DISCOVERING THE PROCESS

From what was discussed in Chapter III, architects can use basic elements to restructure patterns which affect the viewer either consciously or unconsciously. Carlo Scarpa was adept at this. It is important to note that when Scarpa's work is discussed it is praised for his attention to details. The author believes that this 'attention to detail' is the means by which Scarpa changes the consciousness of the viewer, so that his 'buildings' become architecture. This raises the question: What exactly is meant here by details? In his book Monsters of Architecture, Marco Frascari saw details as monsters. The term 'monsters' comes from a troped form of the word demonstration. A trope "links, through pun or homonym, objects that otherwise seem to have little to do with each other."⁹¹ A way of looking at this is that a trope combines new ways of looking at something so that new patterns can be seen where they were not seen before. Details, then are "events/joints (that) are architectural monsters that make people think about their environment."⁹² They are at the point between our consciousness and unconscious mind and they "call into question the adequacy of our ways of organizing rationally the world into determinable

⁹¹George Hersey, The Lost Meaning of Classical Architecture (Cambridge: The MIT Press, 1988), 4.

⁹²Frascari, 16.

parts and details."⁹³ The detail is that which joins the signifier (function) and signified (representation). As an example, in Venice at the Istituto d'Architettura di Venezia, Scarpa used what Frascari calls a "poetic monster." Using the Vicinon motto of body being the highest form of representation, "vervm, I.psV.m fA.ctV.m," or "truth through making" which has much to do with architecture and architectural design, Scarpa focuses on I.V.A.V. acronym embedded in Vico's maxim and transforms it into something else of extraordinary relevance.⁹⁴ The nature of the school is shown in a way that relates to, or makes one think about appropriate meanings.⁹⁵

Another way to understand the above is through architecture as a system. A system is not made up of parts that react to each other through a cause and effect process. A system is governed by constant interaction. The detail can be seen as a part of a system that is constantly interacting in some way to create the whole. Frascari believes that the science of detail, not the science of the whole should be the basis of architecture.⁹⁶ This can be seen by considering the role of details in Scarpa's Banco Popolare in Verona, Italy. Some might look at them and see the parts or details as having little connection or flow. The design for the more enlightened, knowledgeable or open-minded, however, is like a hologram, take a piece of it, a detail, and you still have the whole; it's a matter of scale. The pieces can be seen

⁹³Ibid., 34.

⁹⁴Ibid., 54.

⁹⁵Ibid.

⁹⁶Ibid., 61

from the general or specific point of view throughout. In the Bank, Scarpa created a design where each detail can stand alone, yet, because it is an interacting system, it contributes in a poetic and pragmatic manner to the whole.

Bianca Albertini and Sandra Bangle discuss Scarpa's details in Carlo Scarpa:

Architecture in Details.

In architectural practice good-natured mockery abounded, even at the expense of his admirers, when he amused himself in designing puzzling catches for windows or panels for unusual and totally unexpected solutions for opening doors. And in all his major works one observes that an integral part of his process of invention is always to transform his sources of inspiration: mere allusions that, as with a rebus, might lead anywhere.⁹⁷

An example is found in a door at Castelvecchio in Verona. In the first ground floor gallery to the viewer's left side is, what appears to be, a door, but when one comes close to it one realizes that it is not a door but a window. To the side of this window is the door that first appeared to be a window. The initial interpretation of the perceived patterns which sent clues to the unconscious mind on further involvement resulted in a jolt into the consciousness by this ambiguous discovery as it did more often in the mind of the Bicameral man. This manipulation of the mind is a wonderful device for a museum designer to use because it enables one to become more aware of everything in

⁹⁷Bianca Albertini and Sandro Bagnoli, Carlo Scarpa: Architecture in Details (Cambridge: The MIT Press, 1988), 10.

that environment. The architecture not only houses the art but becomes the catalyst for the deeper revelation, understanding and appreciation of the art itself. Frascari writes that Scarpa is known for his museum designs because he broke the paradigm of most museums' overcrowding and ordering. The relationships he creates produce a theater of memory which not only reminds one of the passages already taken, but through the manner in which the objects are shown in a completely new way makes one envision more than just the object itself.⁹⁸ For example, Scarpa designed a base for a statue of a kneeling doge in such a way that the viewer can fantasize that when everyone is gone, and the museum is locked up for the night, the doge gets up and stretches; thus begetting haunting quality never before realized.⁹⁹

Another example of Scarpa's ability to manipulate conscious and unconscious structuring is seen once again at Castelvecchio. When approaching the castle that has been adapted into a museum, among the first things that one notices is that Scarpa has played with the glazing of the windows in an unusual way. He places mullions and transoms into the existing frames in places where you would least expect them, forcing "one to examine more closely the counterpoint between the two."¹⁰⁰ The use of the word "force" here is apt. One might love or hate this detail but either way one is forced to consider the patterns and relationships between the angular and the

⁹⁸Frascari, 61.

⁹⁹ Ibid.,

¹⁰⁰Soroka, 224.

organic and come to terms with them. A new (future?) world is created in the imagination through the intercourse of past and present forms.

Principles

Previously, a discussion has revealed how the conscious and unconscious mind can be affected by the seen and unseen in architecture and the fact that Scarpa was able to do this through his details to manipulate what is perceived by the viewer. Can this design process of Scarpa's be learned through an investigation of his work? If so, can this enable Architects to delve more deeply into his works, to reveal guidelines for their own designs, especially when confronted with the challenge of historic sites?

It is the authors' contention that while Scarpa approached each new work individually, there was an underlying basic set of principles on which design decisions were based. These principles take on new meanings or dimensions depending on the specific circumstances, for example, whether the project was a new structure or restoration, a house or a museum.

A similarity of approach may be found in weaving. In the process, one or more elements are entwined with each other but the outcome can be very different depending on the type and number of materials chosen, and the patterns that are created by the variety of ways they can be joined; the possibilities are endless. In his article "City That Exceeds its Promise," Michael Wright states that Scarpa was "a

systems builder, but one who never allowed himself to be imprisoned by the demands of his own system."¹⁰¹

Through a study of various Scarpa works the author has found several consistent and underlying elements or principles that she believes are major constituents of Scarpa's design process. These include: the use of solid and void; non-monumental treatment of entrance; off-axis entry; overview; emphasis of the horizontal; contrast and texture of elements; and the use of the circle, bridge, and water elements real or abstracted. All of these and those of secondary importance however, can be narrowed down into six groups. They are: layer; sequence; marker; integrity; scale and proportion. Although the bridge and water elements are central to most of Scarpa's work, they are set aside in this thesis as they are personal symbolism. The way in which Scarpa uses them, however, can be explained in terms of the above. For example, the bridge is a form of sequencing interpreted physically, visually, and chronologically in joining the old and the new. The flow of water can symbolize the flow of time, or when still, be indicative of actual and spiritual 'reflection' of reality or myth.

The basis of this investigation into Scarpa's work and the results of it as applied to the design process will be predicated on layer, sequence, marker, integrity, scale and proportion. These need further definition.

¹⁰¹Michael Wright, "City that Exceeds its Promise" Country Life 169/4367 (April 1981): 1208.

Layer

Webster defines layer as "one thickness, course or fold laid or lying over or under another."¹⁰² While this is accurate, it needs to be expounded on for the purposes of understanding it in Scarpa's design process. Layering can be 2-dimensional, 3-dimensional, or even venturing into the 4th dimension which shows relationships across time. Layering can also go in different directions, either horizontally or vertically, and can be void or solid. The main focus of layering in this thesis is archeological and symbolic.

Examples of Layering

1. The hovering steps at the Canova plaster cast gallery in Possagno, Italy (Figure 4.1) represent a good example of the symbolism of the archeological process that Scarpa uses in order to meld the past with the future. The floating steps invoke a mental reaction that there is more to be seen than meets the eye if one would look deeper. They also summon mythical or magical feelings; one can imagine that water is flowing down the steps, for example, or that they are a series of altars, rather like le Corbusier minor chapels at la Torrette. This impression is reinforced by the curb around the steps, as if to hold back water, or contain the spirit.

¹⁰²Webster, s.v. "Layer," 1403.

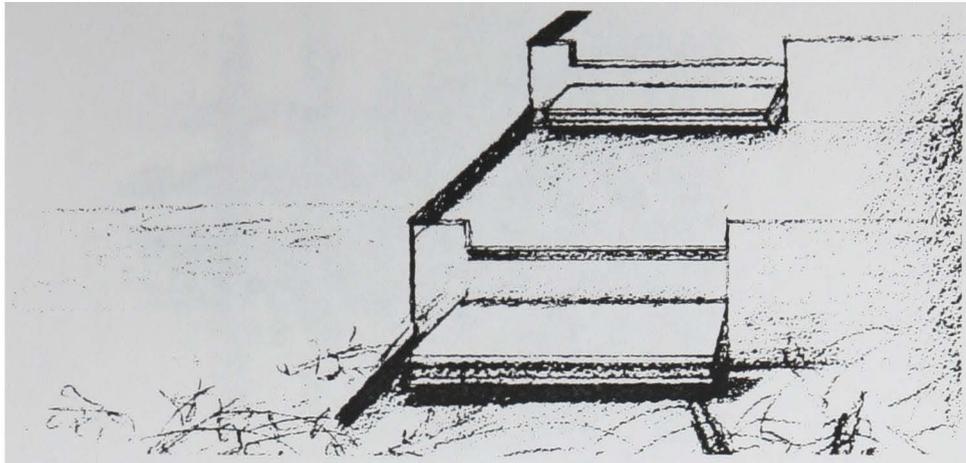


Figure 4.1 Gallery stairs at Canova Plaster Gallery, Possagno, Italy
Sketch by Karen Eisele

2. A familiar theme in Scarpa's designs is the woven pattern. It is seen on gates, doorways, and grills (Figure 4.2). This symbolic reference to enclosure dates back to the earliest times. In Gottfried Semper: The Four Elements of Architecture and Other Writings, Semper wrote that weaving was the essence of enclosure. "The use of wickerwork for setting apart one's property, the use of mats and carpets for floor coverings and protection against heat and cold and for subdividing the spaces within a dwelling in most cases preceded by far the masonry wall."¹⁰³ Scarpa uses this pattern as an abstract 'memory' of the earliest layer.

¹⁰³Gottfried Semper: The Four Elements of Architecture and Other Writings, translated by Harry Francis Mallgrave and Wolfgang Herrmann (Cambridge: Cambridge University Press, 1989), 103.

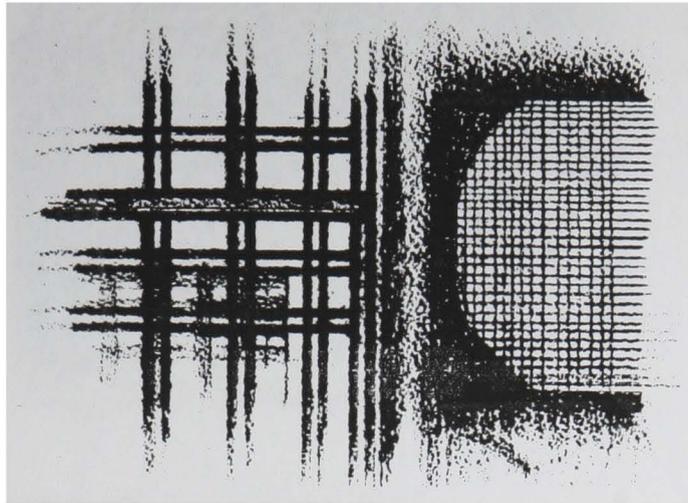


Figure 4.2 Grill at Olivetti Shop, Venice, Italy
Sketch by Karen Eisele

3. The detail of the Tomb at the Brion Cemetery can be seen as another signature element of Scarpa's since it is found in most of his designs. This can be explained as the revealing of the material, the pulling back to expose thickness, texture and veining. This notion is further supported by the fact that Scarpa loved semi-precious stones for their textures and stratification of color that had been imposed geologically and through the layering of time.¹⁰⁴

¹⁰⁴Albertini and Bagnoli, 16.

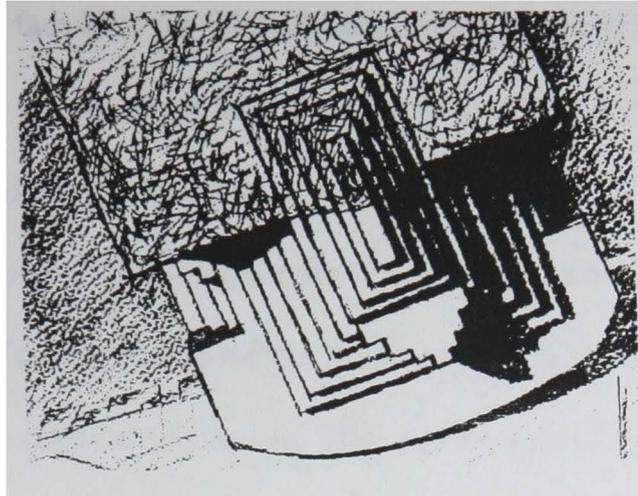


Figure 4.3 Tomb detail, Brion Tomb, Italy
Sketch by Karen Eisele

4. The stone element, or found fragment, that Scarpa has placed on the ledge in the courtyard of Querini Stampalia in Venice, Italy, is deliberately placed and serves as a focal point for an area that is hard to pin down due to the ambiguity of inside versus outside. Its relationship to, and comfort with, its surroundings expresses the new and the old in harmony. The materials here are layered physically, one in its relationship to the others, and also texturally. The rough as opposed to the smooth, the new against the old. The rough stone urn placed upon the smooth concrete base, the original stone columns placed against the backdrop of the smooth, transparent glass and in turn, its relationship to the overall rough stone of the whole structure.

Sequencing is indicated in the placement of the paving of unequal widths which establishes the flow of movement that slides beneath the glass wall and further reinforces the dichotomy between interior and exterior.

5. In the facade of the Olivetti Shop, the montage of parts are details that contribute to the whole yet are separate from each other. Not only are the pieces physically layered but the materials and their textures are also layered. The various textures Scarpa uses in the design of the Olivetti sign, the smoothness of the letters, the roughness of the surround, and the brightness of the incised, gold-leafed hinges work together to create a rich canvas. The gold reveals are indicative of the layering of spaces. Placed at the edge of the door it seems almost as if a crack of light from the room beyond is shining through.

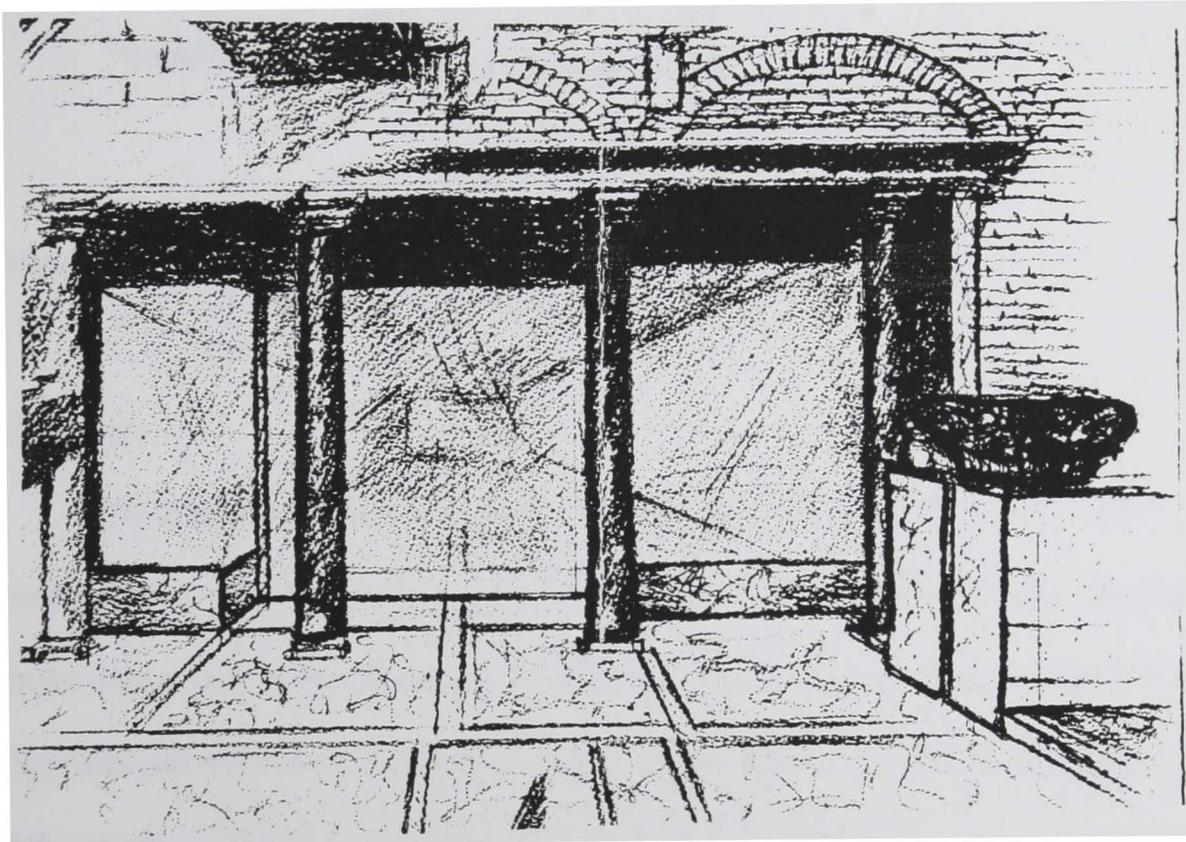


Figure 4.4 Doorway, Querini Stampalia, Venice, Italy
Sketch by Karen Eisele

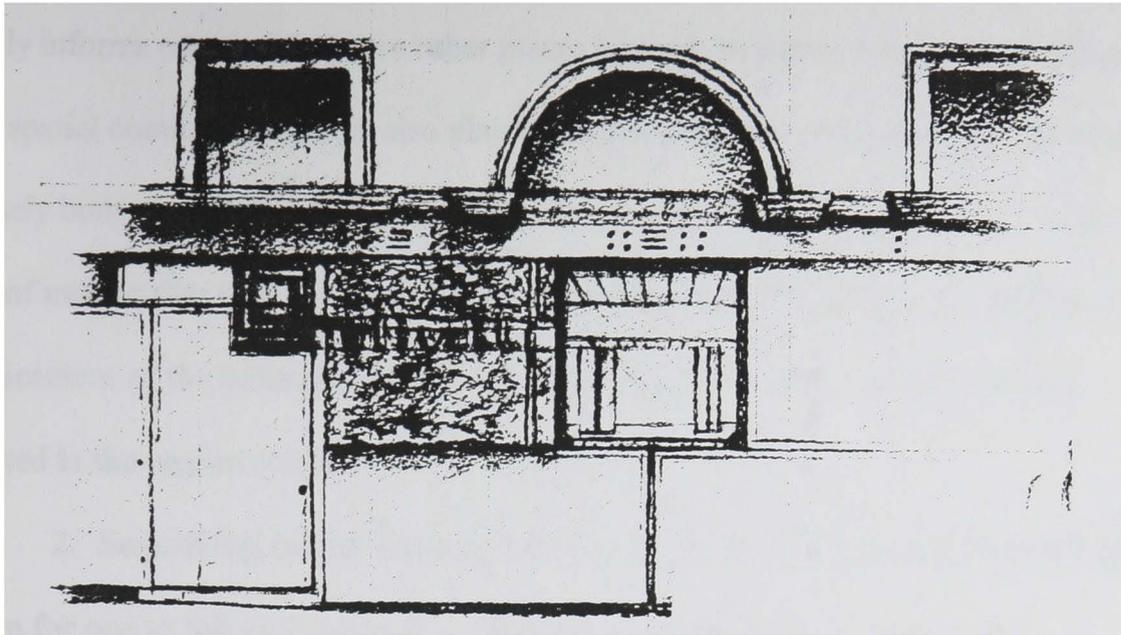


Figure 4.5 Facade, Olivetti Shop, Venice, Italy
Sketch by Karen Eisele

Sequence

Sequencing can be many things: visual , physical, or linked to time. In the visual sense it is the space or spaces seen but not yet reached. The physical sequence is the actual path taken. Sequence through time is either an awareness of where one has been and where one is going, or a sequence of experiences that work together to tell a story.

Examples of Sequence

1. In the garden at Querini Stampalia in Venice, the wall shown in Figure 4.6 subtly informs one that there are other planes beyond, thus providing a hint of visual and spatial continuity. Scarpa also plays with this wall in a symbolical way. Venice is densely built up, and therefore the horizon line is hidden by the structures. The thin line of mosaic tiles that Scarpa introduces at eye level can be read as the architect's replacement of the horizon line so that it can be 'seen' from this garden and thus located in the unseen world.

2. Sequencing can be physical in the sense that it provides a definite path laid down for one to follow (Figure 4.7). This can be achieved in circulation and movement patterns through space by introducing solids (barriers) and voids (space). Scarpa carefully used solids and voids to control movement through space so that the sequence of events is experienced systematically, rhythmically, emotionally, and even unconsciously.

3. A symbolic or physical sequencing device is the labyrinth which is used with great success in Italy. In the historic towns, such as Urbino, Gubbio, and Assisi that are scattered throughout the country; the winding maze of streets are bracketed by the high, almost sheer walls of building facades. This is related to the concept of pathway previously discussed but contains the additional element of mystery.

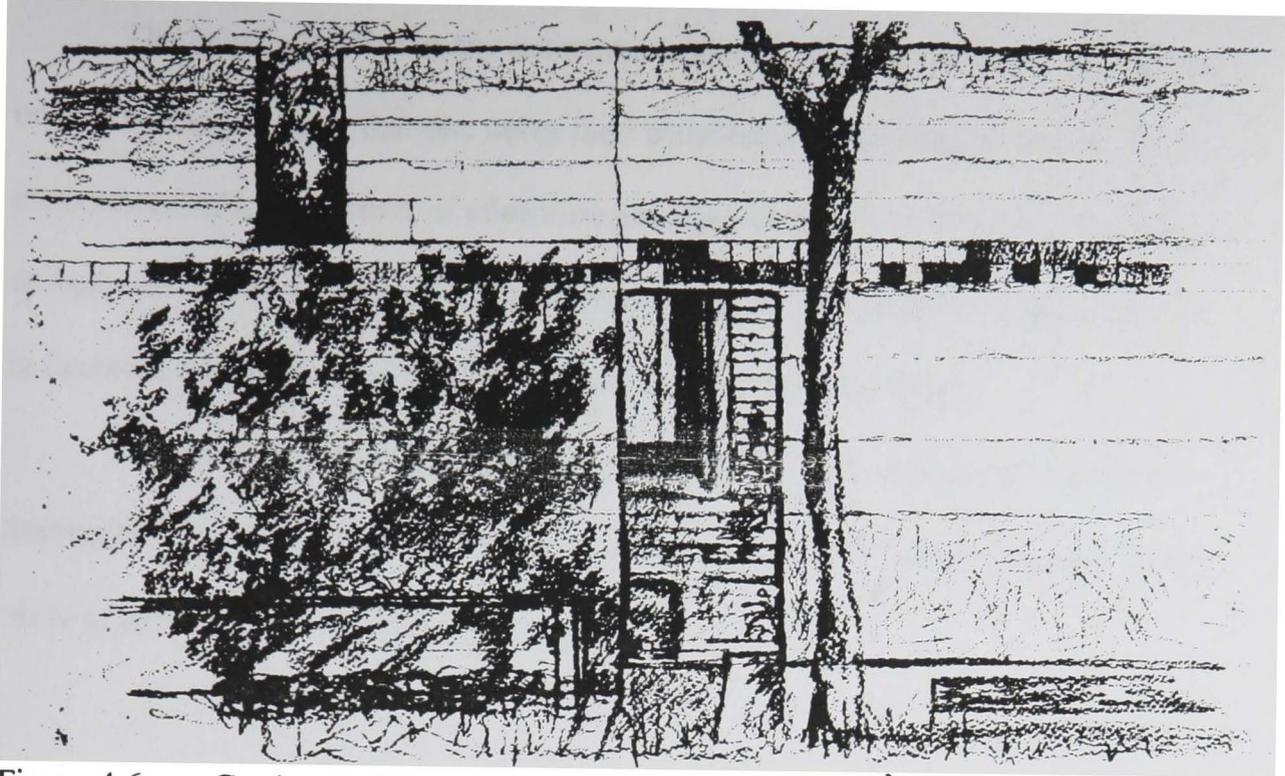


Figure 4.6 Garden wall, Querini Stampalia, Venice, Italy
Sketch by Karen Eisele

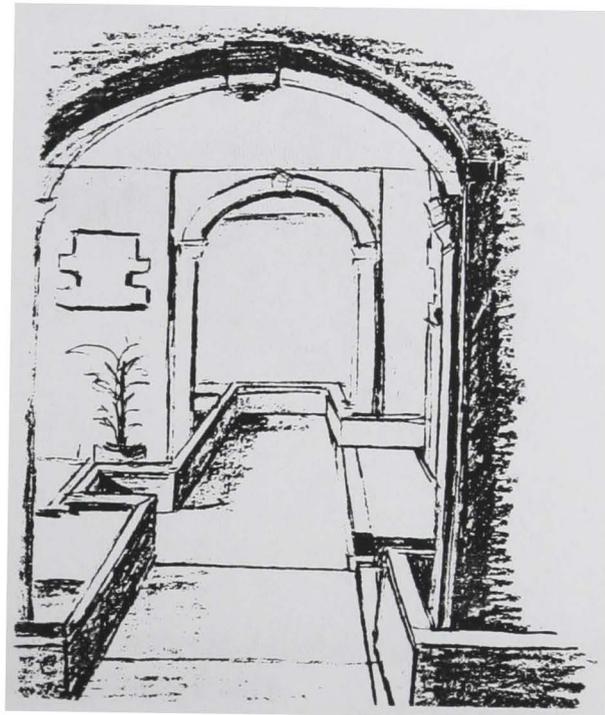


Figure 4.7 Walkway, Querini Stampalia, Venice Italy
Sketch by Karen Eisele

The knowledge that at any moment a landmark will be seen which will provide one with orientation, so that one never feels truly lost in these Italian towns however experienced adds an element of adventure and discovery. While difficult to describe verbally yet so clean when actually experiencing it, this aspect has also been captured in Scarpa's designs such as the Banco Popolare and the Brion Tomb.

The detail presented in Figure 4.8 is part of the water-element at Querini Stampalia. This familiar form in Scarpa's work immortalizes the labyrinth quality of the cities of the Veneto in which he grew up.

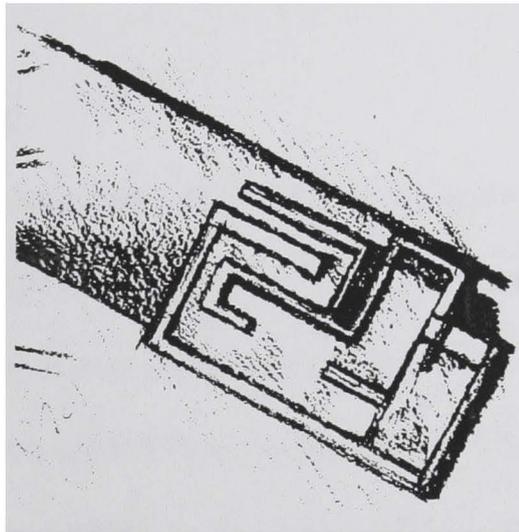


Figure 4.8 Garden water detail, Querini Stampalia, Venice, Italy
Sketch by Karen Eisele

Marker

The term 'marker' is taken from Damasio's somatic-marker discussed in Chapter III. Webster defines marker as "a worker who puts identifying information on articles; something posted to a point to indicate a position."¹⁰⁵ Both of these definitions capture the essence of Scarpa's intentions. The marker is a change in the normal pattern of things learned in the world, when normal expectations are compromised. This reordering of familiar patterns serves to waken one from the unconscious state and into the conscious. When used in conjunction with sequence, the designer can define or expound upon the path to be taken. This device therefore can create an event through discovery or focus.

Examples of Marker

A marker is not a new device, classical architects used it under the name of "oxymoron." An oxymoron defined by Tzonis and Lefaivre in Classical Architecture: The Poetics of Order is a figure that "manifests contained anomaly equivocalness, and the recognition of two apparently contradictory arguments as tacitly complementary...like a witticism or a joke, (and) is a contained violation of a norm, a provisional relief from an obligation that ultimately reinforces the rule and backs the coherence of the whole."¹⁰⁶

¹⁰⁵Webster, s.v. "Marker," 1504.

¹⁰⁶ Tzonis and Lefaivre, 160-62.

1. If a corner would normally call for the insertion of a large, solid pilaster, but a delicate statue or caryatide would be inserted instead to surprise, this is an excellent example of a marker or oxymoron.

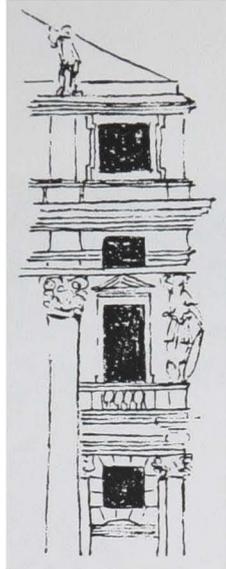


Figure 4.9 Palladio's Palazzo Valmarana
Source: Alexander Tzonis and Liane Lefaivre, 161.
Sketch by Karen Eisele

2. The process, however, might not be as dramatic as just suggested. At Palazzo del Te in Mantua, Italy, Romano designed these markers or oxymorons so subtly that when standing in the courtyard one senses something not quite right but can not immediately figure out what it is. When it is noticed that the triglyphs are dropped (Figure 4.10) one realizes the change in the classical element. Damasio has noted that it is through the unconscious somatic-marker that an awareness of a change in familiar patterns has occurred. This raises the question of whether one needs to be conscious of the marker in order to enjoy the space. The author suggests that the

marker is a device that can increase the richness of a space. The space will probably not be experienced in the same way each time. Scarpa said "...if the architecture is any good, a person who looks and listens will feel its good effects without noticing."¹⁰⁷

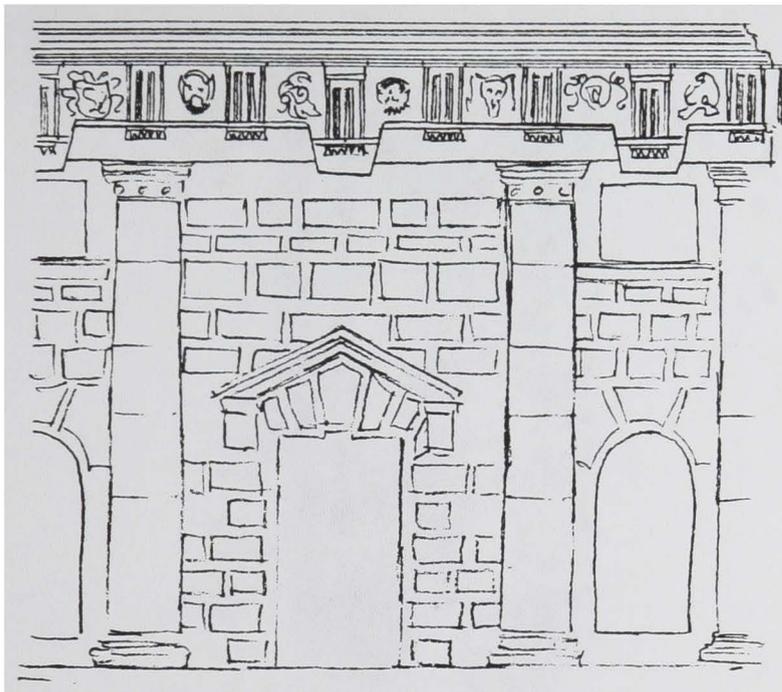


Figure 4.10 Romano's Palazzo del Te, Mantua, Italy
Sketch by Karen Eisele

3. What can be seen from these two examples is that Scarpa is not reinventing the wheel, he is not doing anything new, just reinterpreting classical ideas into modern language. By stimulating one's intuitive abilities through the perception of unusual

¹⁰⁷Francesco Dal Co and Giuseppe Mazzariol, Carlo Scarpa: The Complete Works (New York: Rizzoli International Publications, Inc., 1984), 286.

details, interpretations occur. In Figure 4.11, the solid upper corners of the Canova Plaster Gallery are cut out for windows, thus destroying the integrity of the cube; allowing a new play of light inside the space. Scarpa considered natural elements such as sky and light to be essential design elements. For this space he was reported to say: “I want to capture heaven’s azure.”¹⁰⁸

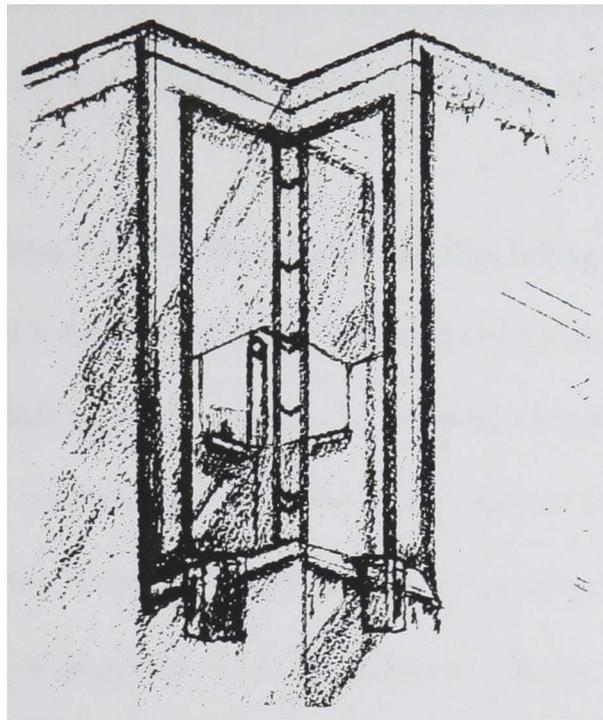


Figure 4.11 Corner gallery window at the Canova Plaster Gallery, Possagno, Italy
Sketch by Karen Eisele

4. A marker can also be described to occur at the gallery doorway of Querini Stampalia (Figure 4.12). As discussed in layering, there is a dichotomy between inside

¹⁰⁸Ibid., 53.

and outside. The ambiguity achieved at the demarcation of the interior and exterior is achieved by the forward location of the columns and the position of the door, all heightened by the transparency of the glass wall, and the pavement that continues below it from inside to out.

Another detail that supports this confusion is the base of the wall in the gallery reaching up higher than normally expected and turning outward to meet the glass. This base height is reflected in the curb or rim that acts as a retaining wall for the grass beyond the pavement.

The way Scarpa treats the lawn creates another marker. Venice's edges are defined by water; the canal in front of the Querini is echoed in the rear lawn which Scarpa seemingly treats as water through his placement of stepping stones. This use of perimeter 'water' on the outside of the structure presents the courtyard beyond the glass as being somehow an interior space rather than exterior one.

5. Inside the same gallery at Querini Stampalia, Scarpa invents games with wall openings either in shape or in their relationship to the walls. The doorway in Figure 4.13 is not cut in the rectangular shape one is used to seeing; it doesn't exactly fit the opening, and where one would expect a normal circulation flow from one gallery to the other, the large step up at the face of the door makes one conscious of the difference in the spaces and the act of passage. This created in the author a physical experience which recognized a change from public to private space. The second

gallery was not ventured into because it did not present itself as a public space at the doorway.

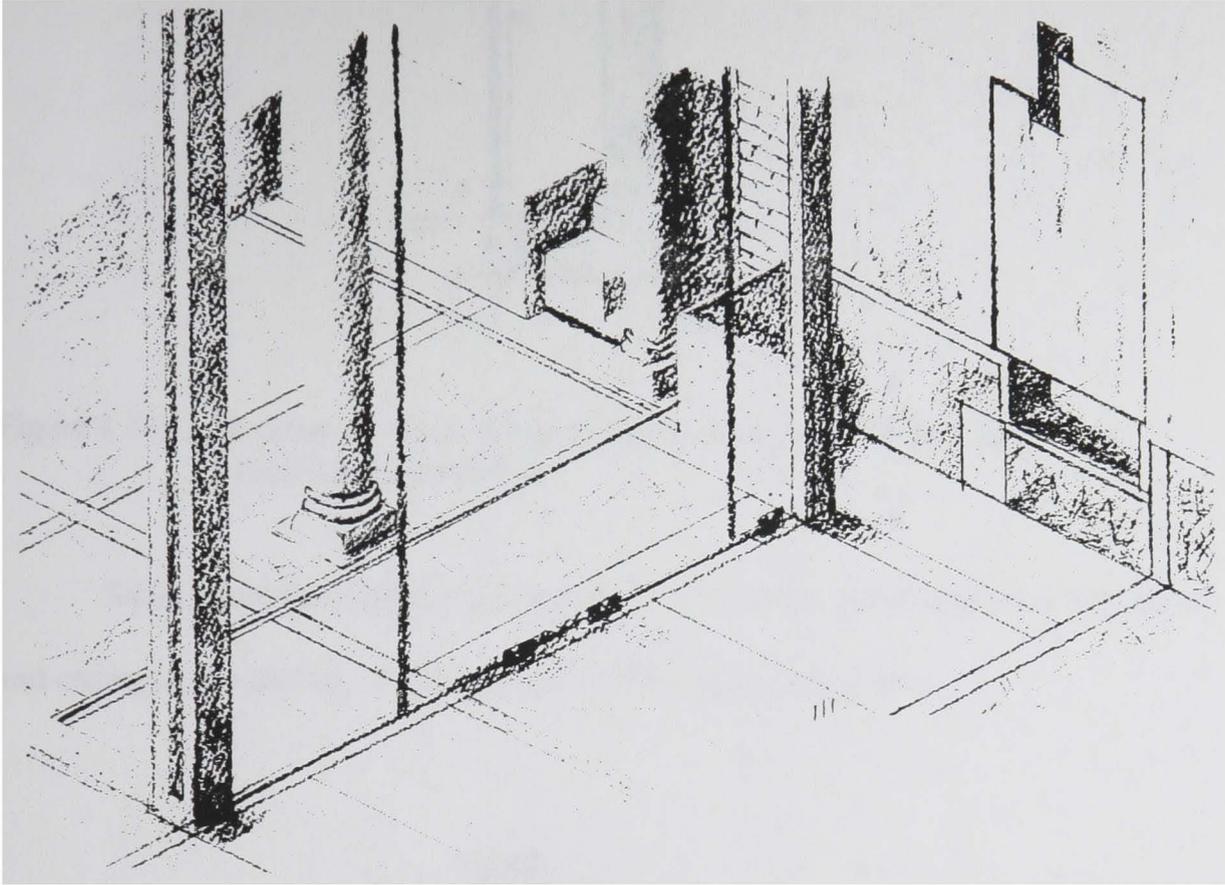


Figure 4.12 Doorway at Querini Stampalia, Venice, Italy
Sketch by Karen Eisele

6. Another traditional marker is that used to indicate change in direction or force. For example, in classical architecture, the natural forces that occur in nature are expressed by the column (a vertical element), the capital (a transitional element), and the cornice line (a horizontal element).

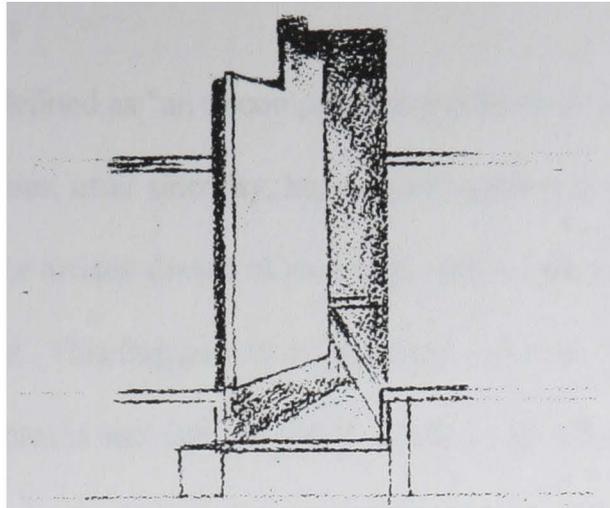


Figure 4.13 Doorway in main gallery, Querini Stampalia, Venice, Italy
Sketch by Karen Eisele

Scarpa uses this same principle (Figure 4.14) in the detail that joins the column and ceiling at the landing of the entrance of the Querini Stampalia.

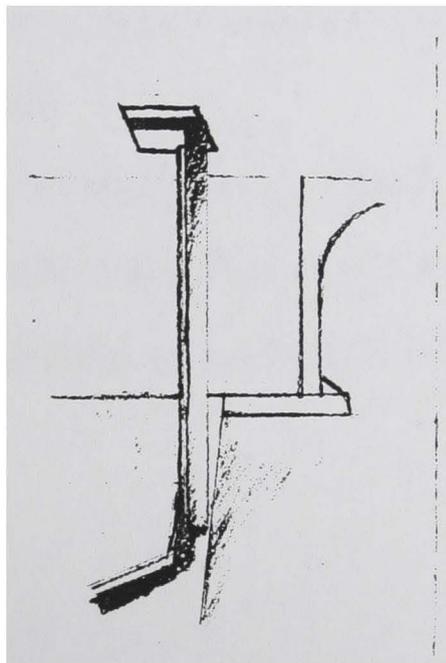


Figure 4.14 Column at entryway, Querini, Stampalia, Venice, Italy
Sketch by Karen Eisele

Integrity

Integrity is defined as "an uncompromising adherence to a code of moral, artistic, or other values; utter sincerity, honesty and candor; avoiding of deception."¹⁰⁹

Scarpa adheres to the artistic device of showing each element separately, thus giving identity and integrity. This fragmented architecture serves to reinforce the idea of the system where each part is separate but intertwined to make the whole.

Examples of Integrity

1. In his architecture, Scarpa shows this interdependency or integrity in the way he emphasizes the joint. He inserts one or more of the following when placing similar or dissimilar elements together; space, changes in texture, color, reflectiveness, or transparency. In Figure 4.15, this Brion Tomb detail is rich because each piece lives its own life within the whole.

2. By separating the old and the new, Scarpa maintains a sense of integrity. The buffer space between the original Basilica and Scarpa's addition at Possagno (Figure 4.16) creates a breathing space which allows a dialogue to be formed between the two spaces.

¹⁰⁹Webster, s.v. "Integrity," 1290.

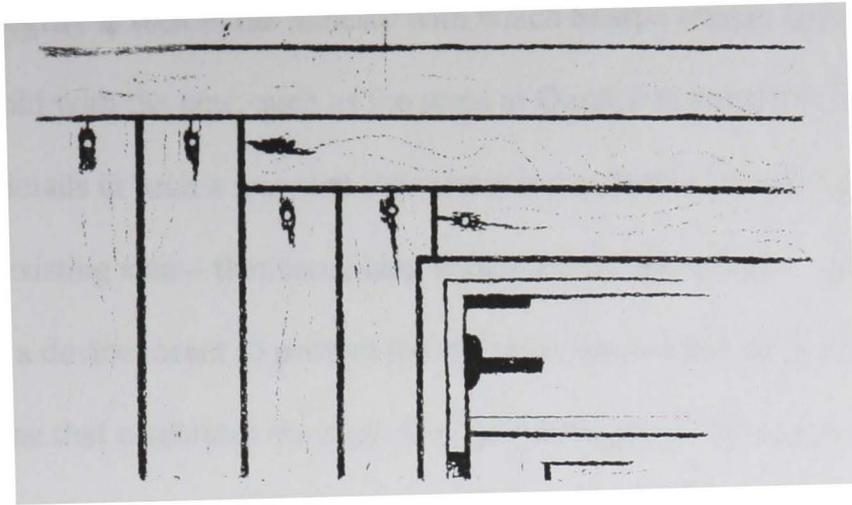


Figure 4.15 Detail, Brion Tomb, Italy
Sketch by Karen Eisele

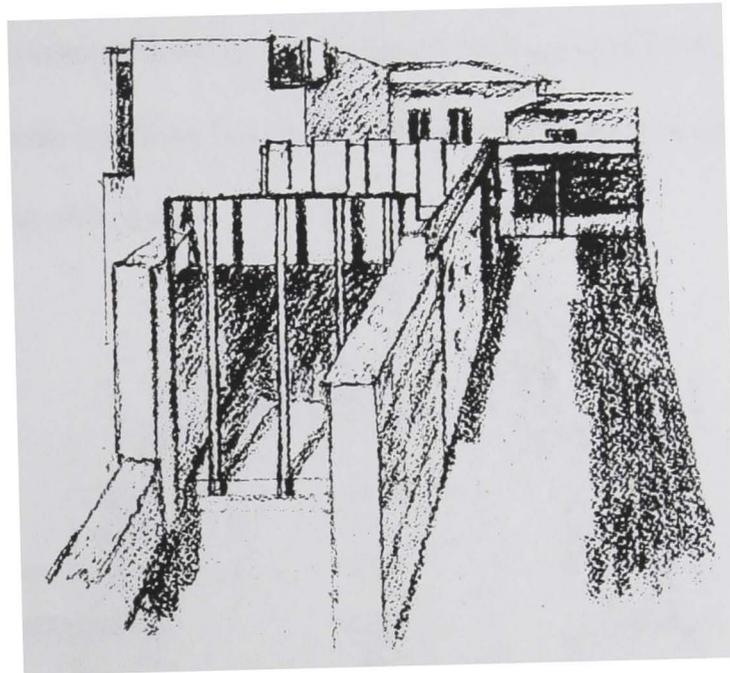


Figure 4.16 Rear elevation, Canova Plaster Gallery, Possagno, Italy
Sketch by Karen Eisele

3. Integrity is seen in the honesty with which Scarpa utilizes layering. If he is covering the old with the new, such as the steps at Querini Stampalia in Figure 4.17, he pointedly details in such a way that the viewer is aware that there is a new material covering the existing stair-- that something occurs on the plane below. This can be seen either as a device meant to protect the old steps for all their service to man during their life, or one that celebrates the steps for their faithfulness. Scarpa said "...I renewed the staircase without destroying it, preserving its identity and its history, increasing the tension between the new and the old."¹¹⁰ While it is true that the stone Scarpa places atop the old, worn steps is protective, the treatment of the edges and the notch placed in the center makes the act of rising from one level to the next an event whether he consciously intended this or not. His alternative was to completely hide, ignore or destroy the older stair.

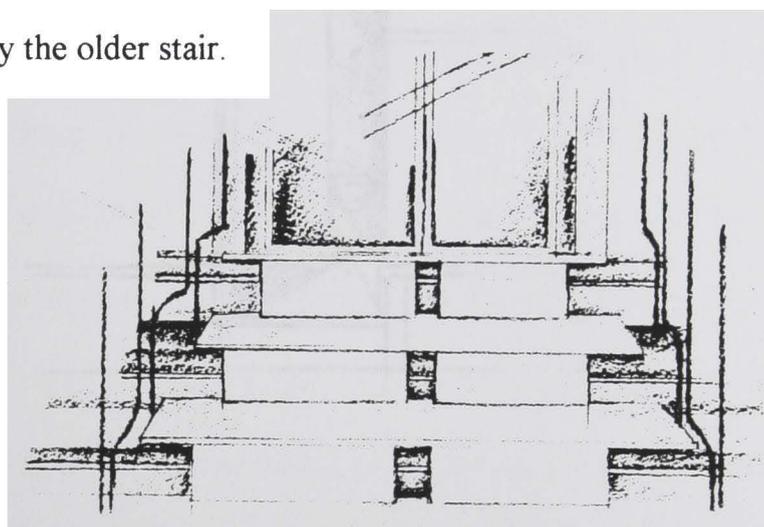


Figure 4.17

Stairs at Querini Stampalia, Venice, Italy
Sketch by Karen Eisele

¹¹⁰Dal Co and Mazzariol, 298.

4. The avoidance of symmetry is located in integrity. This notion probably dates back to Scarpa's childhood in Venice where much of the gothic architecture is non-symmetrical.¹¹¹ Scarpa understood that asymmetry allows an element to be a part of the whole while simultaneously asserting its independence. Scarpa, like Michelangelo, was never satisfied; therefore he never repeated the same detail twice.¹¹² The author thinks that the lack of satisfaction reaches further to the intuitive sense. Each element is a separate expression of the whole and a part of the constant dialogue with movement that is expressed in his work.

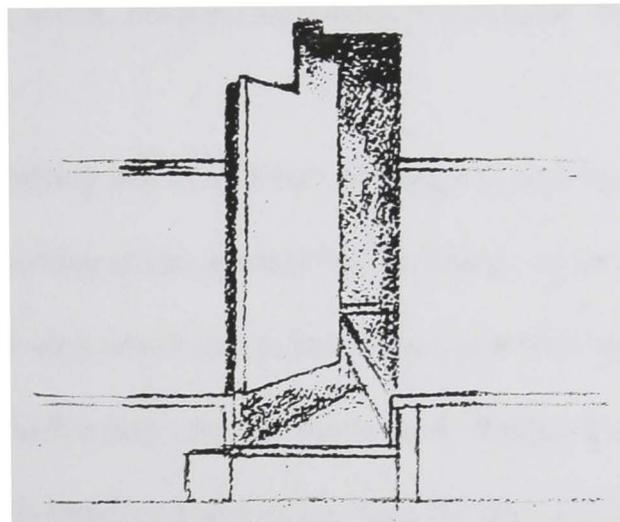


Figure 4.18 Doorway from main gallery to smaller gallery, Querini Stampalia, Venice, Italy
Sketch by Karen Eisele

¹¹¹Ibid., 286.

¹¹²Ibid.

Scale

Scarpa deals with scale in three separate yet interrelated ways. The first is the relationship of the overall design to its contextual surroundings; the second is with regard to the human figure; and the third is the degree of scale assigned to each detail by Scarpa throughout the design process.

Webster defines scale as a “standard for reference in estimating or judging.”¹¹³ However, one judges based on one’s own experience of elements, and on the human form.¹¹⁴ The relationship Scarpa established with the contextual surroundings is readily understood because of the involvement of visual clues, such as windows, doors, materials, forms, people, trees, and other familiar elements, stored in the somatic-marker.

When studying one of Scarpa’s drawings or a photograph of a detail, the scale in which he is working at can at times be confusing. In his drawings he often draws the human figure with which to establish a dialogue with the building design. Through this method he studies how one will relate to the designed space. His drawings are his way to express his intuitive knowledge; from the first quick lines that are searching, and the back and forth analysis of details to the whole, to the final delineated form given to the builders, Scarpa never stops his exploration.

¹¹³ Webster, s.v. “Scale,” 2227.

¹¹⁴ Ching, 326.

He emphatically stated: “ I want to see things, I don’t trust anything else. I put them down on paper in front of me so I can see them. I want to see and that’s why I draw. I can see an image only if I draw it.”¹¹⁵

. This quote fully expresses his conscious or unconscious desire to let his intuitive process have free reign. By repeating that he “wants to see,” it almost seems as though his right brain is trying to convince his left brain. He is not forcing the solution, rather he is allowing the expression of what he knows instinctively to be revealed ultimately on the page before him. It is further expressed by the back and forth attention in his drawings from the part to the whole and back again. The method of seeing that Scarpa utilizes in his drawings also becomes apparent in the built form. Although his work has been alternately praised and condemned for being fragmentary, there is a cohesiveness that is found in this fractal method.

Examples of Scale

The following drawings express this relationship through the expression of one form that is alternately a floorplan, a door, a window, or a tiny detail set on a wall.

¹¹⁵ Dal Co and Mazzariol, 53.

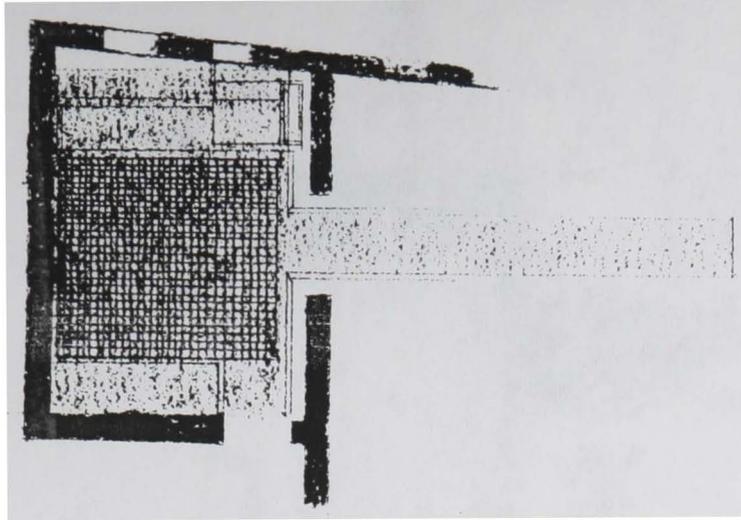


Figure 4.19 Floorplan of entrance, Querini Stampalia, Venice, Italy
Sketch by Karen Eisele

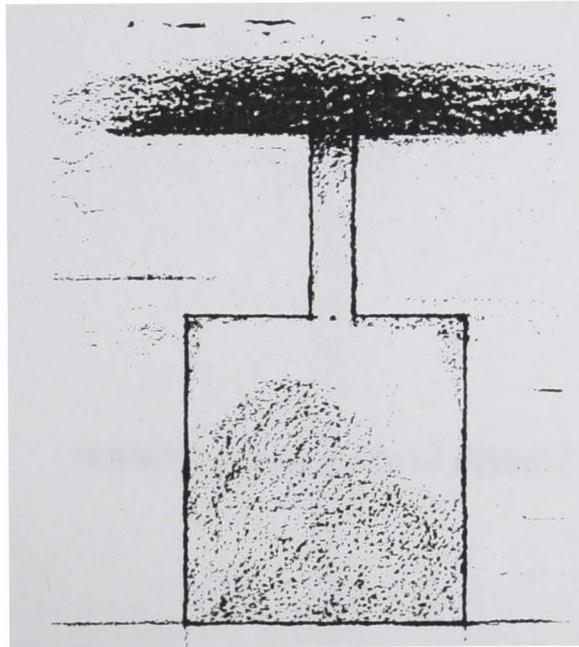


Figure 4.20 Conference room doorway, Banco Popolare, Verona, Italy
Sketch by Karen Eisele

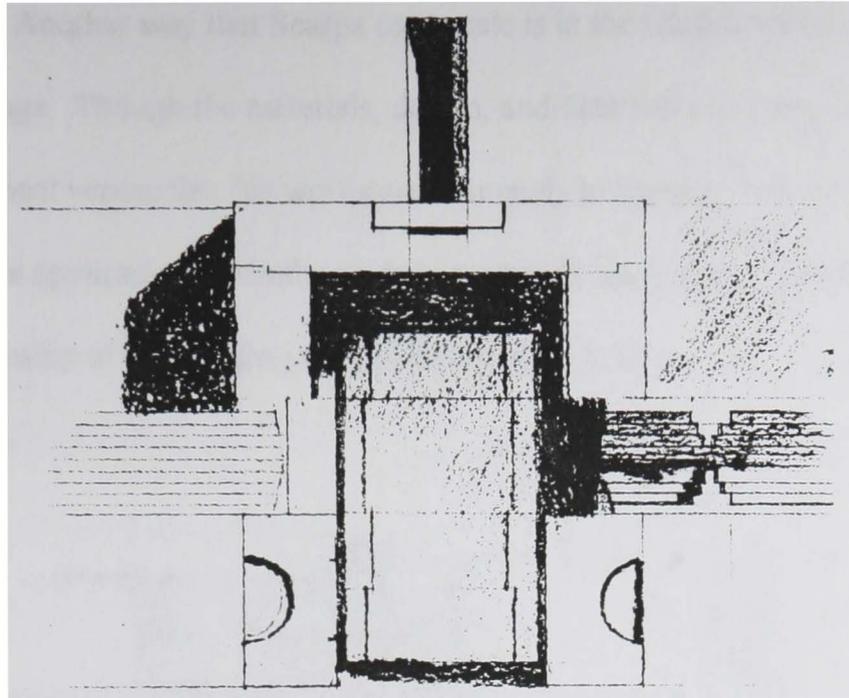


Figure 4.21 Main entrance, Banco Popolare, Verona, Italy
Sketch by Karen Eisele

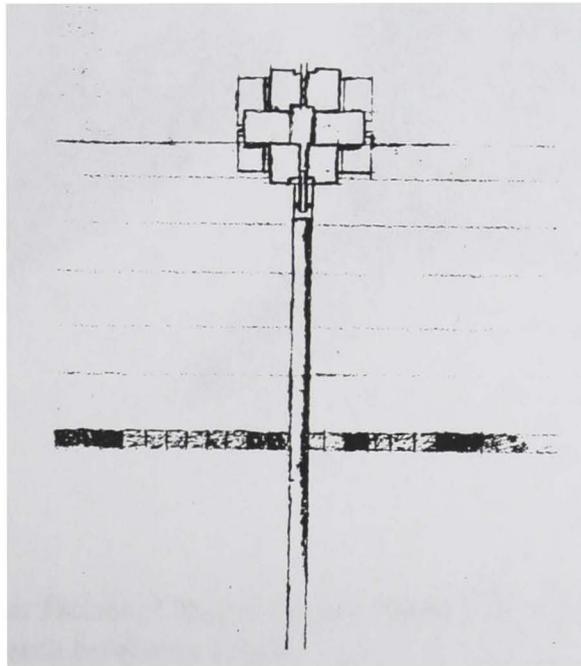


Figure 4.22 Garden wall detail, Querini Stampalia, Venice, Italy
Sketch by Karen Eisele

4. Another way that Scarpa uses scale is in the relation of his designs to their surroundings. Though the materials, design, and detailing are often very different from the traditional vernacular, his works are ultimately in harmony with the surroundings through the application of similar scale in terms of dimensions in height and width, and the relationship of the building to the surrounding facades.

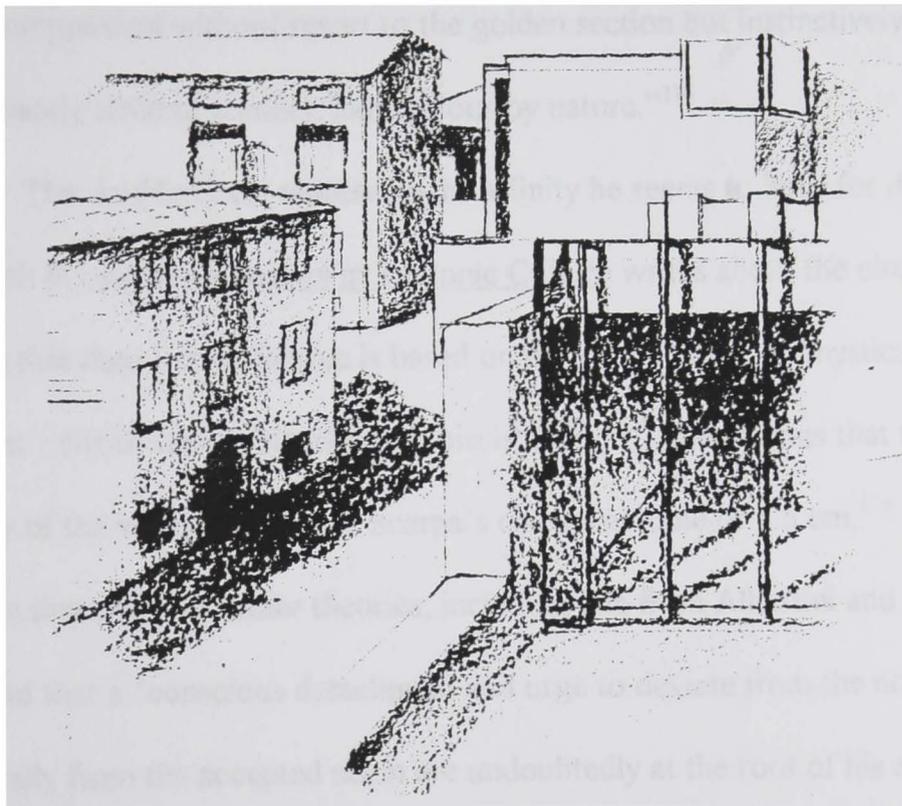


Figure 4.23 Rear facade, Canova Plaster Gallery, Possagno, Italy
Sketch by Karen Eisele

Proportion

While scale is the touchstone for the somatic-marker, proportion is the internal logic. Through Scarpa's education and serious study of classic architecture, proportion became intuitive, second hand. In his familiar double-circle design for the Brion Tomb, Licisco Magagnato noted that in his drawings "... Scarpa worked out their composition without resort to the golden section but instinctively arrived at an immediately striking contact, harmonious by nature."¹¹⁶

The double circle represents the affinity he seems to have for duality.¹¹⁷

Kenneth Frampton in Studies in Tectonic Culture writes about the circles and his theory that their use by Scarpa is based on the vesica piscis, a "mystical idigram... (from vesica, bladder, and piscis, fish)."¹¹⁸ He reasons that the "inherent duality of the vesica" relates to Scarpa's chosen module of 5.5 cm.¹¹⁹ It is interesting to note that there are other theories, including one from Albertini and Bagnoli. They contend that a "conscious detachment and urge to deviate from the norm, even if only minimally from the accepted norm are undoubtedly at the root of his adopting a

¹¹⁶Carlo Scarpa: il Progetto per Santa Caterina a Treviso, Licisco Magagnato "The Museum of Santa Caterina" (Treviso: Edizioni Grafiche Vianello spa, 1984), 13.

¹¹⁷Kenneth Frampton, Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture (Cambridge: The MIT Press, 1995), 314.

¹¹⁸Ibid., 312.

¹¹⁹Ibid., 313.

yardstick of his own," his use of 5.5 cm module rather than the classical 5 cm.¹²⁰

Either way, the series of 5.5 as a base becomes 5.5, 11, 16.5, 22, 27.5, 33...etc., and it can be noted that 5.5 is a double number as is every second number in the series.¹²¹

An investigation of Palladio uncovers that he favored the "perfect" number 6. Perfect because $1 + 2 + 3$ equals 6. Using the series of numbers: 6, 11, 12, 15, 26, and 30, these six numbers are added together they equal 100, also 6 to 12 and 15 to 30 are a 2:1 ratio. Finally, 6 to 30 is at a 1:5 ratio.¹²²

Scarpa's uses of numbers can be looked at in a similar way. If one were to take six of his series and add them together: $5.5 + 11 + 16.5 + 22 + 27.5 + 33$ they equal 115.5 or a number with two doubles. Also, looking at the numbers that are not doubles, the front number and the back number equal the middle number. For example in 16.5 the 1 and 5 equal 6. Taking the hypothesis a step further, $1 + 2 + 3 = 6$, $1.2 + 2.2 + 2.1$ equals 5.5. They form interesting dual patterns: 1.2, 2.2, 2.1 is two pairs of 2's bracketed by a pair of 1's. 1.2, 2.1, 2.2 is pairs of 2's separated by a pair of 1's and 2.1, 1.2, 2.2 is one 2, two 1's and three 2's which relates to the above Palladian perfect six.

The immersion with numbers like this is fascinating but, for some, ridiculous. However, as Frampton points out:

¹²⁰Albertini, 18.

¹²¹Frampton, 313.

¹²²Lionel March, "Palladio's La Rotonda: A Study in Renaissance Arithmetic," Texas Tech University student.

Measure itself, far from being an expedient and arbitrary delimitation of size, is in fact inseparable from the coming into being of form...the Sanskret word matra means both “measure” and “matter”. Thus making matter manifest, one might say, is the prime function of measure...the measure simultaneously reveals both the material and itself.¹²³

This quote recalls the observation by Frascari in Chapter III of Monsters of Architecture, that the intangible is shown through the tangible. The main theme of Scarpa’s work.

In support of this notion, Scarpa talked of his use of 5.5 and 11 for his design of the Brion Cemetery. “I needed a certain kind of light and I worked out everything on a grid of 5.5 cm. This motif which seems nothing special is actually rich in expressive scope and movement...”¹²⁴

For the standard proportional ratio in looking at the above forms, the author’s measurements show a constant proportional ratio of 1:3. For example the grill used on the Banco Popolare is 5.5 x 16.5

Classics in Comparison

Through the above detailing of the six principles, one cannot help noting and wondering what affect Palladio (and other classical architects) had on Scarpa. The

¹²³Ibid., 320.

¹²⁴Dal Co and Mazzariol, 286.

Basilica has many of the same characteristics that Scarpa uses in his own design process. The following are ways that Palladio used marker, integrity, and layer in his designs.

Layer: In Wanderings, Gabriel Faure writes that Palladio was able to "penetrate antiquity and apply it to the needs of modern times...to maintain tradition, (and) to enlarge the laws of antique wisdom by modern science."¹²⁵ In other words, he also continued the layering process from the past into the present.

Integrity: The way the Basilica loggia almost crashes into the row of buildings at its southwest corner could be seen as the use of integrity. Where the Ragione used to be trapezoidal in shape, Palladio changes the grid when he cloaks it with the loggia. Each part of the whole, in terms of the piazza area, are maintaining their own identity through this change and the emphasis of that change.

Marker: In looking at the marker concept, one example can be seen at the design of the steps leading to Villa Emo. The expected form of steps is not seen here, rather there is an almost ramp-like structure with horizontal ridges for foot placement. This is reminiscent of the streets of hill towns in Italy.

From the examination and documentation of Scarpa's work detailed in this chapter, Scarpa's true talents lie in melding the past with the future in such a way that neither are compromised. The details with which Scarpa deals are at the crux of the

¹²⁵Gabriel Faure, Wanderings in Italy (London: Richard Clay and Sons, Limited, 1919), 175.

old and the new. His work has both function and representation, built form that is concrete and functional, and abstract, rife with symbolic meaning. The invisible becomes visible, and as the Greeks used the metaphor of weaving in their architecture and planning, Scarpa wove the past and present to create a clearly defined future.

Finally, the intention here is not to present these six principles as reflecting the totality of Scarpa's work, but to suggest their use in directing future analysis and study of Scarpa's work, and for future architectural application.

CHAPTER V
CASTELVECCHIO MUSEUM, VERONA, ITALY
SCARPA CASE STUDY

In the last chapter, Scarpa's work was discussed generally in order to define the six elements the author has chosen to focus upon. To further explore how he uses each of the principles, one of his works will be explored comprehensively.

Castelvecchio is a castle and fortress located in Verona, Italy. In its earliest times the castle was protected from the city by the outer fortress walls and towers. This reduced the need to place a wall between the two towers fronting the river (Figures 5.1 and 5.2). As time passed, the fortress began to change its function. With the onset of wars, a wall was built along the river and the whole length of the fort wall readied for munitions. In the Napoleonic era it was necessary to turn the fortress into barracks (Figure 5.3). In 1924 the city of Verona decided to use the castle and fortress as a museum (Figure 5.4). The architect chosen was Antonio Avena. He applied a gothic facade to the barracks and designed the fortress yard into the pattern of a formal garden. It is interesting to note that the gothic elements were salvaged by Avena from a damaged gothic palace located elsewhere in Verona. Scarpa was given the commission in 1956 to redesign the museum.

The work of Scarpa's was chosen as a case study for a variety of reasons: It is a successful restoration located in a historic area, the author was able to physically

experience the site, and there are many articles and books written about the site, lending to a well-rounded comprehensive analysis.

Layer

The following is a documentation of his work with emphasis on investigating how he used the six principles discussed above in Chapter IV.

1. Scarpa wanted to demonstrate that at one time the fortress wall and east tower were unconnected so he removed the northeast bay of the fortress (Figure 5.3). At one time he had considered removing the northwest bay but decided that this area would not be as symbolically relevant as the northeastern area where the facade actually joined the fortress wall.

2. Scarpa was not afraid to uncover a hidden element such as the moat of the castle or remove an element as he did the staircase next to the fortress wall (Figures 5.6 and 5.7) This method of layering is aimed at revealing the truth of past intentions for the site.

3. One problem that he dealt with was how to join the fortress and the castle. When he decided to excavate a path under the wall, where he later discovered the moat, Scarpa demonstrated a layering system on several planes (Figure 5.8). One plane is representational of time. The vertical layering of a strata of elements one atop the other become a catalogue of the history of Castelvecchio.

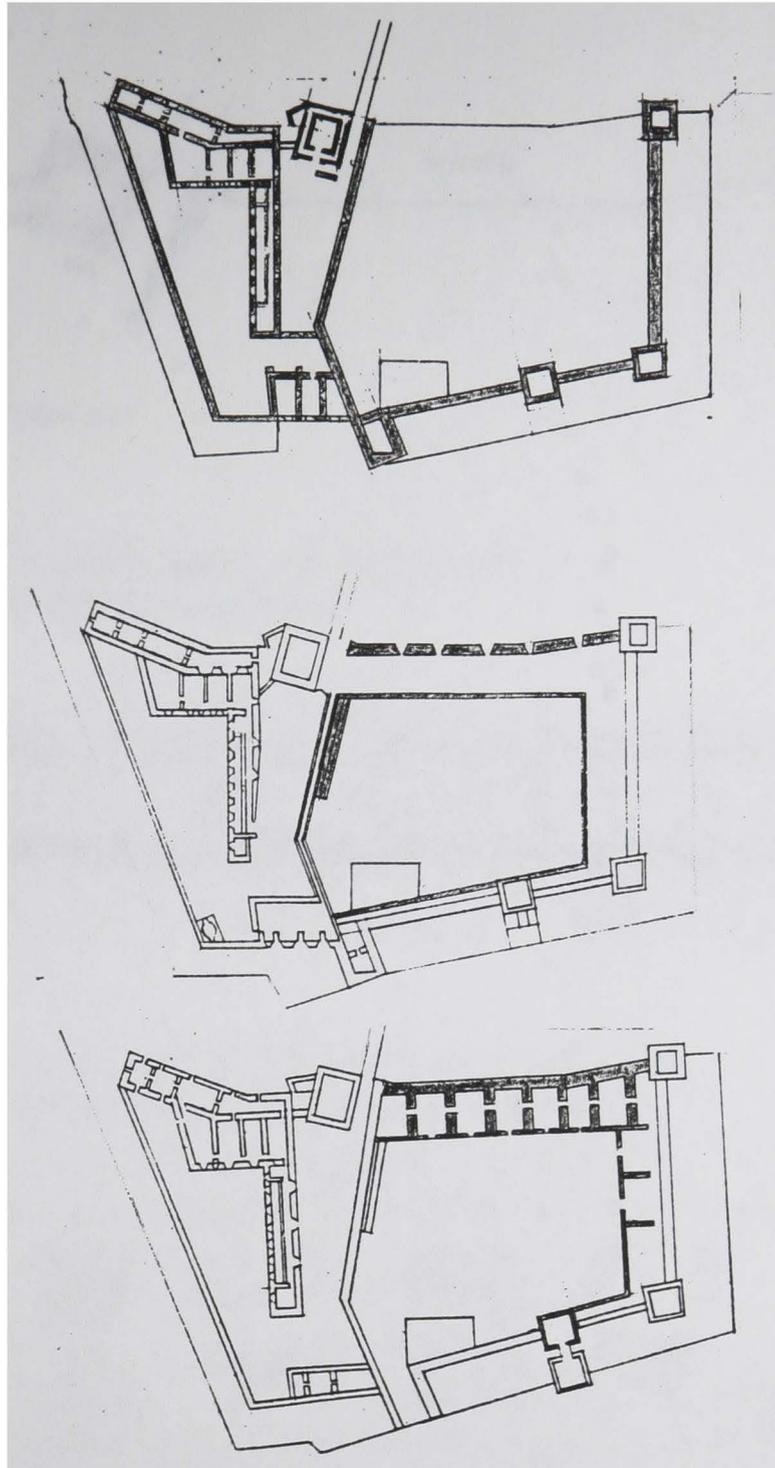
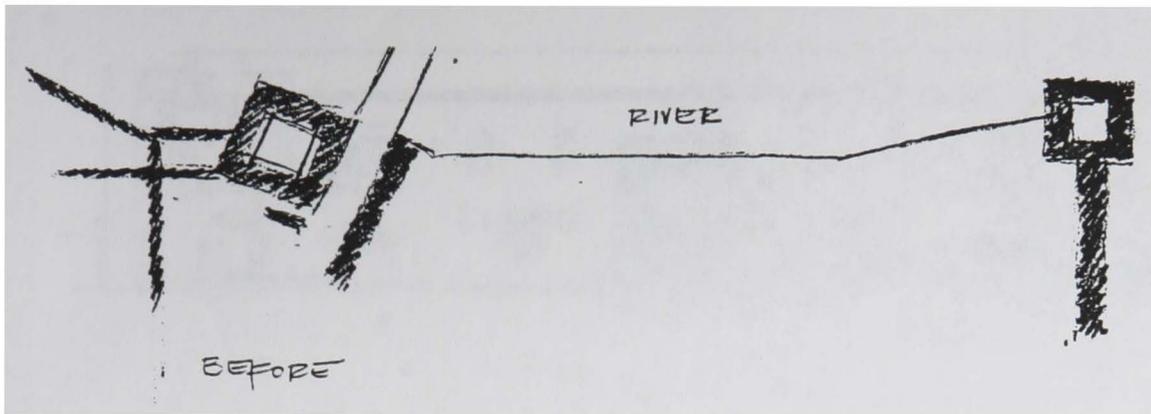


Figure 5.1 Castelvecchio plans from 1100-1806
Source: Karen Eisele Drawing - Murphy, 4¹²⁶

¹²⁶Richard Murphy, Carlo Scarpa and the Castelvecchio (London: Butterworth Architecture, 1990), 4.



Figures 5.2 Detail of Castelvecchio plan (1100)
Sketch by Karen Eisele

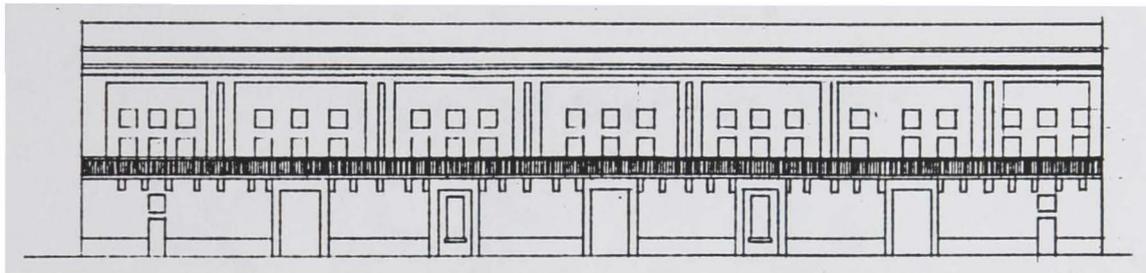


Figure 5.3 North facade, Napoleonic (1806), Castelvecchio
Source: Karen Eisele Drawing - Murphy, 6.

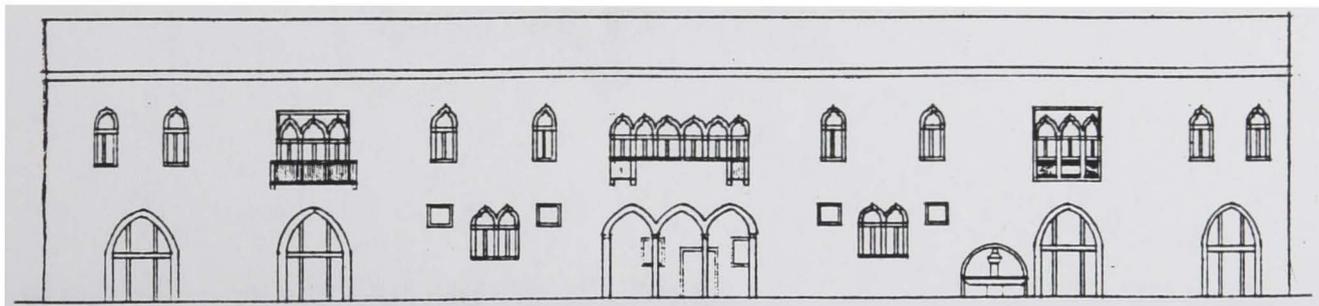


Figure 5.4 North facade, Avena (1924), Castelvecchio
Source: Karen Eisele Drawing - Murphy, 6.

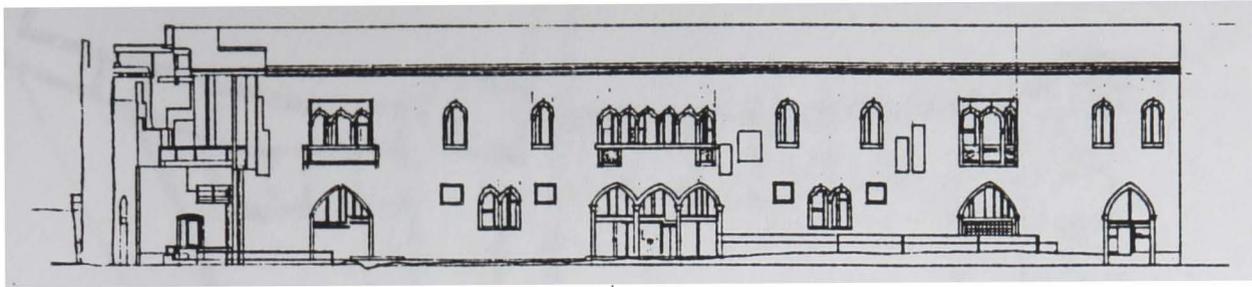


Figure 5.5 North facade, Scarpa (1956), Castelvecchio
Source: Karen Eisele Drawing - Murphy, 26, 27.

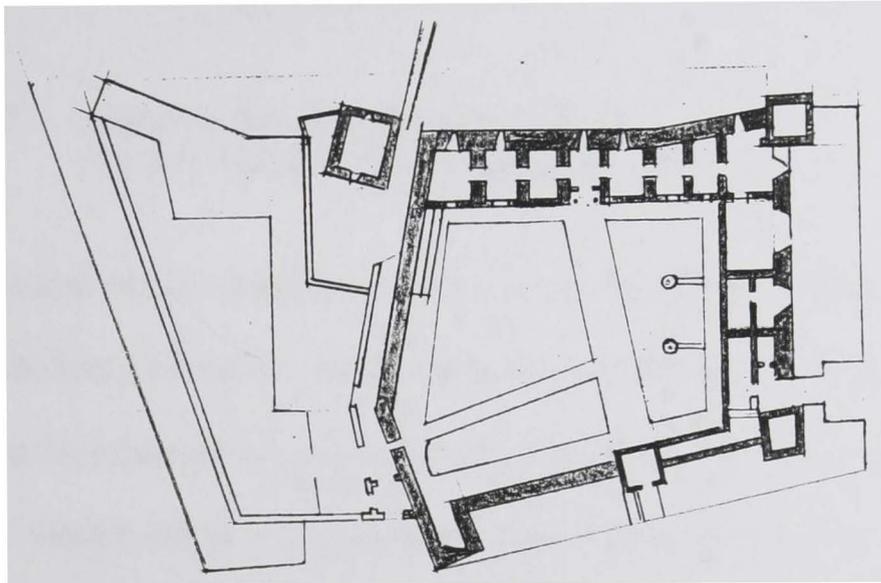


Figure 5.6 Castelvecchio plan, Avena (1924)
Source: Karen Eisele Drawing - Murphy, 4.

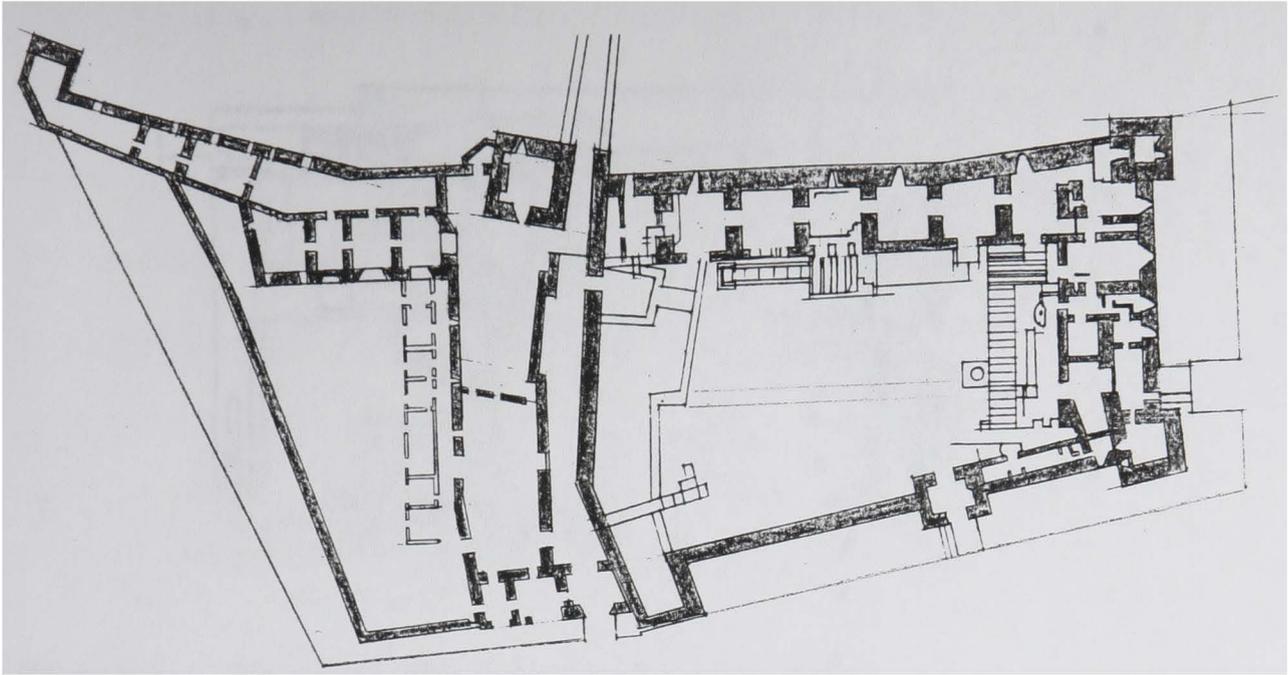


Figure 5.7 Castelvecchio plan, Scarpa (1956)
Source: Karen Eisele Drawing - Murphy, 4.

Another plane is the physical view point as the excavation underneath provides views of the area from below, and the bridges views from above. This allows the same elements to be evaluated in a variety of ways whether one is conscious of this or not.

4. Using symbolism to show the passage of time was also accomplished when Scarpa removed the “fake” emphasis of the formal garden that Avena designed (Figure 5.9). Scarpa created a space that speaks of past functions with the use of parallel hedges which could be interpreted as the echo of a military parade ground.

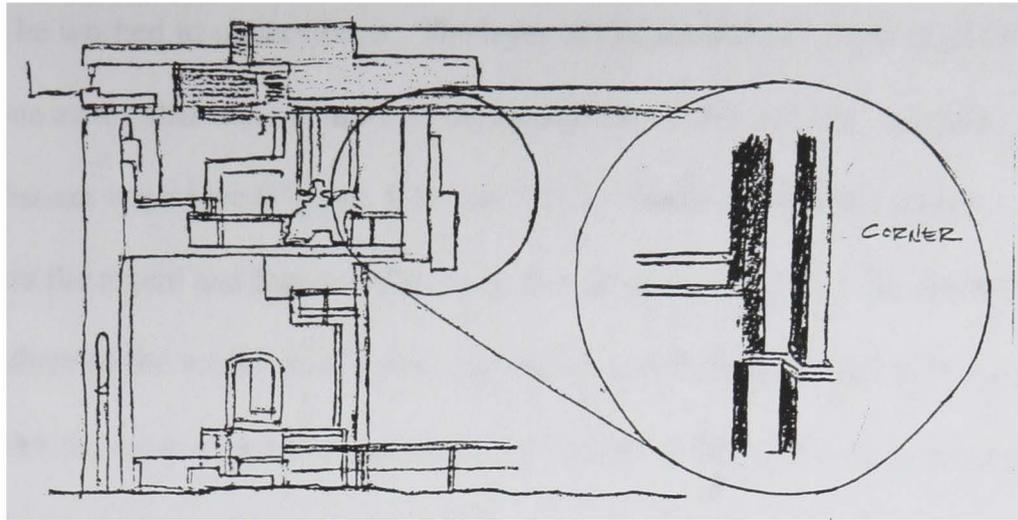


Figure 5.8 Cangrande area, Scarpa (1956), Castelvecchio
 Source: Karen Eisele Drawing - Murphy, 93

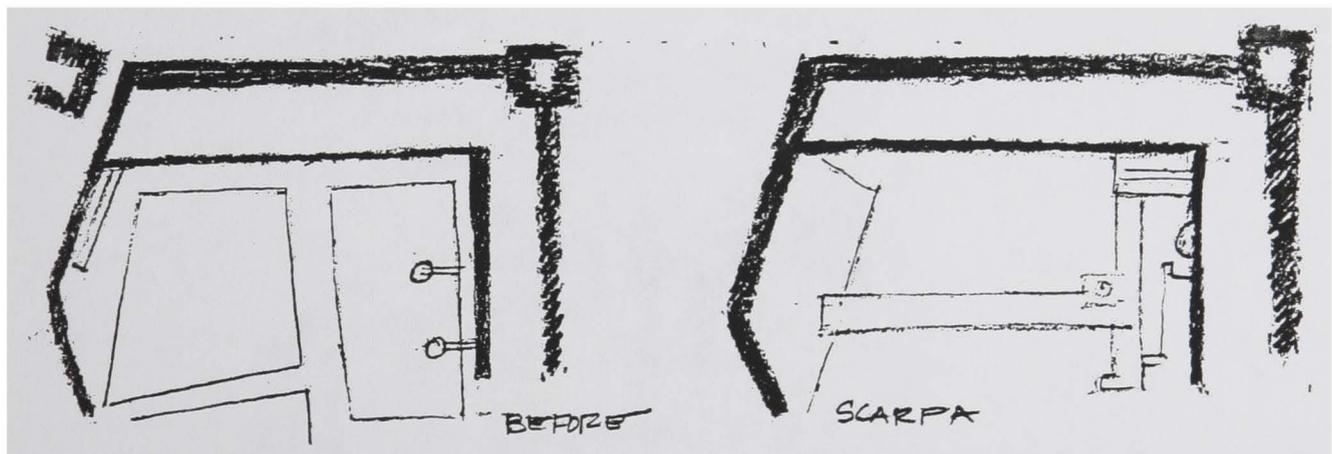
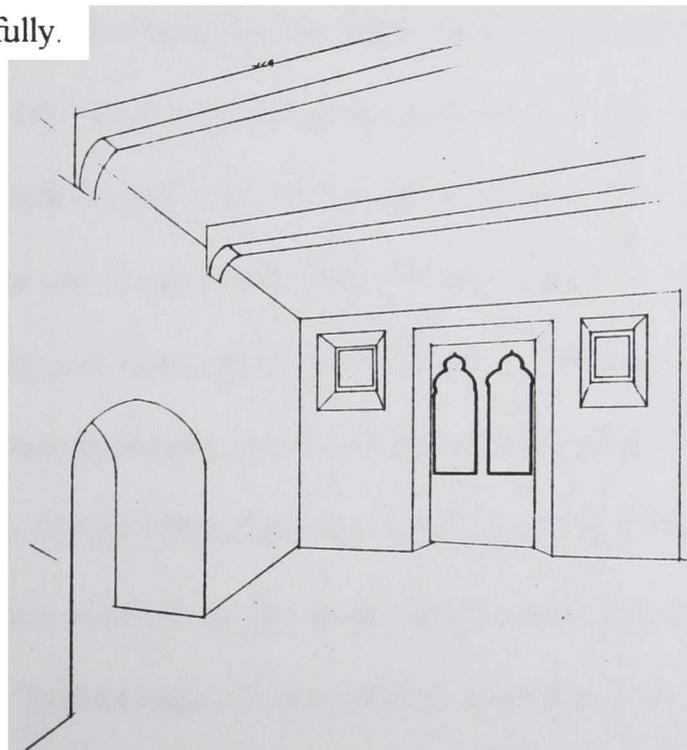


Figure 5.9 Sketch of Castelvecchio fortress grounds (1924 and 1956)
 Sketch by Karen Eisele

5. As noted previously, Scarpa wanted to remove Avena's facade but when he couldn't he worked to undermine it. The layer of the screen behind the windows makes one aware that there is more to the facade than meets the eye. Layering is used in two distinct ways here (Figures 5.10 and 5.11). The first is that the screen represents the present and future while the gothic facade is the past. The materials and modern form of the screen don't soften this effect instead they strengthen the contrast. Along with the other elements that Scarpa introduced in front of the gothic facade, the low wall and sacellum, the screen served to reduce the substance formerly afforded this elevation. Figure 5.11 is a wonderful example of the layering process—modern cubist detailing, Romanesque rounded door, Eastern Gothic and square windows coexist peacefully.



Figures 5.10 Gallery space, Avena (1924), Castelvecchio
Source: Karen Eisele Drawing - Miotto, 80, 81.

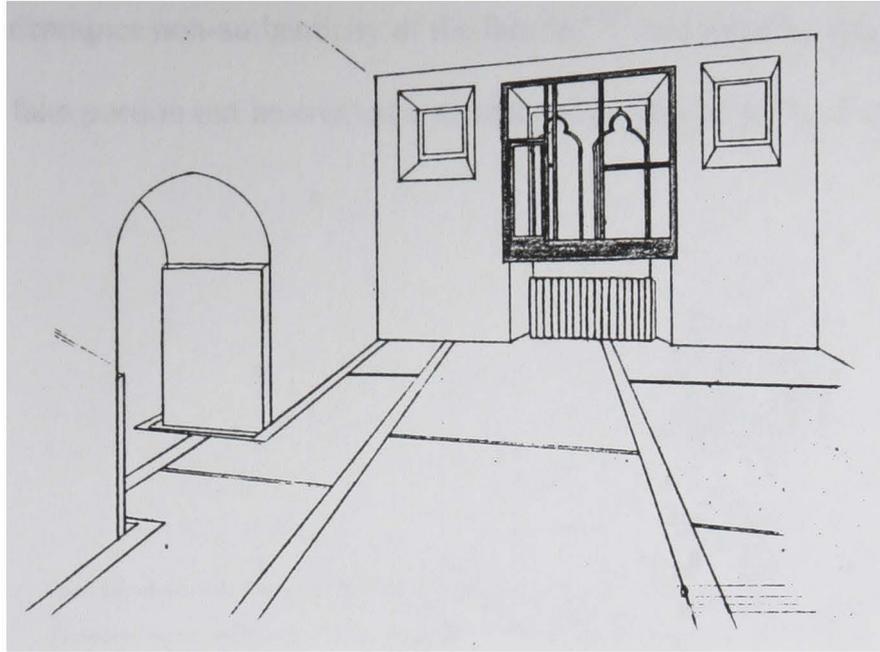


Figure 5.11 Gallery space, Scarpa (1956), Castelvechio
Source: Karen Eisele Drawing - Miotto, 80, 81.

6. Scarpa accomplished two things with the elements in front of the north facade (Figures 5.5 and 5.12). The first, touched on above, was to undermine Avena's fake gothic facade by punching through the wall with the sacellum and covering part of the elevation with the low wall. The second, was to turn the facade from static symmetry to one of non-symmetrical movement. There is the suggestion of the outside and inside combining and the movement horizontally across the facade.

7. The shifting of materials also demonstrates layering as when Scarpa exposed different materials by peeling the top one back to show the layers underneath (Figure 5.13). In the Cangrande area what at first seem to be a time line of materials--from rough brick, to stone, and Scarpa's own rendered coating, is actually a history of construction. "At the Castelvechio it was necessary (for Scarpa) to underline and

some way denounce non-authenticity of the facade.”¹²⁷ and since he was not allowed to tear the fake portion out he created a surreal artistic presentation of construction.

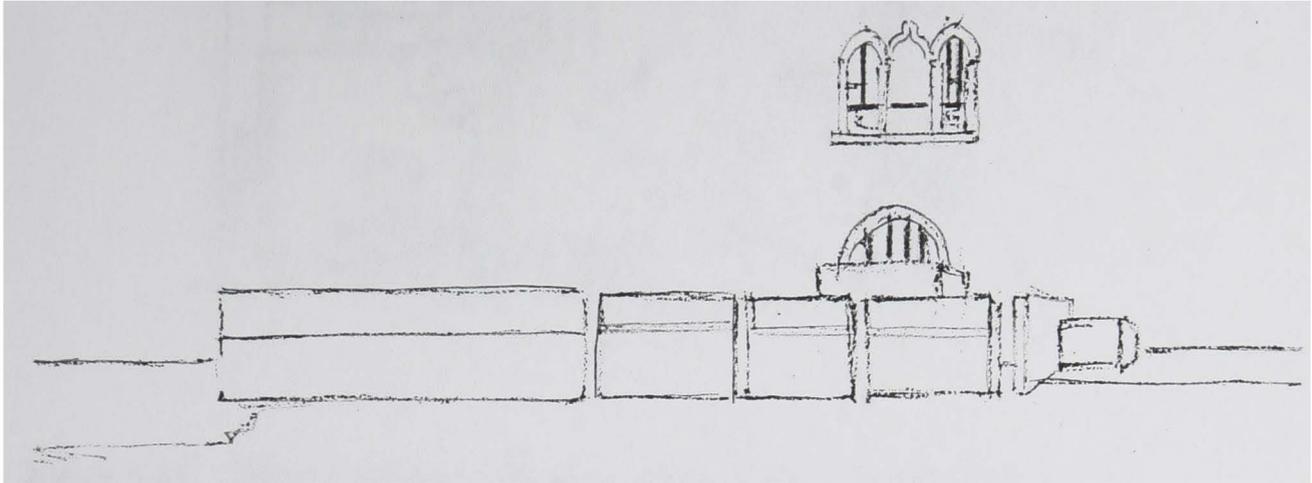


Figure 5.12 Sketch of details on north facade, Scarpa (1956), Castelvecchio
Sketch by Karen Eisele

Using cantilevered concrete and steel, detailing the construction method of brick and wood, and unveiling the roof to show joints of the skeletal construction using metal and tile.

¹²⁷ Carlo Scarpa: *il Progetto per Santa Caterina a Treviso*, Pier Carlo Santini
“Architecture as a Continuous Dialogue,” 31.

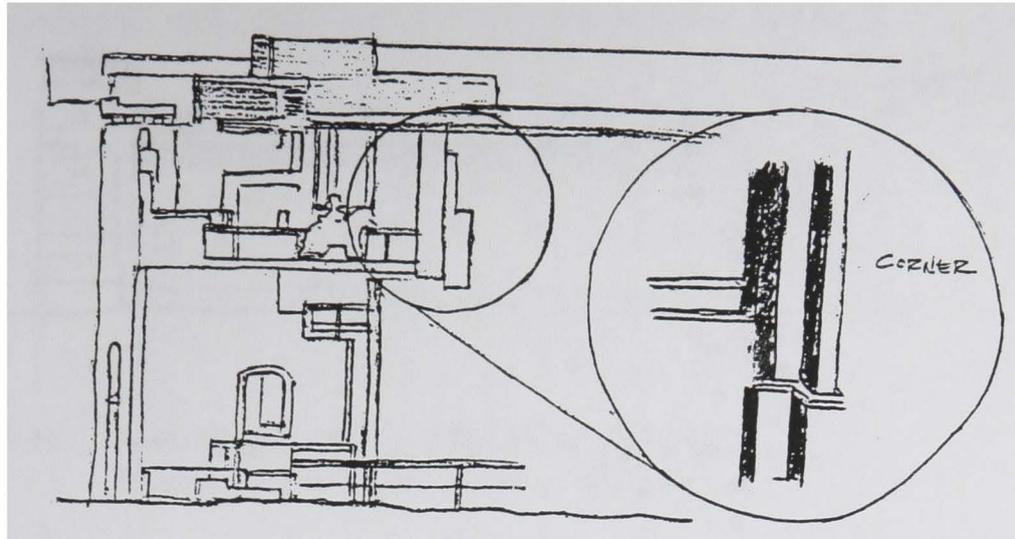


Figure 5.13 Sketch of Cangrande area, Scarpa (1956), Castelvecchio
Sketch by Karen Eisele

8. On the south facade Scarpa again separates the fortress wall from the tower to demonstrate that at one time the tower stood alone (Figure 5.14 and 5.15). While this is comparable to the bay removed on the north facade, here the materials that Scarpa chose--wood, and glass--emphasize that a new element has been inserted. The past and the future are not subtly peeled apart but crash into each other. While this "crash" is dramatic, one element does not totally overwhelm the other.

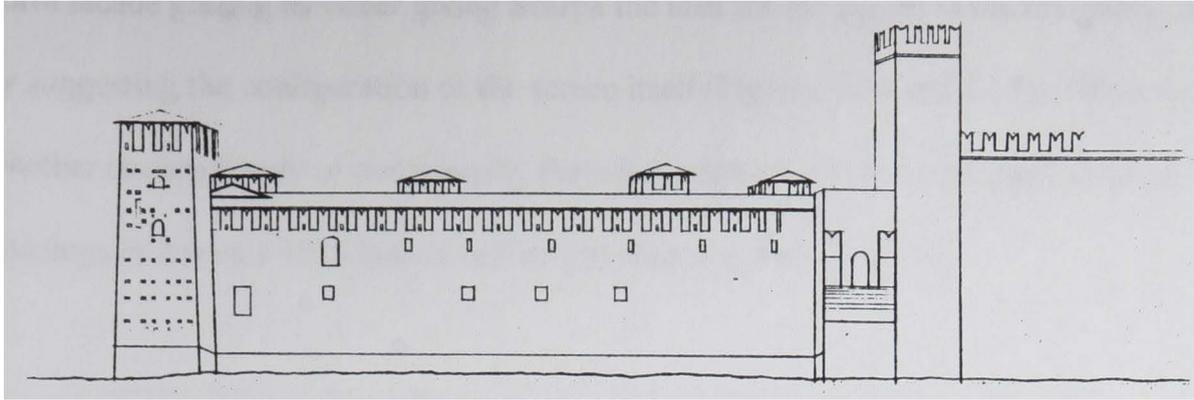
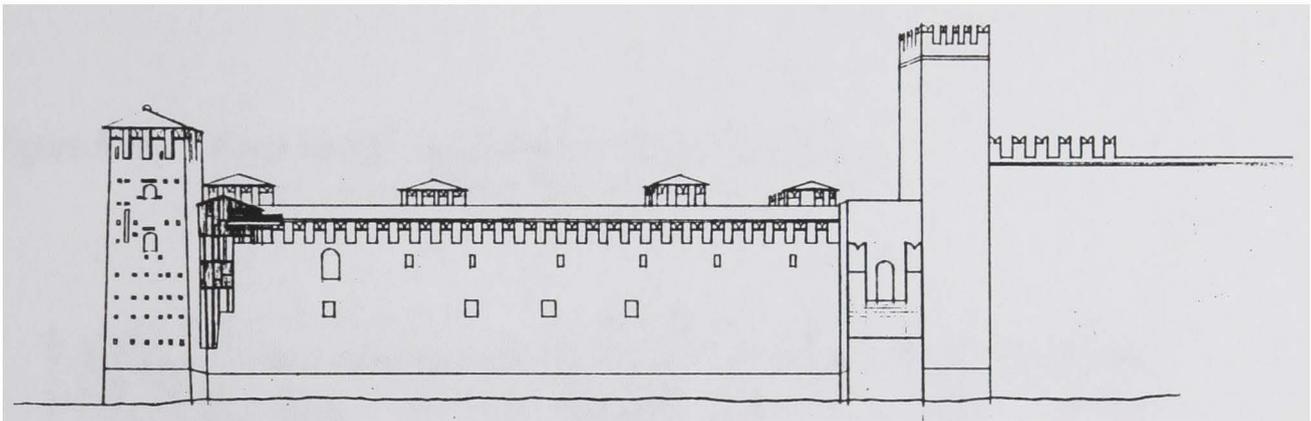


Figure 5.14 South facade, Avena (1924), Castelvecchio
Source: Karen Eisele Drawing - Murphy, 161.



Figures 5.15 South facade, Scarpa (1956), Castelvecchio
Source: Karen Eisele Drawing - Murphy, 162.

9. Another form of layering at Castelvecchio, in the authors opinion, is a very subtle one. Although the hypothesis cannot be confirmed in the scope of this thesis, one wonders whether the barracks facade was the impetuous for the screen behind the

north facade glazing by either giving Scarpa the idea for the screen in the first place, or by suggesting the configuration of the screen itself (Figures 5.16 and 5.17). However, whether unconsciously or consciously, there is a relationship of horizontal lines from openings in Avena's 1924 facade to Scarpa's openings (Figure 5.19).

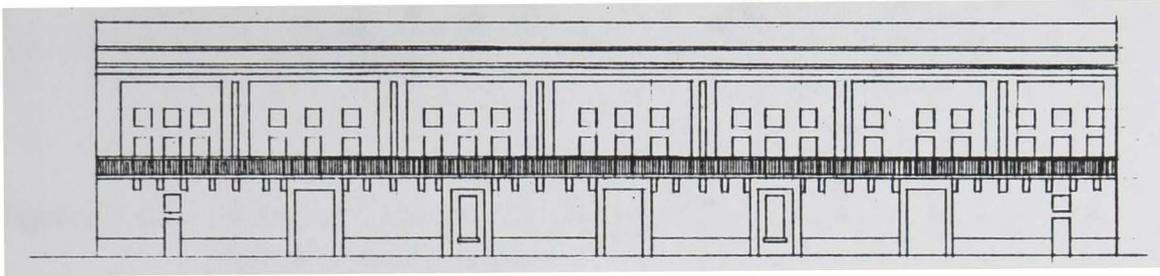


Figure 5.16 North facade, Napoleonic (1806), Castelvechio
Source: Karen Eisele Drawing - Murphy, 16.

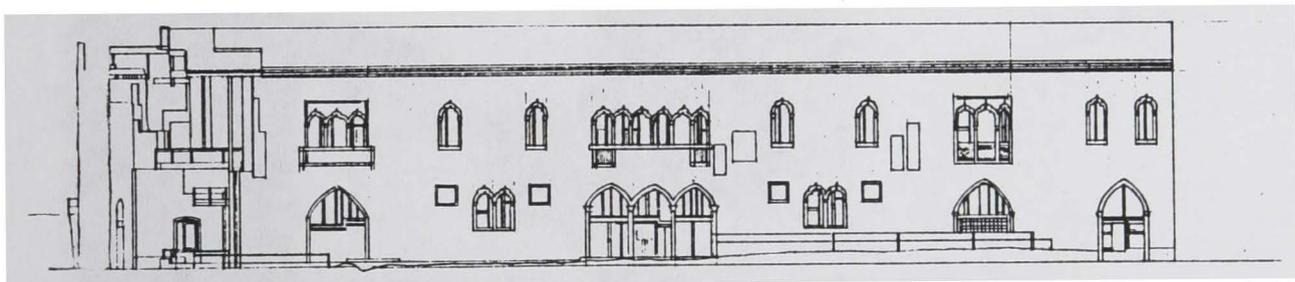
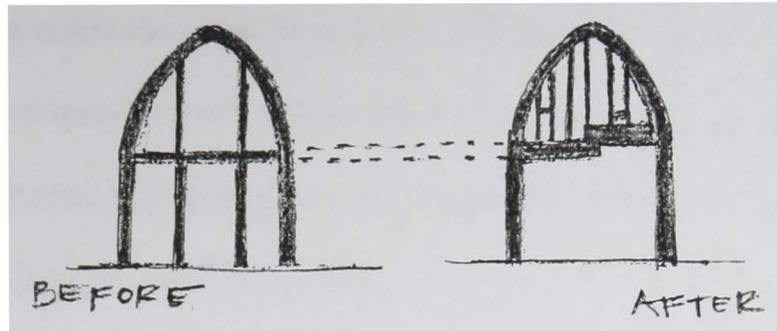


Figure 5.17 North facade, Scarpa (1956), Castelvechio
Source: Murphy, 26, 27.



Figures 5.18 Sketch of window comparison (1924 and 1956), Castelvecchio
Sketch by Karen Eisele

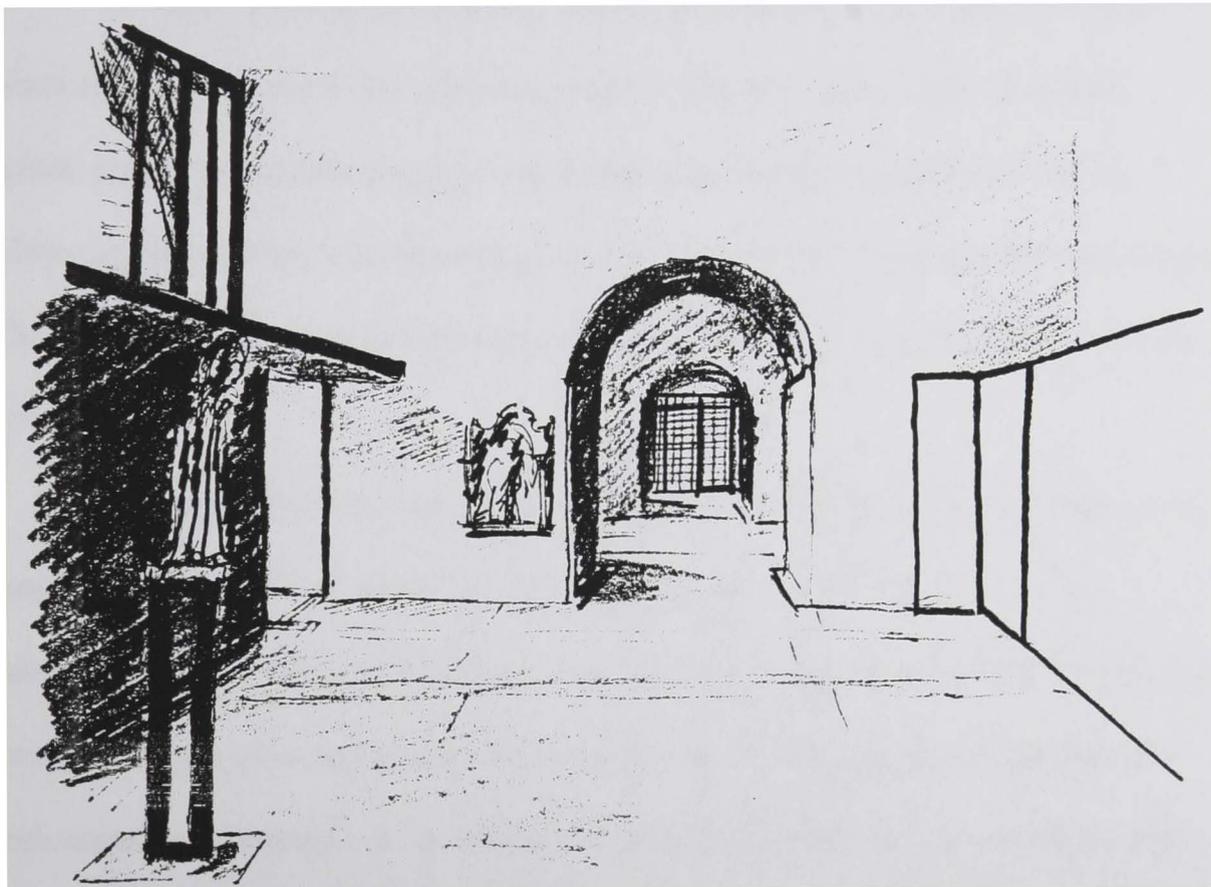


Figure 5.19 Sketch of middle gallery, Scarpa (1956), Castelvecchio
Sketch by Karen Eisele

10. The use of light can also be seen as a layering device. Figure 5.18 shows the middle gallery, which used to be the entrance, where Scarpa has blocked the lower doors so that light enters the space from above. This recreates the source of gothic lighting which corresponds to the gothic exhibit in that space. The gallery with the sacellum space also has light from above due to the placement of the windows and the way the sacellum punches through the wall.

Sequence

1. When entering the complex through the central tower in the outer wall, there are many elements that reinforce direction and movement. The Cangrande space, set at the opposite end from where the landscaping and pathways lead the visitor to the entrance, is a sequencing method (Figure 5.5). Imposing and unusual the Cangrande space focuses the attention and creates anticipation to reach this space on ones journey.

2. Scarpa did more than create anticipation through his choice of entrance, he gave order and imposed control of movement through the museum. When he relocated the entrance from the central axis, imposed by the main entrance through the city wall and the three bay gothic window in the center of the facade, to the off-axis non-monumental entrance at the northwest corner, he gained control over the visitors movement through the space (Figure 5.20). Not only is the monumental three bay

window no longer the entrance but it is removed altogether from the path by use of the parallel hedges and low wall in front of the facade.



Figure 5.20 Comparison of entrance and resulting circulation between Avena's and Scarpa's plans.
Sketch by Karen Eisele

3. The entrance door itself (Figure 5.21) is another interesting example of sequencing and Scarpa's control of path. The element that divides the entrance moves from the outside to the inside and sets the stage for the interior control of movement through the museum. This same form is seen repeatedly in Scarpa's design. This strict geometrical form makes one aware of sharp, forced movement, as though Scarpa is making sure one is conscious of the next view. In contrast he uses the 30/60 angled pattern from the Reggia (Figure 5.6) to show unconscious, flowing, organic movement as in the first step of the tower.

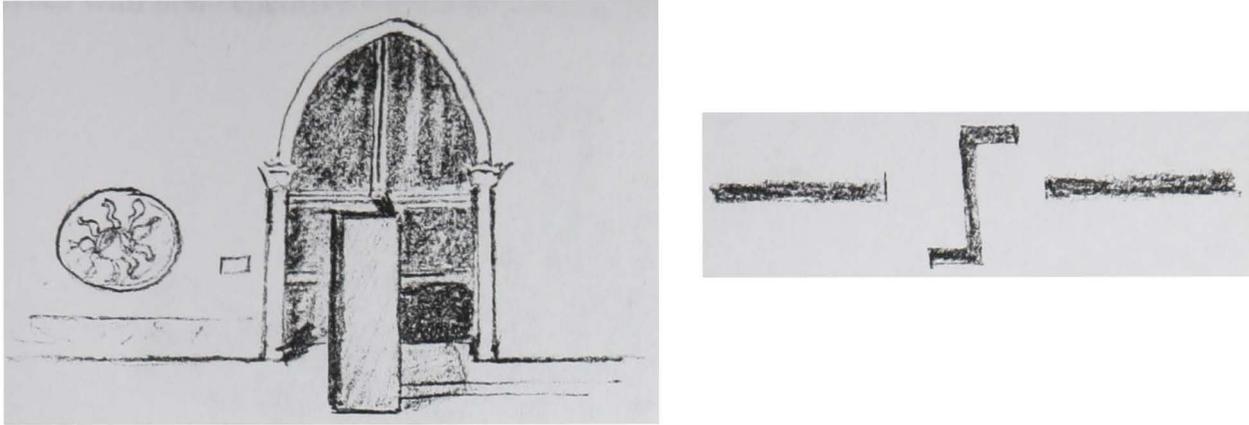


Figure 5.21 Main entrance elevation and plan, (1956), Castelvecchio
Sketch by Karen Eisele

4. The Cangrande area is an interesting example of sequence (Figure 5.12). This pivotal point to the whole complex is experienced many times and in a variety of ways. It is reminiscent of the labyrinth effect of sequencing discussed in the last chapter. The museum is a maze that one winds through, and under, and above, but the Cangrande acts as a reference point.

5. In the interior of the museum Scarpa not only controls movement through the use of physical solids and voids, he also does so visually. The lines that he uses are clean and defined (Figures 5.22 and 5.23). These straight, bold lines without excess ornamentation result in focal points (Figure 5.25) rather than the eye having too much to absorb as in Avena's design (Figure 5.24). Scarpa has also moved the emphasis from the ceiling plane to the floor plane. In the gallery Scarpa has removed the multi-beamed ceiling and replaced it with a single element that leads from room to room like

a needle threading the spaces together. The patterns of stone on the floor are separate pieces with non-repetitive widths reinforcing rhythm of movement.

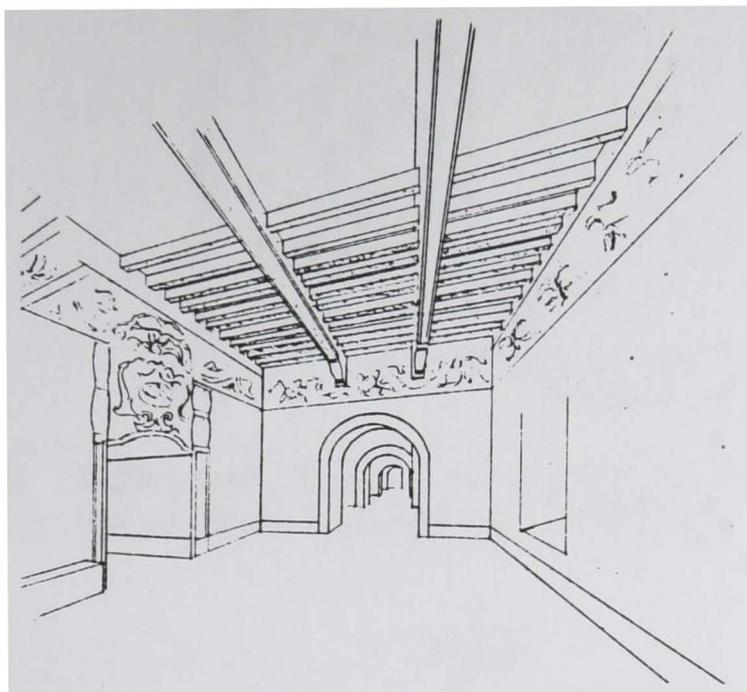


Figure 5.22 Gallery space, Avena (1924), Castelvecchio
Source: Karen Eisele Drawing - Miotto, 22.

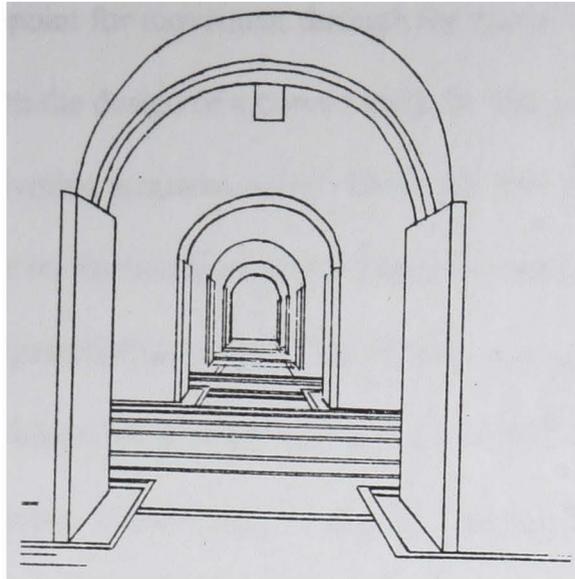


Figure 5.23 Gallery space, Scarpa (1956), Castelvecchio
Source: Karen Eisele Drawing - Murphy, 49.

Marker

1. When entering the fortress yard, the Cangrande space and framing system behind the gothic windows are immediately noticed (Figure 5.3) as both are unusual design elements. They exemplify the marker--when expected patterns are compromised.

2. On the south facade fronting the river, the area that Scarpa cut out of the fortress wall is also a marker (Figure 5.14). Seen from on the river or across it, this unusual architectural design catches ones attention as the new materials reinforce the elements and stimulate the curiosity.

3. The doorway to the Cangrande space from the gallery is also very unusual (Figure 5.25). The dark grill work and the placement of the door make it a visual

landmark and focal point for movement through the space. However, Scarpa has gone further than that with the design of a curved track for the grill and the method that the door itself opens, pivoting around a point. These serve to focus the attention on the details and therefore on the whole museum. The grill covering serves another function; keeping one in the space before exiting. Rather than the expected exit or transitional doorway, Scarpa's design leads one to pause at a secondary focal point, the window to the castle ruins below. This 'memory' seen through a looking-glass sets one up for the artistic expression surrounding the Cangrande statue and the walk beneath the original fortress wall to the castle beyond.

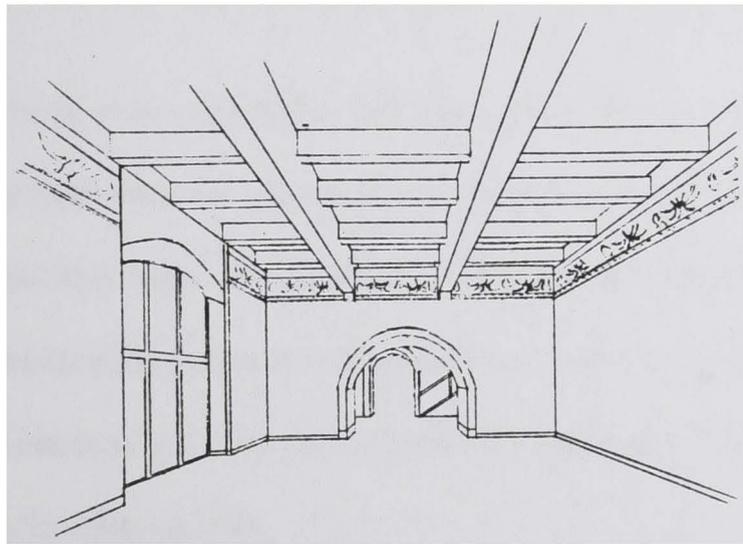


Figure 5.24 Gallery end bay, Avena (1924), Castelvecchio
Source: Karen Eisele Drawing - Miotto, 22.

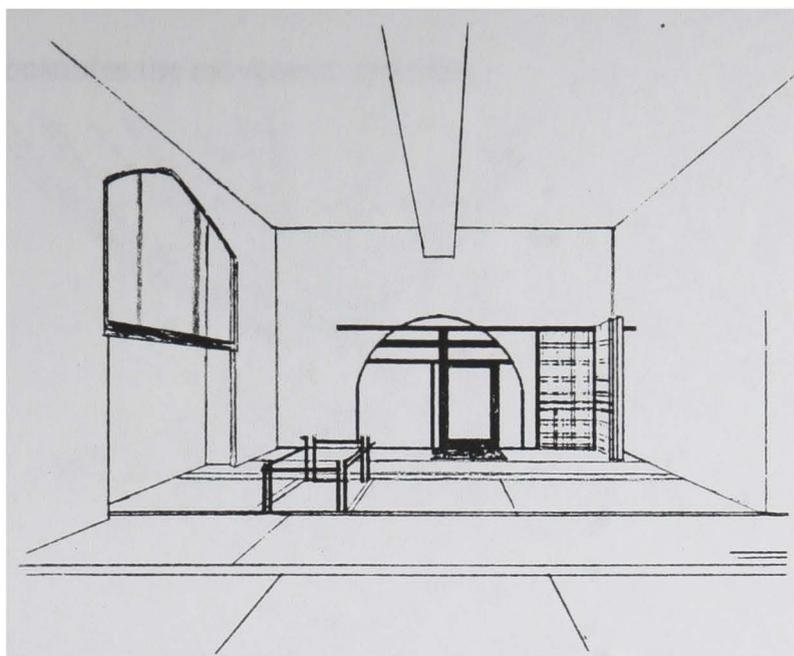


Figure 5.25 Gallery space before the Cangrande area, Scarpa (1956), Castelvecchio
Source: Karen Eisele Drawing - Murphy, 60, 75.

4. Scarpa seems especially fascinated with doorways. Not only does their shape change from the usual pattern one has come to expect, but they also are emphasized in other ways. The drawing of the gallery arches (Figure 5.23) show that Scarpa emphasized the arches by pulling the floor away from them and placing a stone block on the inside of the walls to reinforce the roughness of the stone and to provide protection to the historic walls.

5. Scarpa did not change the Reggia as much as he did the fortress. He did simplify the design elements by removing the patterned floor so that the ceiling plane and floor plane no longer compete (Figures 5.26 and 5.27) On the ground floor of the museum in the fortress galleries he chose to highlight the floor rather than the ceiling.

One wonders if his choice of highlighting the ceiling plane on this upper level
symbolically demonstrates the movement upwards.

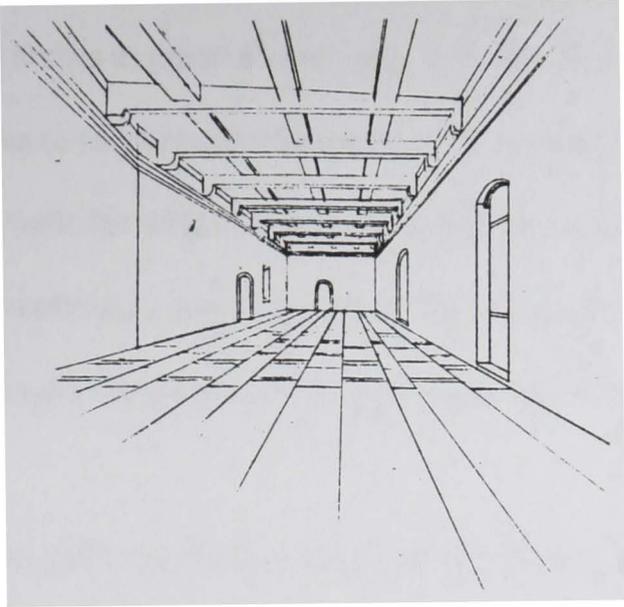


Figure 5.26 Reggia gallery space, Avena (1924), Castelvecchio
Source: Karen Eisele Drawing - Murphy, .

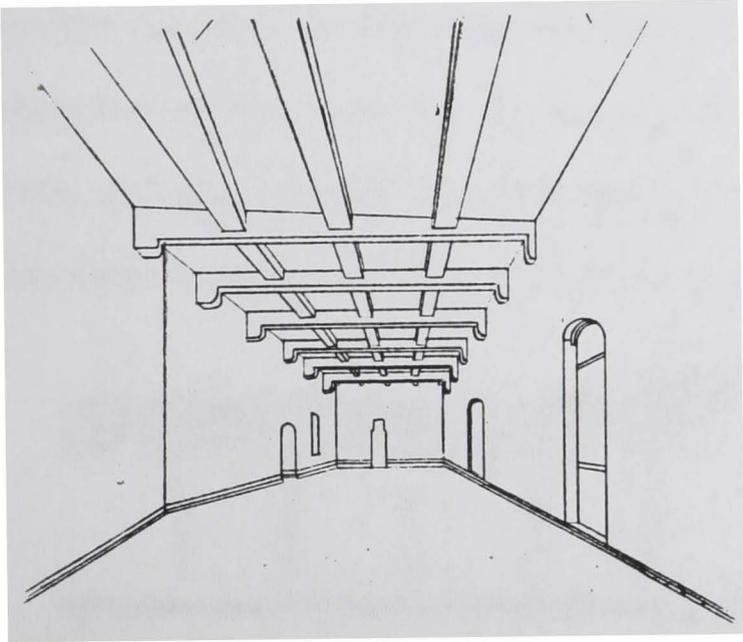


Figure 5.27 Reggia gallery space, Scarpa (1956), Castelvecchio
Source: Karen Eisele Drawing - Murphy, .

6. On the first level of the gallery Scarpa changes the emphasis. The walls are placed in the middle of the space dividing the pathway (Figure 5.29 and 5.30). In opposition to the arches at ground level, these walls are thin and don't reach the ceiling. This serves to reinforce the thickness of the walls fronting the river. With the placement of the walls the same length down the gallery, one is conscious of where the stone wall turns, creating a squeezing effect. This is reminiscent of Palladio's treatment of the loggia meeting the wall of the shops adjacent to the Basilica in Vicenza.

In the lower galleries, Scarpa concentrated attention of the floor plane contributing to a focus for viewing the statues placed at eye level. In the upper galleries, with the walls not reaching the ceiling, it is as though Scarpa wants one to be aware that they have risen to another level where even the art form is different; paintings are hung from the walls or on easels that Scarpa himself designed. Although one has physically, and perhaps mentally, risen, Scarpa endows the floor with a translucent red perhaps to reinforce that the path and the art has changed form.

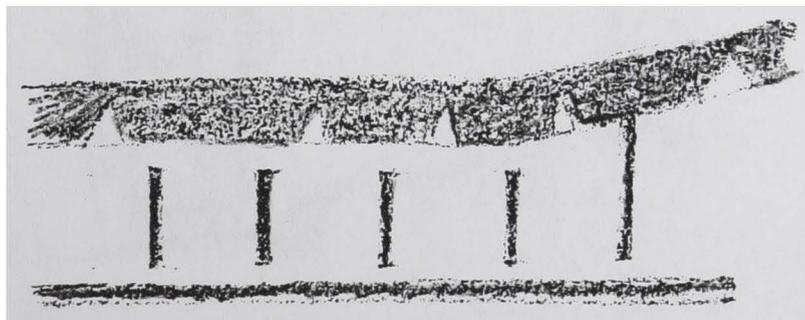


Figure 5.28 Fortress first level gallery, Scarpa (1956), Castelvecchio
Sketch by Karen Eisele

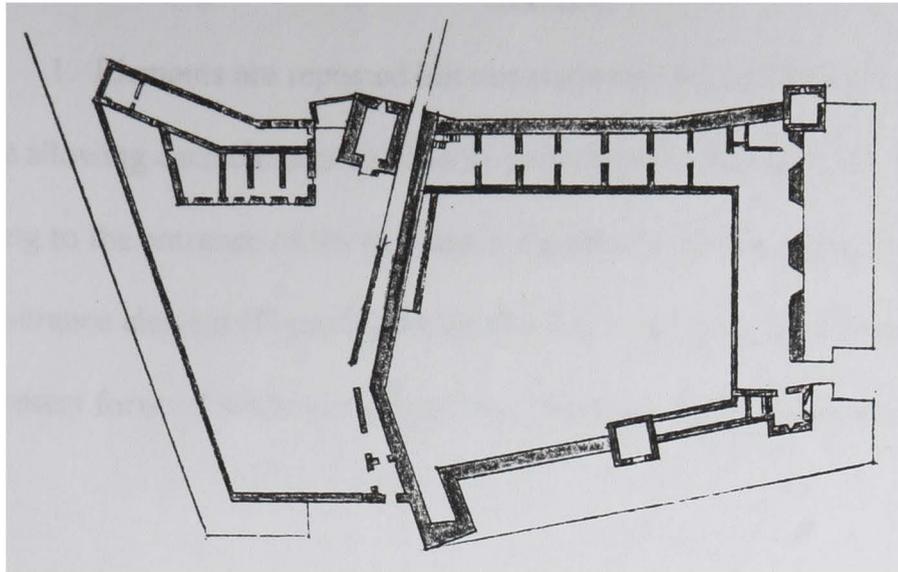


Figure 5.29 Fortress first level plan, Avena (1924), Castelvecchio
Source: Karen Eisele Drawing - Murphy, 20.

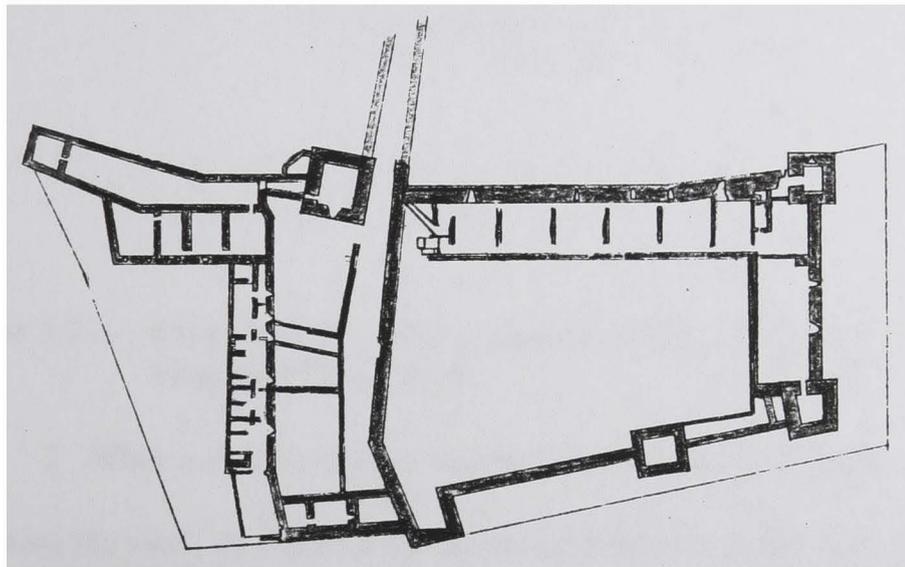


Figure 5.30 Fortress first level plan, Scarpa (1956), Castelvecchio
Source: Karen Eisele Drawing - Murphy, 20.

Integrity

1. Elements are repeated but not static making each piece a part of the whole while allowing each element to have its own identity (Figure 5.31). The pathway leading to the entrance of the museum is designed in the L-shape that corresponds to the entrance element (Figure 5.21) yet the size of each stone is irregular reinforcing the movement forward while complementing the pool and fountains flowing alongside.

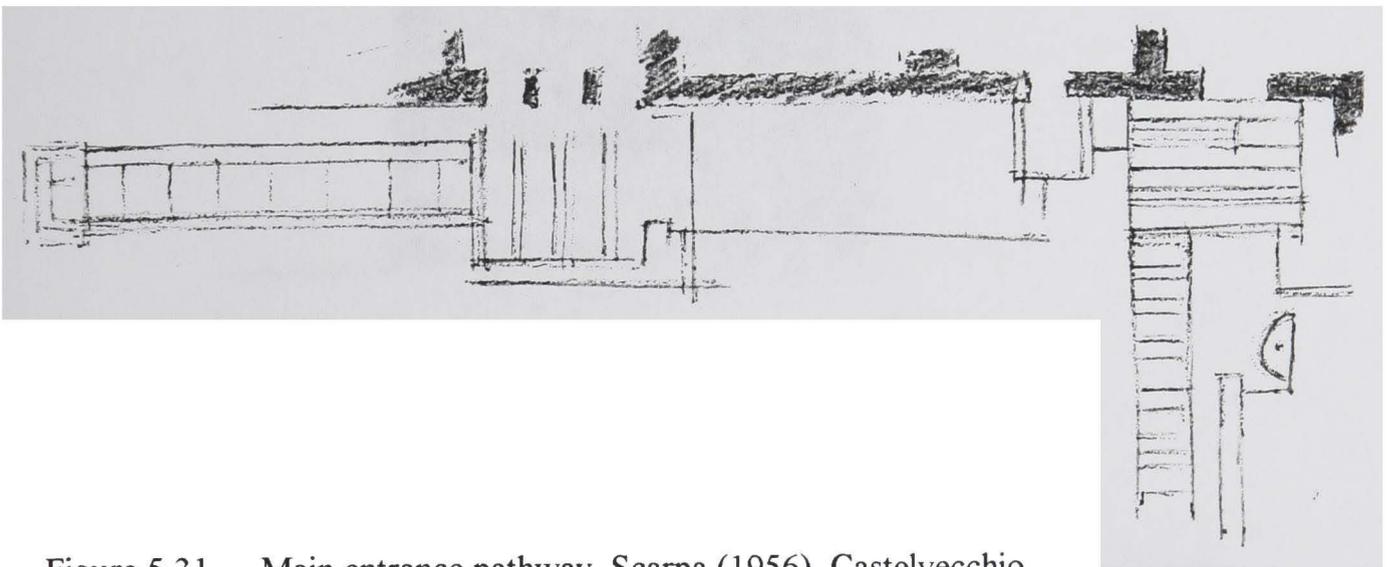


Figure 5.31 Main entrance pathway, Scarpa (1956), Castelvecchio
Sketch by Karen Eisele

2. When a new element is inserted into the historical, Scarpa highlights this by widening the joint. In Figure 5.23, the inserted floor is pulled back from the walls as if to float by, making it clear that the floor pattern is not original.

In the Sacellum space, this same detailing is used when Scarpa slightly changes the way the floor planes of the sacellum and gallery meet (Figure 5.32).

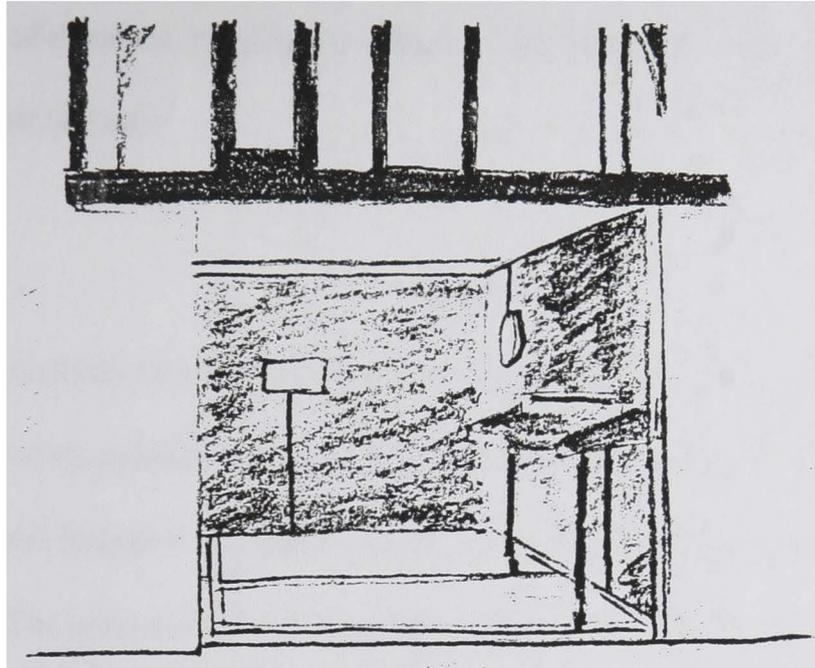


Figure 5.32 Sacellum space, Scarpa (1956), Castelvecchio
Sketch by Karen Eisele

3. On the south facade Scarpa highlights his work through the materials he chooses. The wood of the new opposed to the stone of the old leaves no doubt that a modern element has been inserted (Figure 5.24). Scarpa does not try to copy what happened in the past and leave the viewer wondering which is "real" and which is the copy; both are real.

4. On the first level of the fortress another example of integrity can be found. As noted before, the inserted walls are thinner than the original fortress walls, they do not touch either the side walls or ceiling, and they are placed with a grid like precision even as they almost touch the outer wall (Figure 5.28). This shows integrity by separation of elements, heightens emphasis of the angle, and allows each part to express itself honestly.

Scale

To understand scale as defined in this paper, one needs to understand the interaction of elements in a system. A good example of systems is given by David Peat and John Briggs in Turbulent Mirror. They consider how one measures a coastline. The general pattern is seen by a line on a map--or should one focus in closer and take into account each cliff, cave and boulder? Would it be even more accurate if the measurement was around each pebble; grain of sand; atom? This example shows that what could be taken as the whole can be looked at in deeper magnitudes.

At Castelvecchio the different magnitudes of scale can be seen through the use of the L-shaped form previously discussed. Scarpa uses the L-shape as the base of the Cangrande statue, on the south elevation to define the cut in the fortress wall (Figure 5.15), as the shape of the entrance pathway (Figure 5.31), the element that divides the entrance doorway (Figure 5.21) , and at a smaller magnitude is seen in the forms of

the window mullions and transoms (Figure 5.5). Abstractly this shape is used as a basis for patterns of movement (Figures 5.20, 5.21 and 5.28).

Proportion

Proportion is closely tied to the principle of scale. In all instances, not only is the form and its magnitude in evidence, but Scarpa does this with an eye to proportion. The L-shape discussed previously, while at different magnitudes is designed at the same proportional ratio of 1:3.

For example, Scarpa has taken the shape of the base for the Cangrande statue, flipped it, and placed it on the opposite facade as definition of edge. In comparing Figures 5.31 and 5.32, the lower part of Scarpa's 'screen' replicates the pattern of the entrance walkway. The back and forth motion that defines Scarpa's drawings also define and enrich his architecture.

In The Man-Made Object, George Braziller writes: "Tradition and memory represent the projection of identity into the time dimension, introducing another condition of effective relationship, that of association...both relates the experience to

some known patterning... (even if but intuitively or unconsciously registered.)”¹²⁸

Whether the memory of the past or present element is concrete or abstract,
Scarpa molds intuitive relationships through the use of proportional ratios.

¹²⁸The Man-Made Object, ed. Gyorgy Kepes “The Meeting: Man and Man-Made Object; Architectural Implications” by Michael J. Blee (New York: George Braziller, Inc., 1966), 80-1.

CHAPTER VI

PIAZZA DEI SIGNORI, VICENZA, ITALY

SITE FOR APPLICATION OF PROCESS

This site was chosen for the device to test this thesis for a variety of reasons; like Castelvechio, Piazza dei Signori is located in a historic area and contains an element of falseness. The site has changed over time and encompasses Palladio's Basilica. As the Basilica is considered one the Palladio's greatest works, how does one approach a site of such historic magnitude? Or more importantly, how would one interpret Scarpa's approach to this site based on his past design work? The author was fortunate to be part of a design class from Texas Tech University studying in Vicenza in July and August of 1995 and was able to study the site first hand.

History of Vicenza

The history of Vicenza is one of turmoil the city was forever caught between warring factions. The location of Vicenza is tucked into the northern Italian peninsula south of the Dolomite mountain range that separates Italy from Austria. It is away from Rome but very near Venice which was a great power when domination of the world was achieved through the ability to control the seas.

Vicenza progressed from being a municipium of Rome in 49 BC to asking Venice for protection in 1404 AD. The two cities had an interesting relationship.

Although Vicenza asked Venice for protection, Venice did not think much of the city. Venice's focus was on the water not the land coupled with the fact that Vicenza was far enough from Milan and Venice to be considered small and provincial. This was reinforced by Vicenza's economy traditionally based on agriculture and sheep farming. Even though Venice was a large part of Vicenza's self-perception, as they shared the same culture and language, and Vicenza not only relied on Venice's protection but access to their markets, Vicenza managed to maintain a separate identity.¹²⁹ In the Piazza dei Signori there are two columns that reinforce Vicenza's connection to Venice. The winged lion symbolizes Venice's rule over Vicenza and the statue of the redeemer is a "continuing if subtle reminder to Vicenza of the power and authority of Venice."¹³⁰ It is important to note that while Venice is important to Vicenza and they are proud of the connection, they are not sycophants. Architecture for example diverged from the Venetian gothic during the quattrecento. James S. Grubb who wrote Firstborn of Venice , has two suggestions regarding this change. One is that it was deliberate due to a "swell of partisan hostility to Venice," or that the local preferences changed and Venice had no other design alternative to offer.¹³¹ However, another explanation might be the suggestion that it was merely a subtle statement of independence. Venice and Vicenza were necessary evils for each other. Venice was

¹²⁹James S. Grubb, Firstborn of Venice: Vicenza in the Early Renaissance State (London: The Johns Hopkins University Press, 1988), 6, 19.

¹³⁰Michael Wright, "Palladian City of the Veneto" Country Life 169/4366 (April 1981): 1091.

condescending but reluctantly acknowledged Vicenza's positive aspect, the access to land routes. It basically left Vicenza alone and would only step in to govern when things got out of hand. Vicenza was conscious of its own identity which can be seen by the fact that they governed by custom yet never wrote down what these customs were. This made it hard for Venice to pin Vicenza down. The movement away from Venetian gothic, therefore, might merely be another way to express individuality. In fact, this might also explain the reason that Palladio was chosen for the Ragione project. Notwithstanding the power of patronship, Palladio was a relatively untried architect as opposed to the more established Serlio or Romano.

Piazza dei Signori

The Piazza dei Signore has been called "one of the greatest open spaces in any European city."¹³² Although it has evolved over time, it has basically stayed the same.

- a. Corso Palladio,
- b. Palatium Vetus,
- c. Piazza dei Signore,
- d. Piazza Erbe,
- e. Bissari house and towers,
- f. Torre del Bissari,

¹³¹Grubb, 170.

¹³²Wright, 1091.

- g. Retrone River,
- h. Palatium Communis,
- i. Piazza Biade,
- j. Piazzette Palladio,
- k. Torre del Girone,

As a quick overview to the area: From 1222 to 1226 the Palatium Vetus and Palatium Communis were joined to form an underground meeting place called Sala dei Quattrocento. In 1236 Ezzelino da Romano destroyed the area and it was rebuilt. The area was also destroyed in 1450 and the rebuilding lasted until the 1460's. In 1493 the Arco degli Zavattoeri was constructed to connect s. Loggia and Torre del Girone and in 1496 the loggia that surrounded the Ragione collapsed. Andre Palladio was commissioned to rebuild the Loggia in 1549 which is the Basilica that we see in the Piazza today. From 1651 through 1656 new prisons were constructed around Torre del Girone but were later demolished in 1884. In 1799 Palazzo Podestriile which sat East of the Basilica burned and was again rebuilt. During WWII, in 1945, the allies bombed the Piazza destroying the Basilica roof and the Palazzo. The Italian architect Forlati built the current building in the area of the destroyed Palazzo (Figures 6.1, 6.2 and 6.3) in the 1950's.¹³³

¹³³“Sabiem Prize—Architecture in Motion 1995: Through History Architectural design context for I.U.A. V. and Milan Polytechnic School students for access definition to Basilica-Palladiana-di-Vicenza's museum spaces.”, Translated by Franca Stocco (Milano, Sabiem S.r.l., Istituto Universitario di Architettura, Venezia)

Piazza dei Signori Today

Currently, the Piazza dei Signori area is made up of four adjoining piazzas, the Piazza dei Signori itself to the north (Figure 6.4), the Piazza Biade to the east, the Piazza Erbe (Figure 6.5) to the south and the Piazzetta Palladio to the west (Figure 6.6). In the middle of these piazzas stands the Basilica, Torre del Bissari, Torre del Girone, and the Palazzo Degli Uffici. On the north side of Piazza dei Signore, is Palladio's Loggia del Capitaniato (Figure 6.4, far left). To the east, south, and west, are various structures of traditional vernacular construction, with public shopping on the ground floor and residential or private offices above. Piazza Biade also fronts a

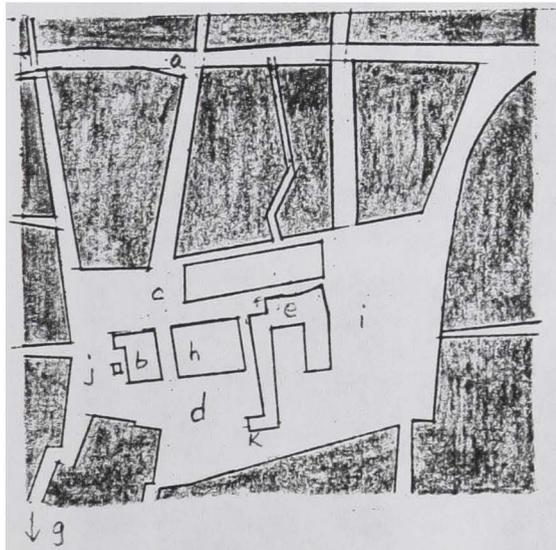


Figure 6.1 Piazza dei Signori plan (1200's), Vicenza
Source: Karen Eisele Drawing - "Sabiem Prize—Architecture in motion 1995: Architectural Design context for I.U.A.V. and Milan Polytechnic School students." Translated by Franca Stocco

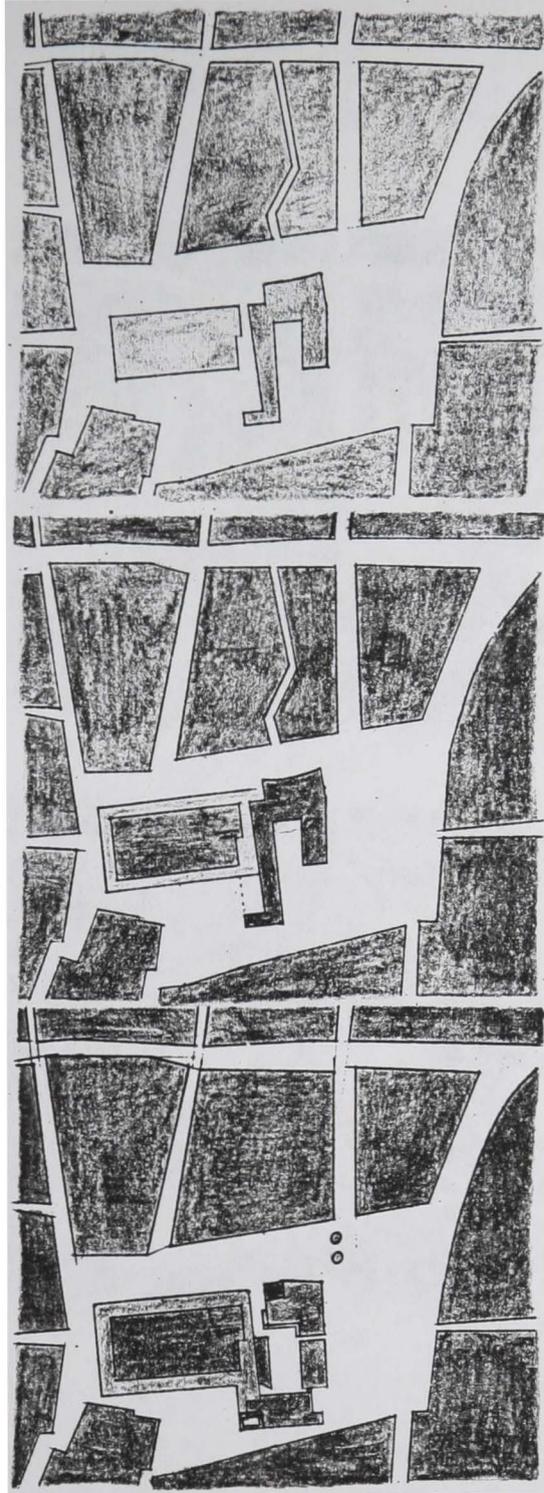


Figure 6.2 Piazza dei Signori plans (122 through 1546), Vicenza
Source: Karen Eisele Drawing - Sabiem Prize

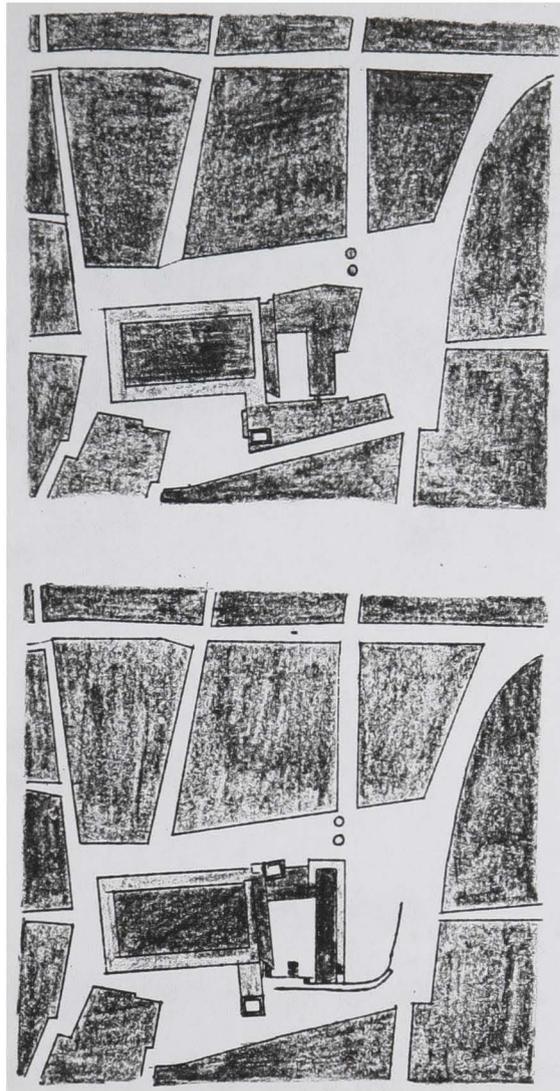


Figure 6.3 Piazza dei Signori plans (1884 through 1996), Vicenza
Source: Karen Eisele Drawing - Sabiem Prize

beautiful little church tucked between the buildings. To the far eastern edge of Piazza dei Signori where it meets the Piazza Biade resides the two columns dedicated to Venice.



Figure 6.4 Piazza dei Signori (1995), Vicenza
Sketch by Karen Eisele

Pedestrian Traffic

The movement of pedestrians through the piazza is shown in Figure 6.7. In the summer, when the location of the sun versus the shade is important due to the high temperatures of the area, the location of the buildings have a direct impact on the movement through the area. People are prone to hug the shaded areas and if crossing the piazza, to do so in the shortest distance. Even in the evening when the sun does not pose a factor, people do not linger in the center of the piazza. The spaces where

there is more varied movement occurs at the southwest corner in Piazzetta Palladio.

This space is smaller and therefore more comfortable to walk through the center.

On the southeast side, in Piazza Biade, a public street runs on one edge of the piazza which is otherwise pedestrian only. While traffic is light, the street unconsciously affects people to stay along the sides and cross over in a direct path. Although there is shopping on this side of the piazza, here it is more sporadic and starts to change from the window shopping variety of the southwest side to businesses that are more service oriented, i.e., cleaners, travel agents. The space is smaller than the Piazza dei Signori but larger than Piazzetta Palladio and Piazza Erbe (Figures 6.5 and 6.6). There is a level change to the southeast which has been handled with a sheer wall and railing which acts to stop any easy flow across the space.



Figure 6.5 Piazza Erbe, (1995), Vicenza
Sketch by Karen Eisele



Figure 6.6 Piazzette Palladio (1995), Vicenza
Sketch by Karen Eisele

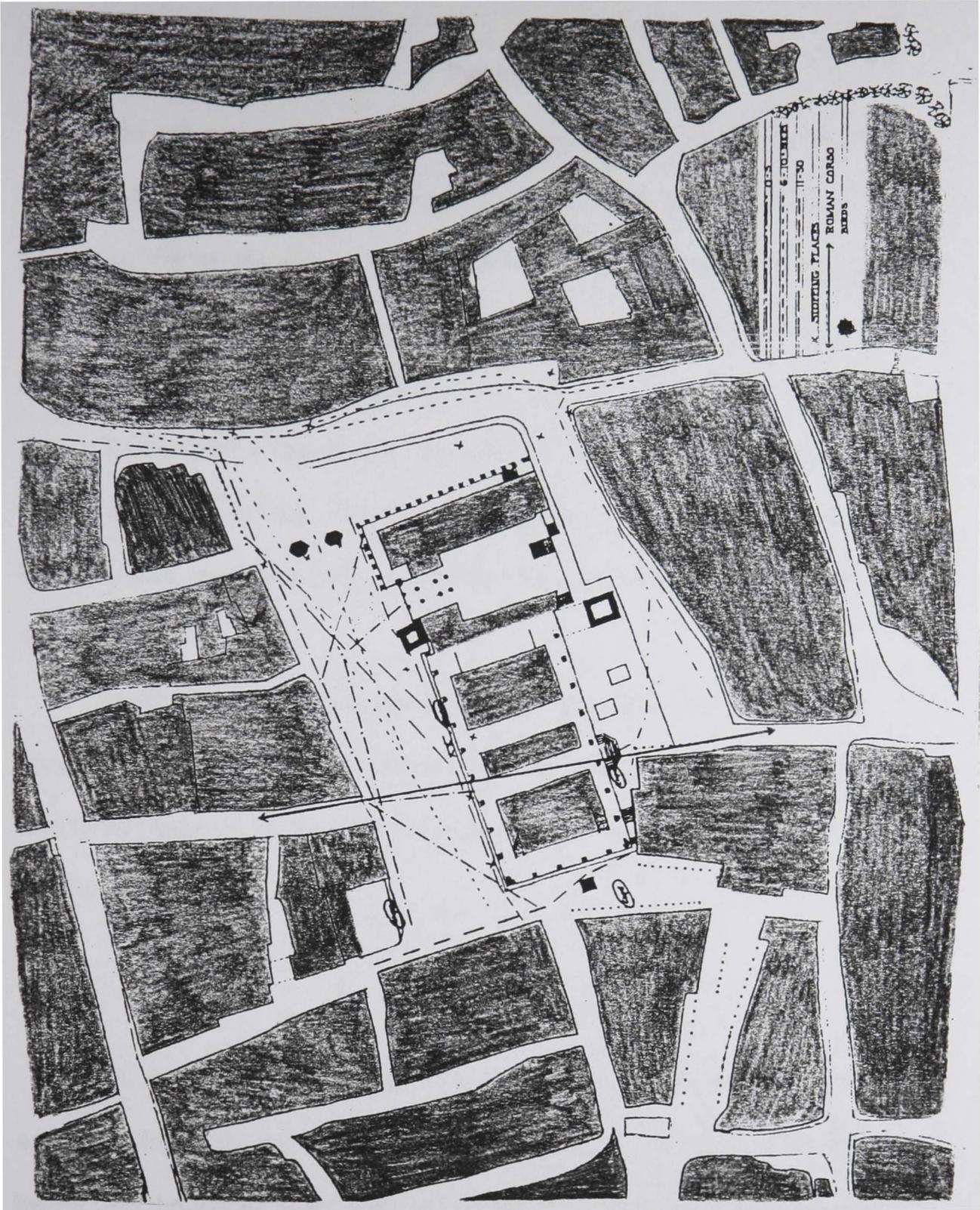


Figure 6.7 Piazza dei Signori and surrounding area, (1995), Vicenza
Source: Author on-site analysis

Parking

The only parking on the piazza is on the east side and the side south of the Basilica where the street function changes to shared activity rather than solely pedestrian. On the east side in piazza Biade, the parking is parallel and relatively light. Occasionally a city vehicle will park next to the Degli Uffici and the bus route stops on the piazza next to the Uffici's loggia.

To the south in Piazza Erbe, the parking is heavier and encompasses both parallel and angled parking. The parked cars dominate this space and while on one hand they give a backdoor feel to the Basilica, they also serve to enclose the space more intimately.

Another form of parking in the area is for bikes and motorcycles. These congregate in three places: the northeast edge where the street bleeds into the piazza, next to the loggia on Piazza Biade and in the courtyard between the Uffici and the Basilica.

Activities

The Piazza dei Signore (Figure 6.8) is a connector space during the day with some shopping on the north side and the south side under the loggia of the Basilica. People pass through the space and occasionally linger next to the statues where there is always a flock of birds to be fed or next to the Basilica steps. The Basilica steps and

the steps of the Capitaniato across the piazza lend a place to sit and watch passerby's. Occasionally chairs for an outdoor cafe are set up by the Basilica and next to the Capitaniato is another outdoor restaurant with live music in the evenings. At night in the summer, the main lingering spot is in the northwest corner near Piazzetta Palladio.

The piazza is a fluid area, evidenced by changes in function. Every Tuesday and Thursday is market day and stalls are set up in piazza (Figure 6.9). It has also been used as a space for a stage with seating, an area to set up a large screen to watch soccer championships and next to the statues an area to place a rock climbing wall.

The southeast corner in Piazza Biade is more residential in feel, there is a beautiful small church and the commercial establishments are more service oriented as discussed above. The Degli Uffici supports the city offices where people do not linger after their business is taken care of. Although surrounded by a loggia, there is no direct route through the building like with the Basilica, and no steps, which reinforces the feel of a hallway rather than a spot to linger.

The southwest side of the area is joined by a winding street coming up from the River Retrone. Along this route stairs access the Basilica and the Piazza dei Signore beyond. Commercial but with a private feel, the bar under the stairs of the Basilica has a definite 'locals only' feel. The commercial shops are a pharmacy and fruit and vegetable market. More residential feel with private buildings and congested parking. A vegetable stand sits forlornly in the piazza Erbe and more often than not is closed.



Figure 6.8 Piazza dei Signori and surrounding area showing commercial versus residential breakdown (1995), Vicenza
Source: Author on-site analysis

Piazzetta Palladio is more commercial with clothing shops, gelato shops, leather goods, and jewelry. This is a good place to people watch because there are people coming from all directions, from the south up from the river and through the Basilica or Piazzetta Palladio, from the north down from the Corso Palladio or angling across the Piazza dei Signori. There are also several outdoor cafes and restaurants patronized by locals and visitors alike.

Lighting

The Piazzetta Palladio, and the northwest corner are the two most lighted areas at night. Besides the activity of people watching, the children play tag in the piazza, and the intimacy of Piazzetta Palladio lends itself well to a popular informal stage area.

Level Change

Adding to the dynamics of the space is the level change that the area experiences as it flows downward from the Corso Palladio to the Retrone. To the east of the Torre dei Bissari there is a 3" difference between the Piazza dei Signori as it moves into Piazza Biade. In the lowest eastern corner of Piazza Biade there is 7'-6" drop from the Piazza dei Signori level. In Piazza Erbe, there is an 8'-6" drop from the Piazza dei Signori.

Materials/Architecture

Paving

The paving is either stone or brick. The start of the brick seems to be defined by the edge of the piazza areas. An unconscious definition of space. Even in the northeast corner where the flow is ambiguous, so too is the pavement patterns between the brick and stone.

Buildings

The structures surrounding the Basilica on the east, south and west sides are rendered and painted the earth tone colors favored by this area and detailed with stone. The Basilica stands out with its white stone loggias and unusual green patina roofing. The brick structures of the towers reinforces their history and the white stone statues are visible by their contrasting color and separation from their surroundings.

The north side of the piazza is more gothic in design as opposed to the traditional vernacular surrounding the other sides. The difference in the two would be that vernacular is anonymous buildings pushed together with public access on the street and private above. Often there is an overhang that acts as a continuous portico for pedestrians. The venetian gothic architecture of the north side is more rigid and imposing. There is no friendly portico, instead the facade is sheer with “forbidding

portals and barred ground floor windows.”¹³⁴ They are private and therefore focus inwardly.

Commercial versus Residential

This was touched on above but it can be noted here that in looking at Figure 6.8, there is a definite change from one side of the piazza area to the other; from the northwest concentration of commercial businesses to the southeast emphasis on residential.

Analysis of Site Information

What can be learned from the above study of the site? First of all, the area has not changed much over time. The current front facade of the proposed site has not altered as much as the footprint has. Although we do not have any information about the former facades other than black and white line drawings (Figures 6.10 through 6.14), it could be inferred that the former palazzo and prison were either in the vernacular of the surrounding area, the grayish stone favored throughout the city or even the brick of the towers. The 1940's design solution using white stone causes the structure to compete, with a less pleasing result, the white stone of the Basilica. The Ufficio was erected after the allied bombing destroyed the former structure during WWII (Figure 6.15). The courtyard between it and the Basilica was capped and the

¹³⁴Grubb, 93.

unwieldy stair access to climb the seven foot level change has rendered it desolate (Figure 6.17). There is also an incongruence between the front facade of the building and the back elevation (Figure 6.16). This gives the impression of a movie set where it is reinforced that the main action happens on the other side of the building, and this is the back alley.

The space fronting Palazzo degli Uffizi is not used much either as the railing and public street curtails pedestrian traffic. Even when it is given a use, by children playing soccer, they are run off.

The loggia of the Uffizi building is not free flowing either due to the occasional parked car and the bicycle stands placed between the arches. The absence of the commercial aspect on the ground level creates a sudden change in this side of the piazza as opposed to the surrounding sides.

The next step would be to look at this site through the investigated process of Scarpa and find the opportunities for design that he might have embraced.

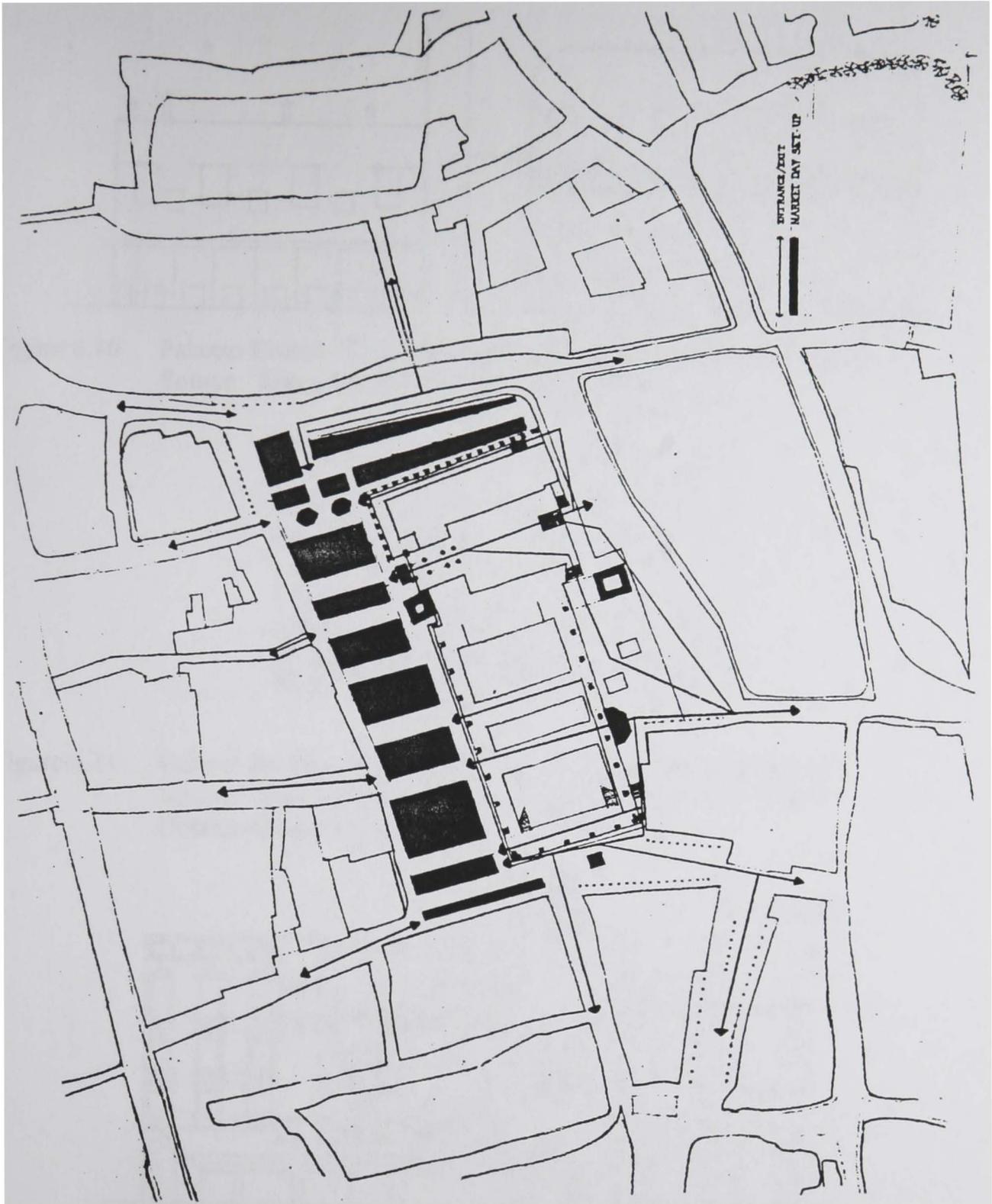


Figure 6.9 Piazza dei Signori and surrounding area, showing market-day set up and entrance/exit to the Piazza, (1995), Vicenza
Source: Author on-site analysis

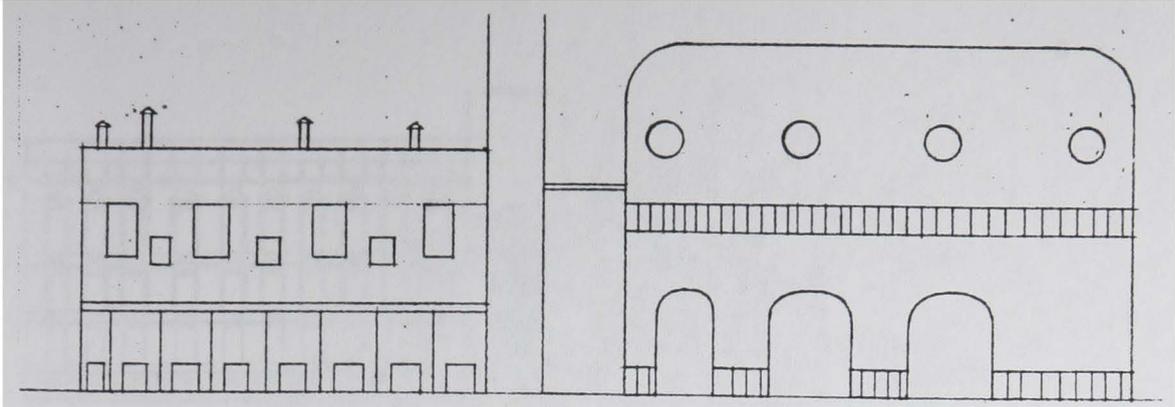


Figure 6.10 Palazzo Bissari, North elevation (1480), Piazza dei Signori, Vicenza
Source: Karen Eisele Drawing - Sabiem Prize

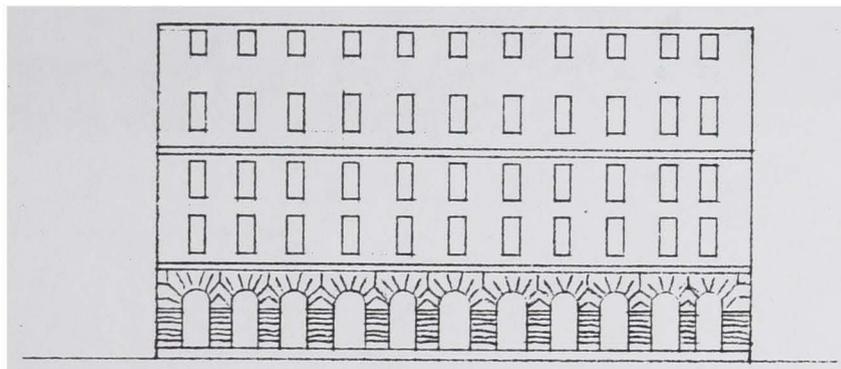


Figure 6.11 Palazzo del Podesta, North elevation (1611), Piazza dei Signori,
Source: Karen Eisele Drawing - *Attraverso la Storia* (Milano: CittaStudiEdizioni, 1995), 15.



Figure 6.12 Palazzo del Podesta, North elevation (1758), Piazza dei Signori,
Source: Karen Eisele Drawing - *Attraverso la Storia*, 15.

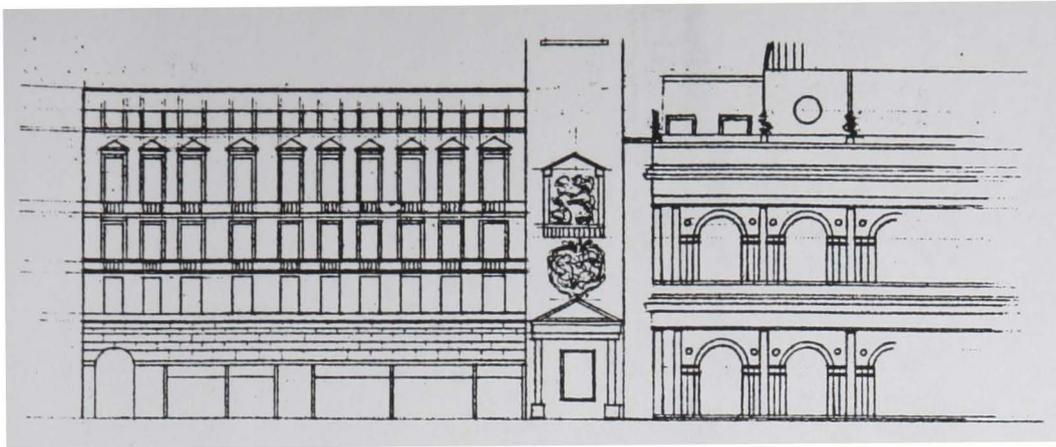


Figure 6.13 Palazzo degli Uffici, North elevation (1940), Piazza dei Signori
Source: Karen Eisele Drawing

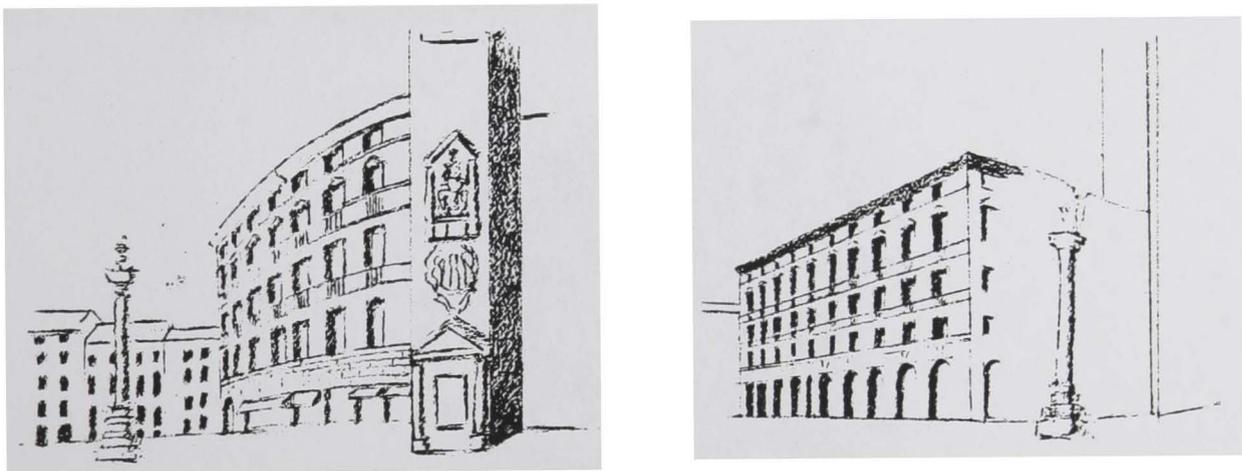


Figure 6.14 Palazzo degli Uffici, North and East perspectives, (1940) Piazza dei Signori, Vicenza
Source: Karen Eisele Drawing



Figure 6.15 East wall of the Basilica after bombing (1945). Piazza dei Signori, Vicenza
Source: Karen Eisele Drawing

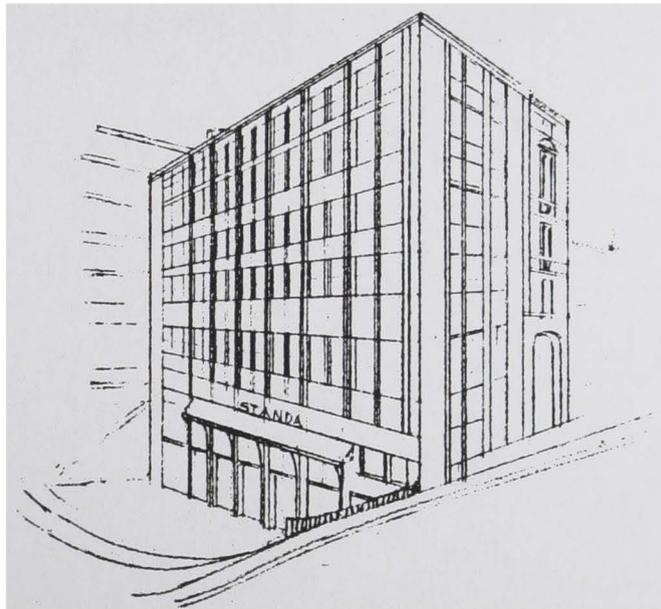


Figure 6.16 Palazzo degli Uffici, West perspective (1950), Piazza dei Signori Vicenza
Source: Karen Eisele Drawing

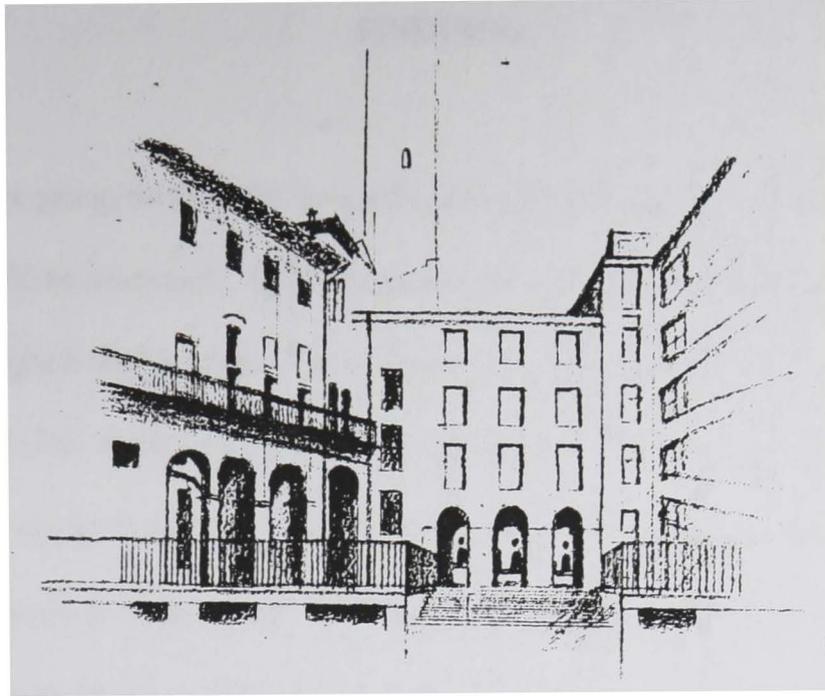


Figure 6.17 Corte dei Bissari, (1995), Piazza dei Signori, Vicenza
Source: Karen Eisele Drawing - Attraverso la Storia, 7.

CHAPTER VII

FINDINGS

Before going further, the question of Scarpa's design procedure as well as his process should be discussed. Did Scarpa design not only to affect the viewers awareness (right brain) but also with an approach that tapped into his own intuitiveness? The book Architecture in Details gives us some clues about his design process. He would first sketch the basic structure or surrounding buildings on tracing paper using heavy and light lines. The ideas that came from these lines were fleshed out with color in a method akin to figure/ground analysis. Off to the side he would draw details "so as to grasp the potential of the small part, which may be decisive for the rest....(he used) Bristol board (because) one can erase without entirely losing ones preliminary work, the first idea or drawing will serve as a reference."¹³⁵ From these drawings others would be made for the builders and artisans to use as working drawings.

Whether the above is indicative to using the right brain through impressions or not, although it is the opinion of the author that this is the case, the investigation of this thesis is one of affecting awareness. Therefore the quick sketch will be employed as a way to tap into the intuitive process.

¹³⁵Albertini, 23

Vicenza Investigation

In order to utilize what has been learned, the following series of sketches detail each of the six principles with regards to the Vicenza site. The method to be used here is to look at each of the six in terms of where at the site there would be opportunities to express them; a quick sketch analysis for intuitive impressions; and finally the sketch that details how they could be expressed.

Layer

1. Just as Scarpa strove to remove the false elements at Castelvecchio, the Palazzo Degli Uffici should be removed. From the plan and elevations (Figures 6.3 and 6.16) one can see that the current structure does not reflect the intentions of the past. The rest of this analysis will be based upon this assumption.

2. Layering can occur vertically from the Roman remains under the piazza, up through the present time and into the future. (Figure 7.1)

3. Figure 6.2 shows that at one time the Torre dei Bissari was separated from the Basilica. This separation can be demonstrated physically with an actual removal or symbolically through patterning. (Figure 7.2)

4. In 1546 there was an opening from the Basilica looking across Piazza Biade to the church on the other side of the piazza (Figure 6.2). There is an opportunity to symbolically show this (Figure 7.3).

5. The Palazzo that has traditionally been joined to the Torre dei Bissari, has not changed much over the centuries but it has expanded and grown in different directions. These past footprints can be demonstrated through layering. (Figure 7.3)

6. Just as Scarpa layered horizontally inside and outside of Castelvecchio's facade, that same layering process can be repeated here (Figure 7.4). The difference between Vicenza and Castelvecchio is that one is not trying to undermine the Basilica wall but emphasize it.

7. Another form that shows the layering process is patterning. In Vicenza, patterns can be emphasized with detailing the level changes, doorways, arches, and walls (Figures 7.3 and 7.4).

Sequence

1. As discussed above, sequence through time can be seen through the vertical and horizontal layers of the structures of the past and present.

2. At Castelvecchio, Scarpa controlled sequence of movement through the space. In Vicenza, this can be looked at in terms of paths physically through the space, connecting the three piazzas that are on the east side of the site (Figure 7.5).

3. Sequencing can also be shown with a connection of spaces between the towers, basilica, any new structure and the elements located underneath the piazza, (whether it is the cafe that is located there now and/or the Roman remains (Figure 7.6).

4. The visual connection of space deals with the overview as in the change of axis that Scarpa used at Castelvecchio. This can be accomplished near the Torre del Bissari, in the piazza Biade and near the columns so that when walking down from the Corso Palladio into the space, a visual connection to the other piazzas can be made (Figures 7.2 and 7.4)

5. What happens when there is a change in emphasis from horizontal to vertical or visa versa? Opportunities for design exist with the towers and elements that come into contact with them, the Roman remains under the courtyard, and when the levels change from one period to the next symbolically, or physically due to the level change of the piazza itself. (Figures 7.1, 7.2, and 7.7)

Marker

1. Marker can be used in emphasizing layering and/or materials where the tower is separated from the Basilica fronting the Piazza dei Signori, and/or the east wall of the Basilica that is now facing the rear courtyard. (Figure 7.4 and 7.8)

2. Emphasize the windows, doors, and walls. (Figure 7.9)

3. Unique bridge design that connects a new structure built on the old footprint of the prisons to the Torre del Girone or leads down to the excavated area. (Figure 7.7)

4. Where the Torre dei Bissari used to join the Piazza degli Uffici, a new element can connect. (Figure 7.2 and 7.8)

5. Put back the 'ghosts' or 'memories' of the past. This can be accomplished through forms, textures, windows, color, etc. (Figures 7.1, 7.8, and 7.9)

6. Create the transitional space that lends ambiguity yet focus to the whole such as the Cangrande space at Castelvecchio. (Figures 7.4, 7.4, and 7.9)

Integrity

1. Emphasize the joints of each element, especially when a new element embraces the old. (Figure 7.1, 7.2, 7.7, 7.8)

2. A datum that holds the design together like the beam threading through the fortress galleries at Castelvecchio. (Figure 7.10)

3. In order to focus on the Basilica wall, patterns should be devoid from the floor or ceiling plane allowing the Basilica to dominate. A 'screen' of the modern could be applied here as a foil or counterpoint to the Basilica. (Figure 7.10)

5. Removing the symmetrical emphasis of the old facade and inserting a non-symmetrical, separate, emphasis. (Figure 7.1, 7.2, and 7.3)

6. In past plans of the Palazzos that have occupied this site, one can see a definite change in the angle of the grid. This can be further emphasized as Scarpa highlighted the angular conditions at Castelvecchio. (Figure 7.11)

Scale

In the relationship of scale there are many opportunities in the Piazza site. The surroundings can be the impetus for design as Scarpa demonstrated at Possagno. Consider the expression of height and width based on the vernacular and classical architecture that surrounds the Piazza. The Basilica and towers are monumental to the space the intervention should complement, not compete.

Materials lend their own sense of scale in their physicality and use. Their size, shape, form, and texture gives reference to their surroundings. This can be expressed traditionally through the use of the material or can be altered as a marker—changing the expected patterns.

The scale of magnitudes is related to proportion. Just as Scarpa used the L-shape as a foil for the 30/60 degree angle that occurred historically in the space, there is such an opportunity in the Piazza. Shapes that occur in the Basilica, the serlio window for example, and shapes taken from past expressions can be utilized as the ‘monster’ that joins the past, present, and future. (Figures 7.1, 7.6 and 7.7)

Proportion

Scale is hard to discuss without the addition of proportion. Scarpa built at the human scale as discussed previously. Even with a monumental space there was always an element that related to humans. For example, the fortress courtyard of the north facade at Castelvecchio can support a monumental entrance but Scarpa designed the

entrance proportionally smaller. This is reminiscent of cathedrals with facade encompassing, grand detailing of the portals where the actual entry was a relatively small set of plain doors.

There is also an opportunity here to use Palladio's proportional numbers such as the perfect 6 and 1:2 ratio that was discussed in Chapter IV, or Scarpa's deviation of this theme with the 5.5 cm and 1:3 ration. Both could be used as foild to one another using the buffer or joint to separate and enhance the focus on each.

Whether in modern materials detailing or through expression and enhancement of past materials and methods, a proportional system, as one sees in Scarpa's work, is important for harmony and coherence.

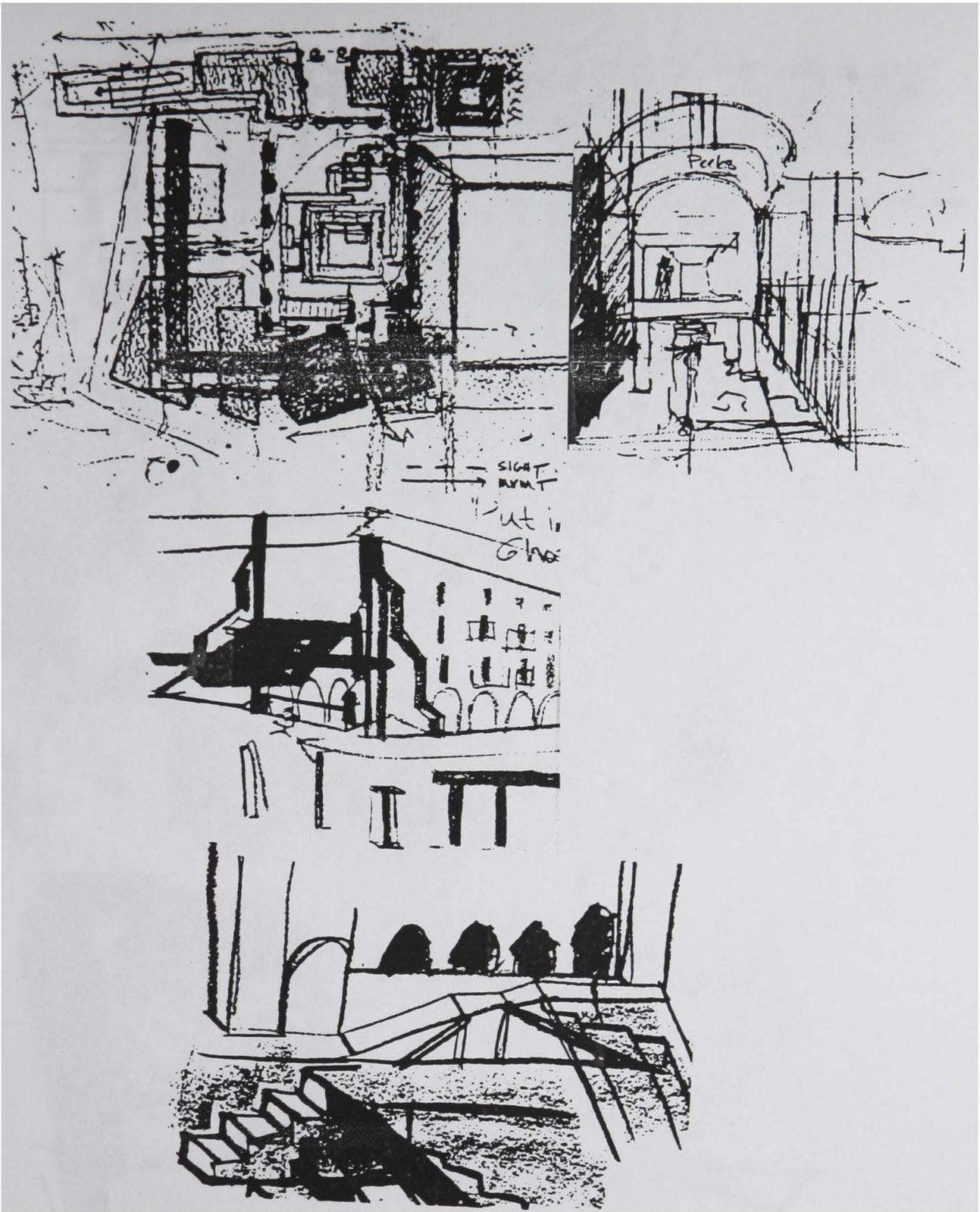


Figure 7.1 Author's investigative sketches #1

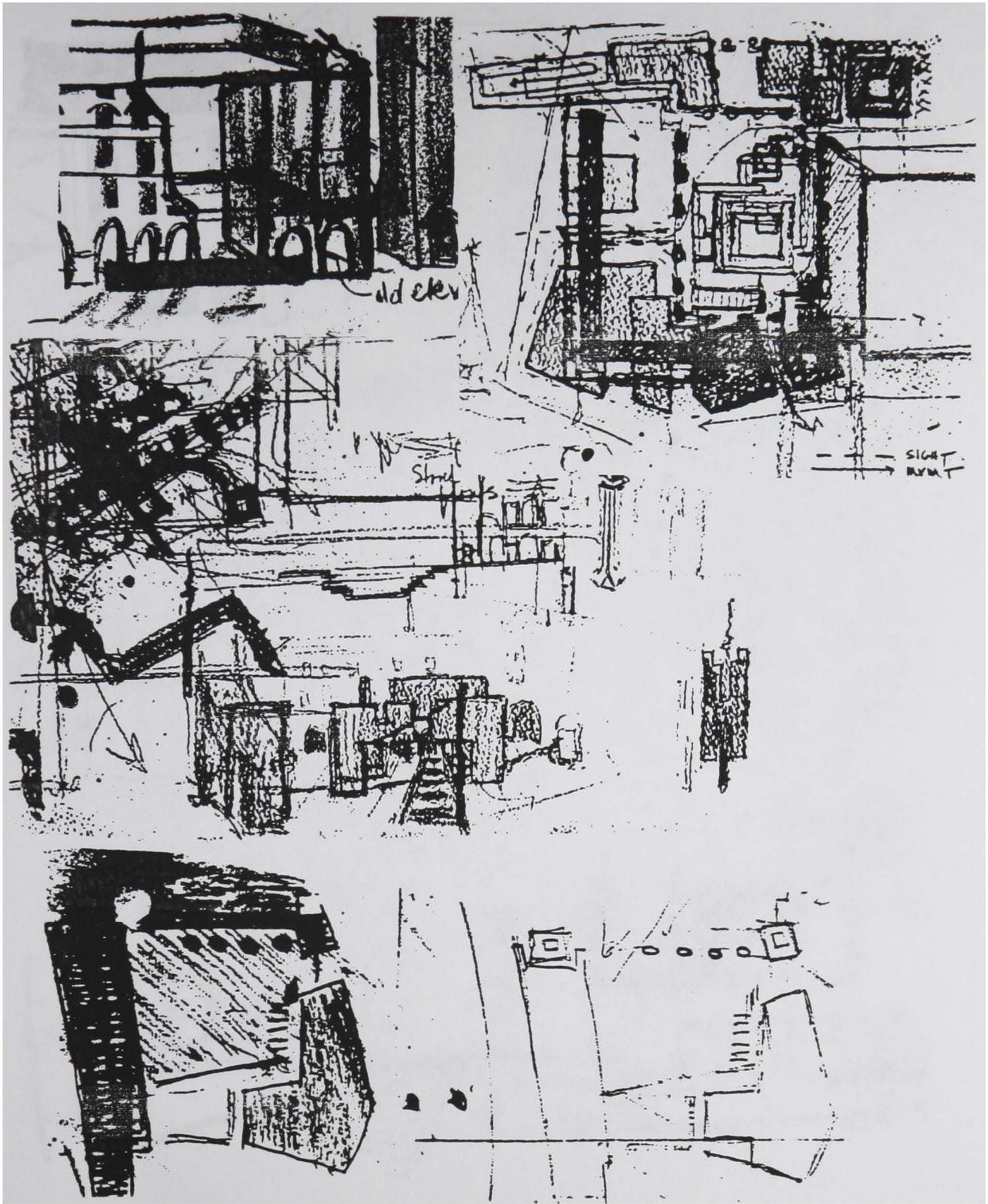


Figure 7.2 Author's investigative sketches #2

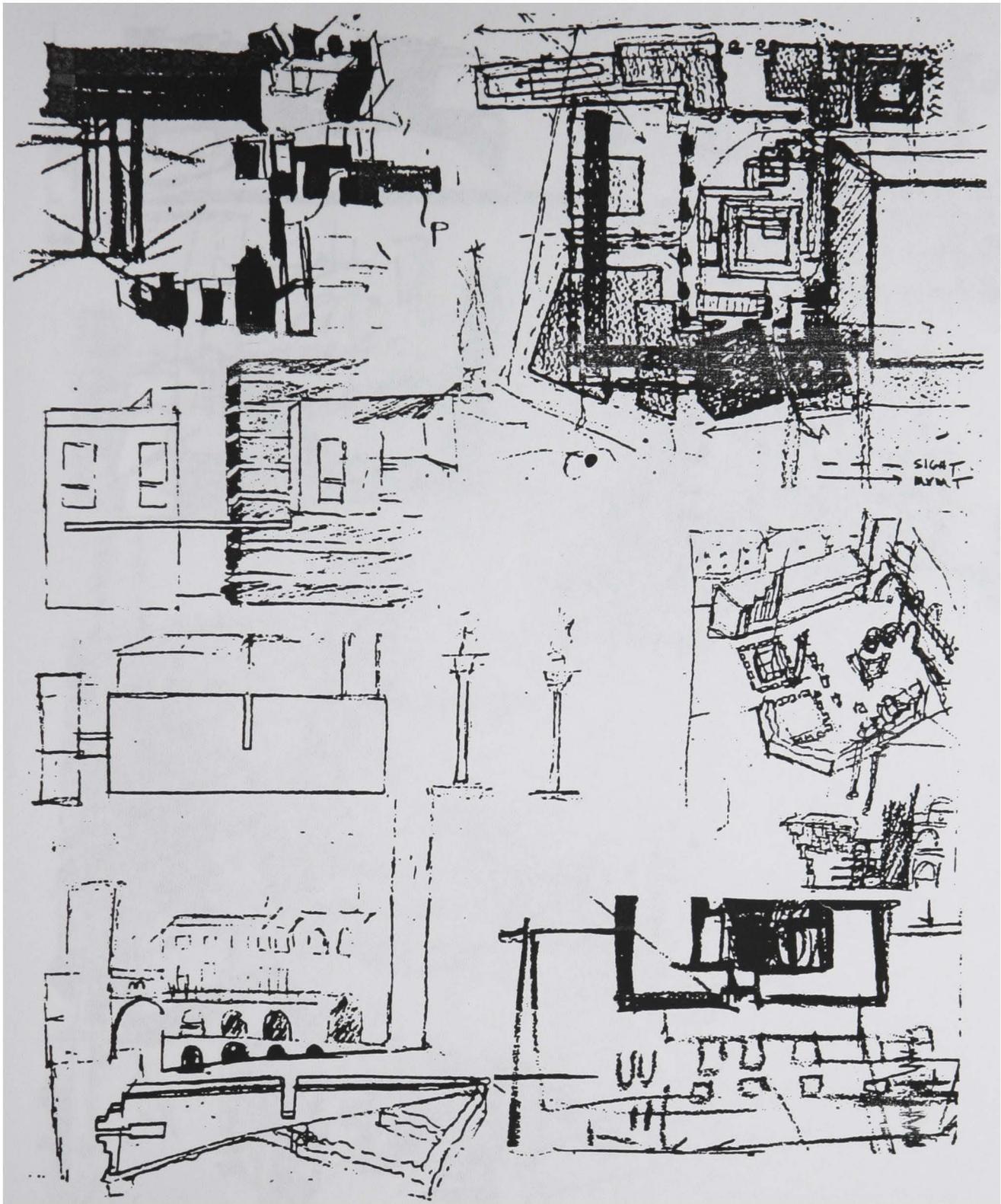


Figure 7.3 Author's investigative sketches #3

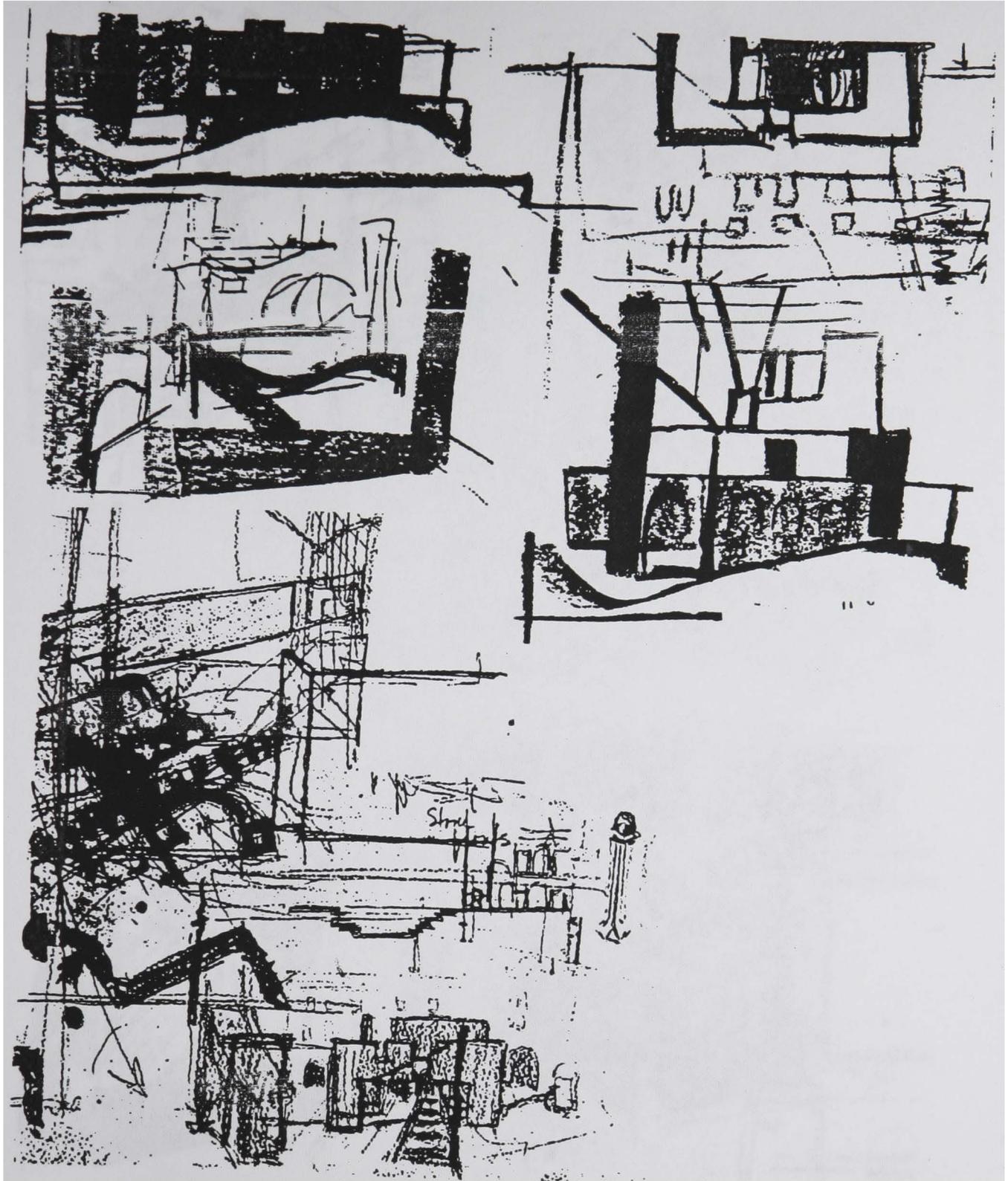


Figure 7.4 Author's investigative sketches #4

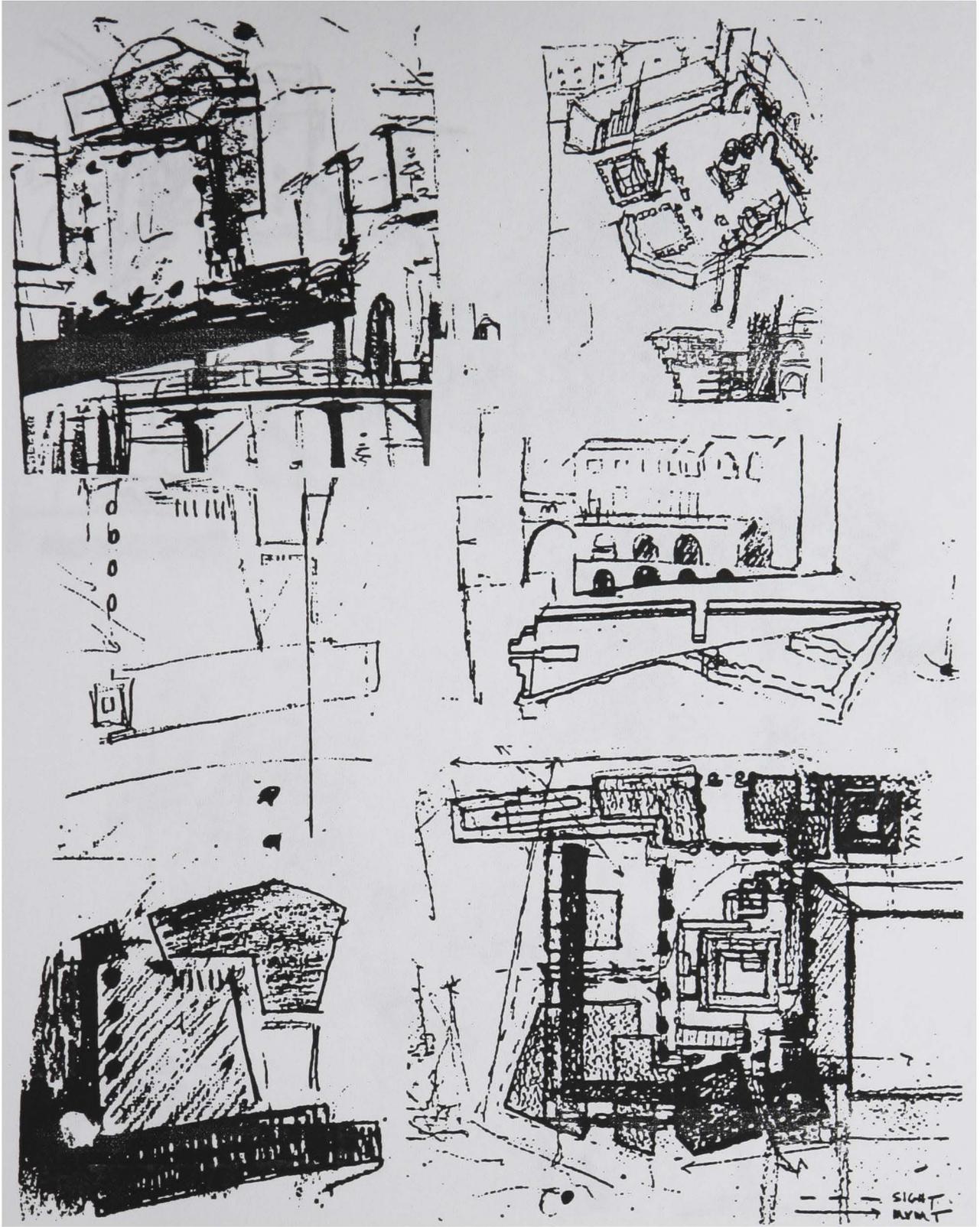


Figure 7.5 Author's investigative sketches #5

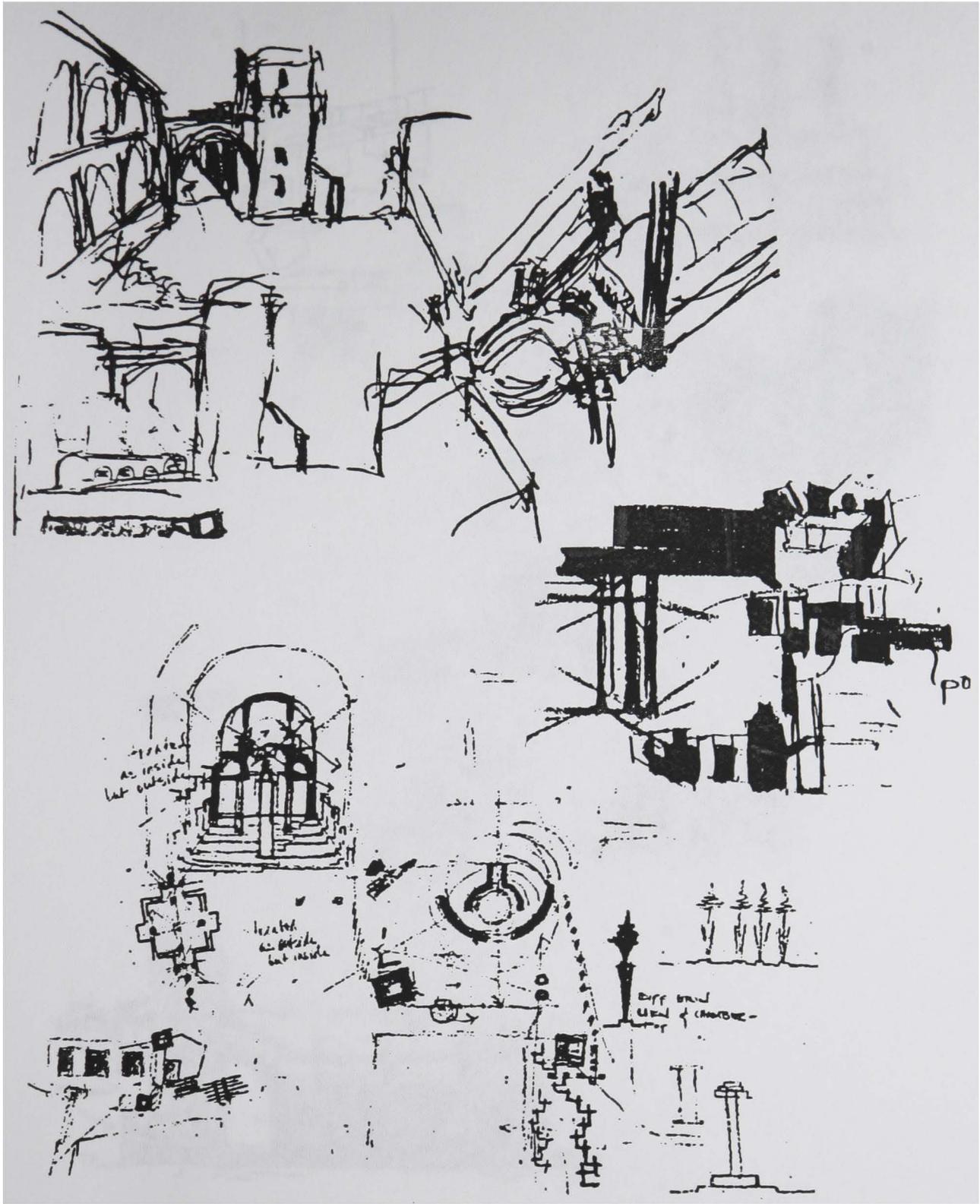


Figure 7.6 Author's investigative sketches #6

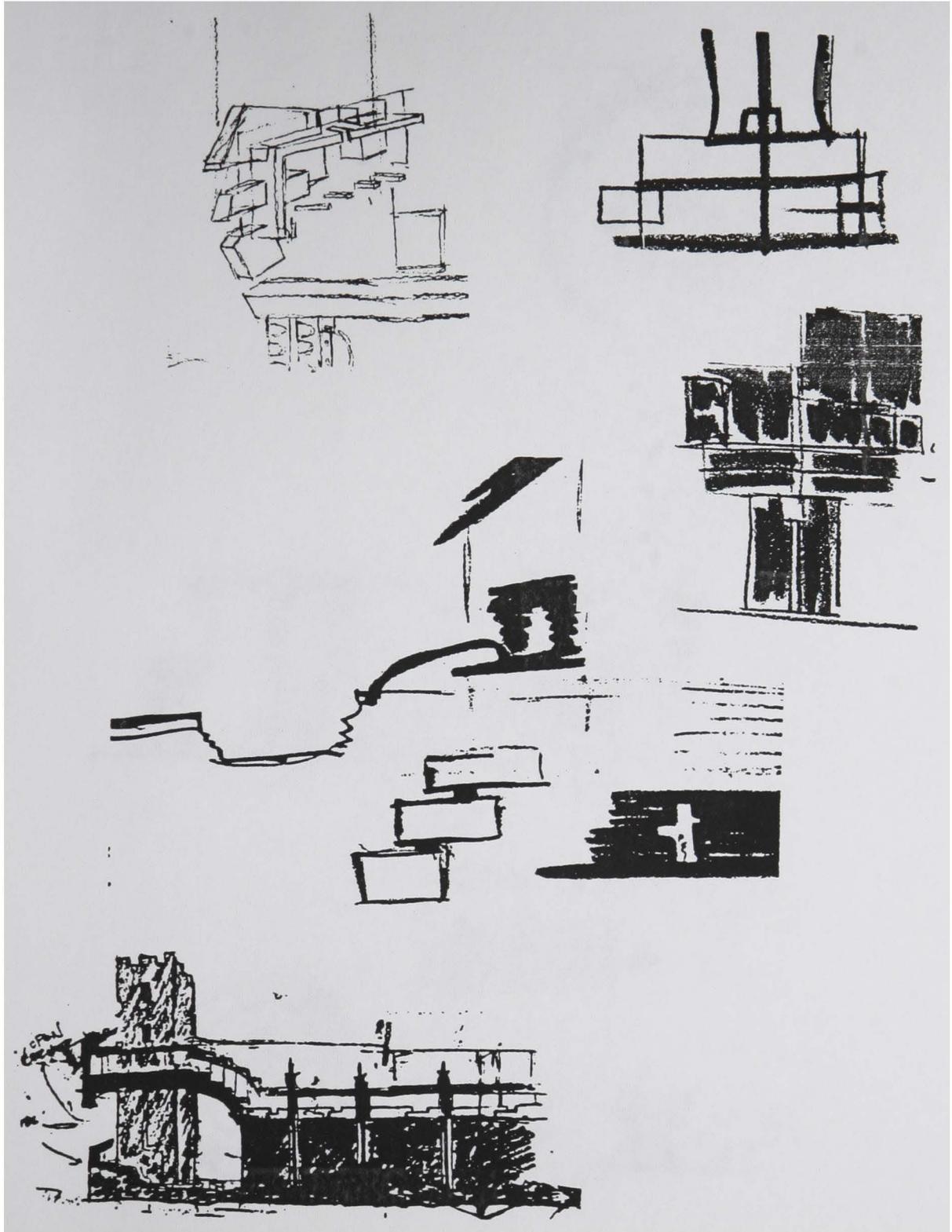


Figure 7.7 Author's investigative sketches #7

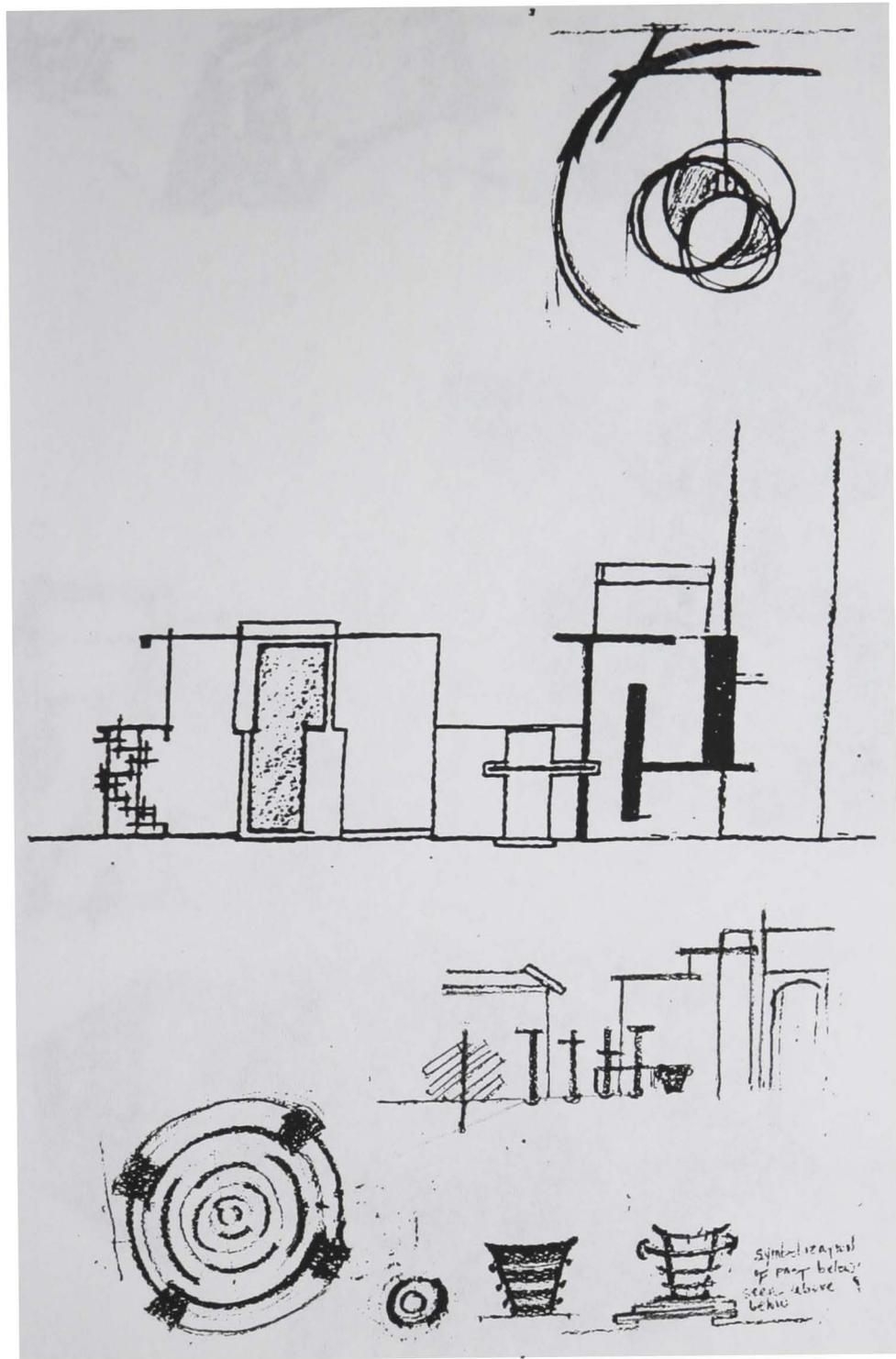


Figure 7.8 Author's investigative sketches #8

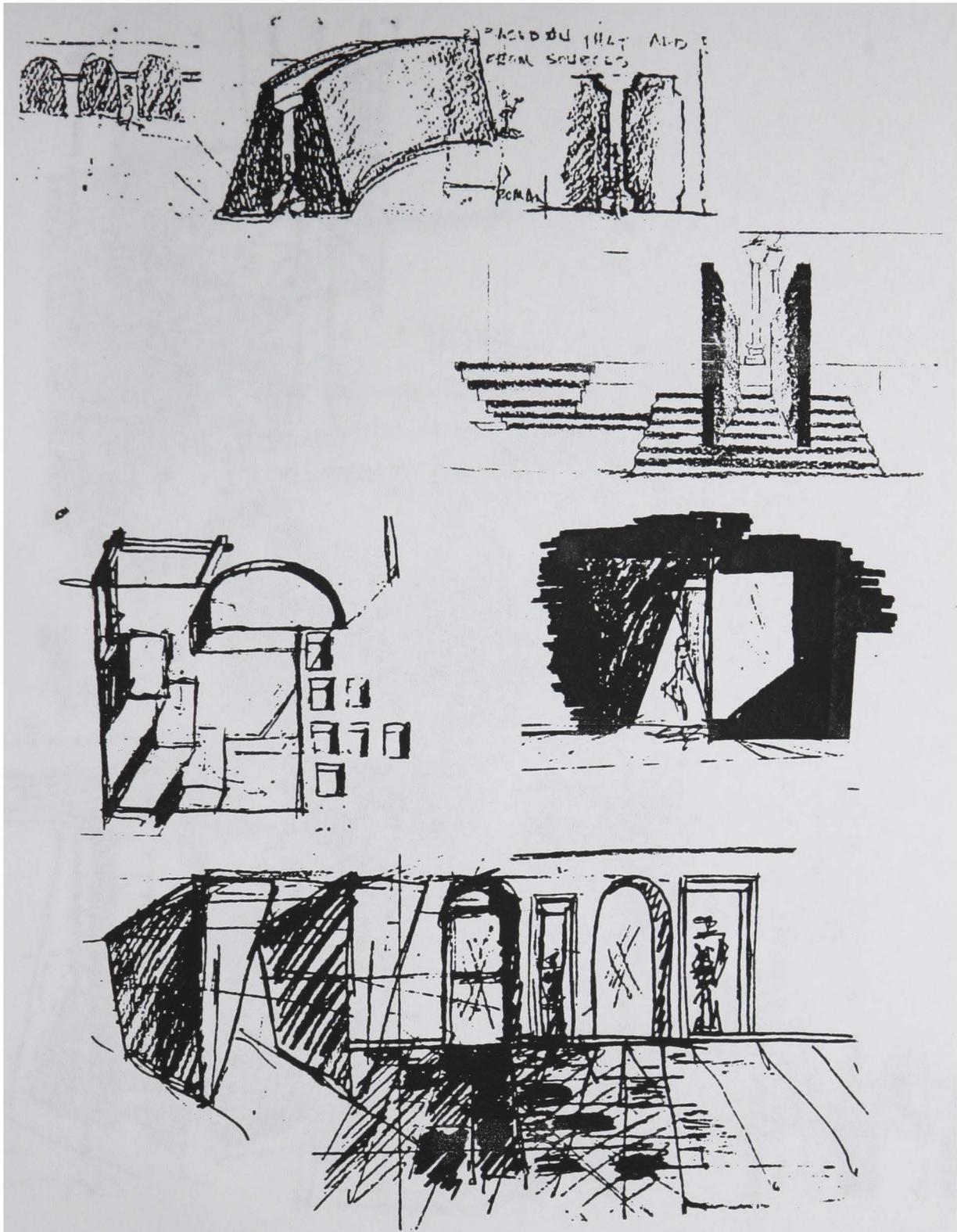


Figure 7.9 Author's investigative sketches #9

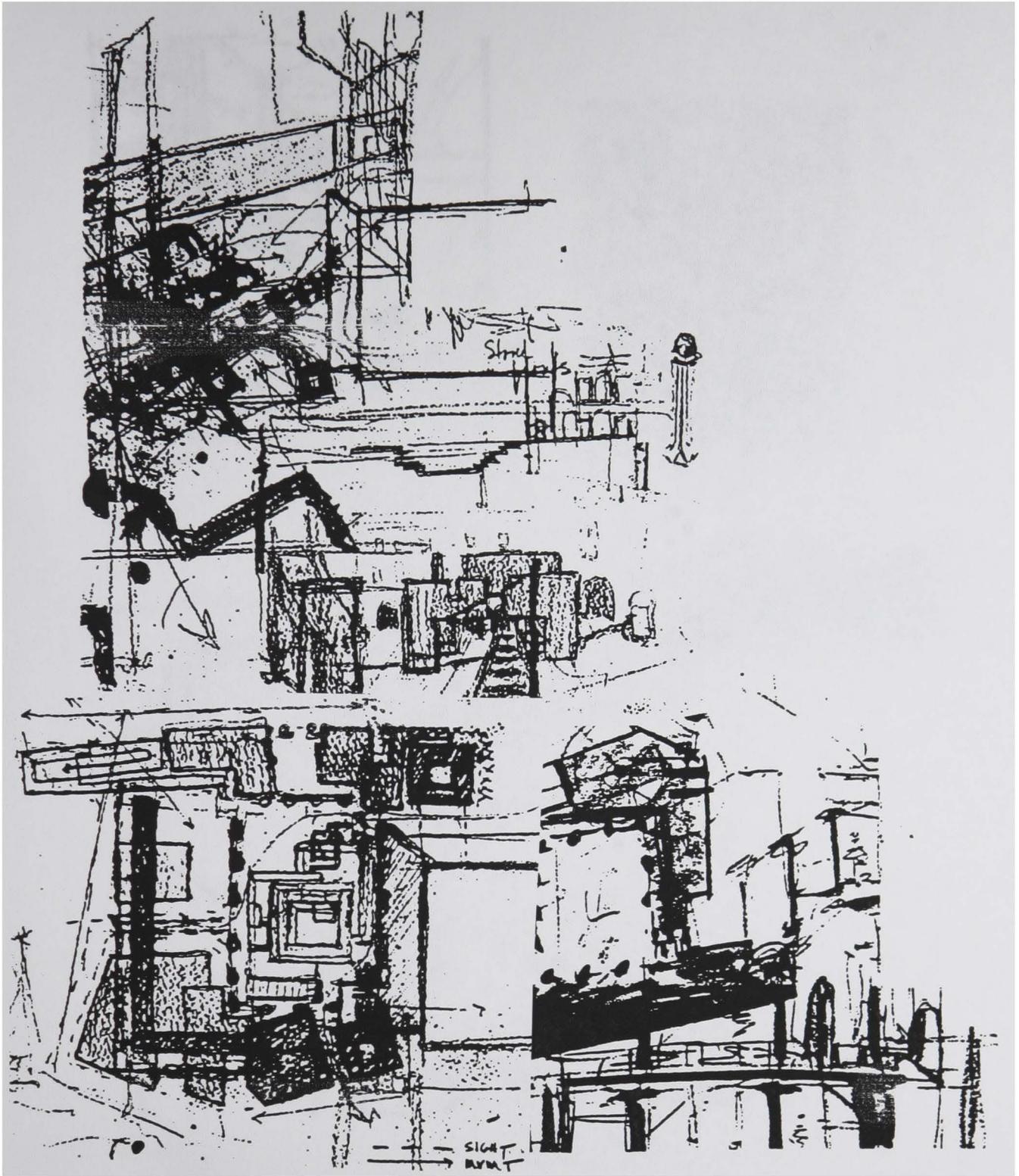


Figure 7.10 Author's investigative sketches #10

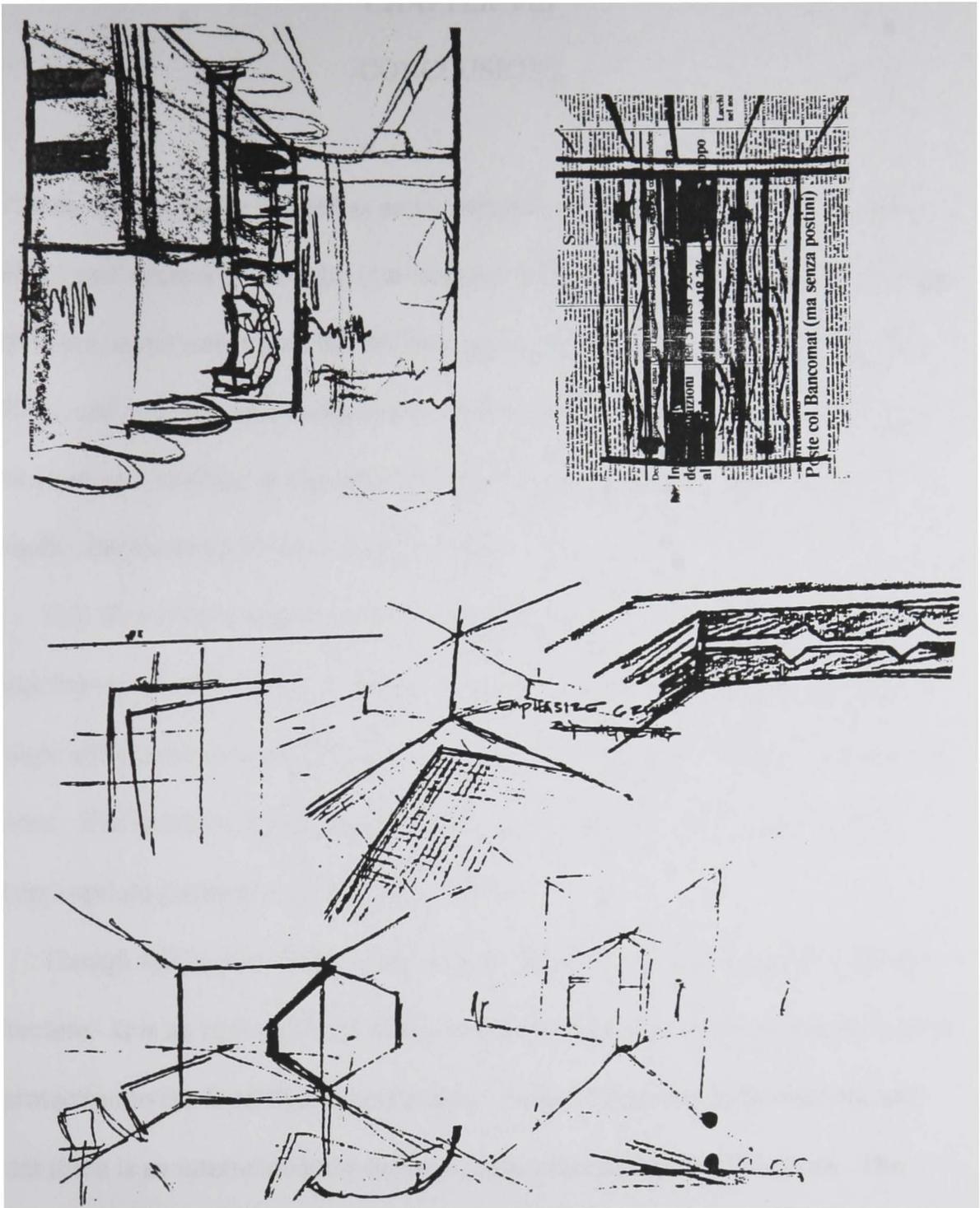


Figure 7.11 Author's investigative sketches #11

CHAPTER VIII

CONCLUSIONS

This thesis was originally defined as an investigation of Carlo Scarpa's work in order to defend two streams of thought; one that restoration in adaptive reuse, as it has been defined here, is not only viable but the best way to approach the use of many historic buildings; and two, that our unconscious intuitive voice with regards to 'designing' architecture and 'reading' it should not be ignored or controlled, rather, it should be embraced and nurtured for the benefits it brings.

This thesis has examined how our body and brain work together in a selective process through the unconscious somatic-marker which sorts through the constant onslaught of information and stimuli that besets us and aids in the selection of the best response. This is based on testing patterns in recall sequence in order to select the most appropriate response to the world around us.

Though this occurs on many levels among one of the most notable is through architecture. It is an important patterning source stemming from the primitive level of self-protection to the food that feeds the soul. As architecture is both concrete and abstract there is an interrelatedness between body and mind and architecture. The relationship was understood by the Greeks when they construed their built world through the abstracted symbolism of weaving. It is also obvious in our intuitive response to architecture and what it symbolizes—a bank, school, or hospital.

There is also the fact that we directly relate architecture to our bodies,--the footprint of a building, the heart of a city, the arm of a building, and its circulation system, the header of a door, a column foot, etc.--it is corporeal; visceral.

Scarpa understood the necessity of, and was able to use, his intuition especially in his ability to recombine the patterns of the past so that they continued to flow into the future. Through a literature review, visits to many of Scarpa's buildings, and through discussions with those who knew him and who have studied him, a gradual understanding of his design process was defined. The author selected those elements she thought to be most critical, and which might be used by future students in pursuing an appropriate design process. These concepts are layer, sequence, marker, integrity, scale and proportion. Embedded within all of these is the concept of integration of the concrete and symbolic past. Scarpa once said "The problems involved are the same as ever, only the answer changes."¹³⁶

Through a detailed look at Scarpa's interventions in the historic Castelvechio this process was further defined by the author and analyzed for validity. The results were then applied to a similar historic site in Vicenza.

From the results of this analysis a guideline for dealing with Vicenza site is presented. In recapping, layering includes horizontal and vertical dimensions; a property occurring within an element itself; and through the repetition and the peeling back or removal of elements to expose deeper and more obscure layers that can be

seen in the abstract as well as in the concrete. Sequence can be demonstrated through time; and by physical or visual movement. Marker has symbolic and real emphasis through the mental reconnection of familiar patterns or as a result of cerebral stimulation resulting from an unusual juxtaposition of two or more elements. Integrity is the separation, physically or visually, of elements so that they can be seen as more than just a piece of the whole. They can be used as focal points, or reinforcements for awareness that change in 'forces' is occurring. Scale is oriented in our somatic-marker and is often based upon human form. Proportion is the harmonious relationship of the parts to the whole.

The following is the final summation which informs the guidelines (Table 8.1).

Another aspect of this thesis that needs to be discussed is what was learned that was unexpected. First, the details were hard to separate into specific, isolated principles. This fact reinforces the notion that architecture is a system in which all of the elements work holistically; no one element has an overwhelming causal effect. For example, when looking at architectural layering, the mind has a tendency to jump from observing how the detail is layered to sequencing of elements, integrity characteristics, or scale issues. In Figure 5.8 of the Cangrande area at Castelvecchio, layering can be the initial aspect recognized following the physical removal of the structure and materials of the bay, and Scarpa's design which, when constructed, appears to reveal the act of the peeling back of materials. However, while that perceptive process is

¹³⁶Dal Co and Mazzariol, 299.

Table 8.1 GUIDELINES AS PER COMPARISON BETWEEN CASTELVECCHIO AND VICENZA

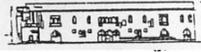
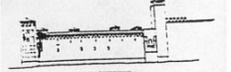
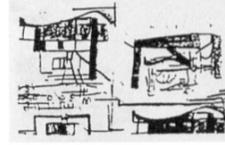
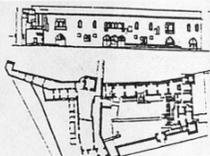
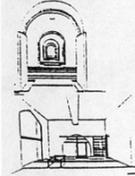
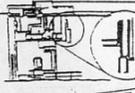
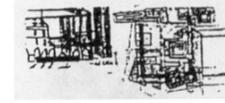
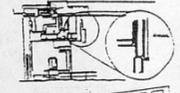
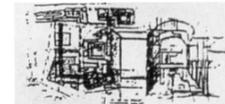
CASTELVECCHIO				VICENZA			
PROBLEM	INTERVENTION BY SCARPA	EXAMPLES	SKETCHES	INTERVENTION BY EISELE	EXAMPLES	SKETCHES	
False Elements	Removal	Remove end bay of north elevation		Removal	Remove Palazza degli Uffici		
		Pull back south elevation wall from tower			Remove wall and railing		
		Formal Garden			Remove Corte dei Bissari 'cap'		
		Raise gallery ceiling and replace beams with slab and steel beam			Uncover	Open hidden portion of east Basilica wall	
		Remove Napoleonic staircase				Uncover Roman remains	
		Moat				Layer down vertically with fragments of past	
Demonstrate truthfulness of past intentions	Uncover	Archway slabs		Recapture movement from Piazza dei Signori to Piazza Biade			
		Ruins below the fortress		Layer	Pull back wall from tower		
		Peel back Cangrande structure and roof					
	Symbolic layering of time	Layer	Separate new floor from original structure		Layer up vertically from Roman to new		
Woven curtain in bay before Cangrande space				Show where separation used to be across from Piazza Biade church			
Change light source							

Table 8.1 GUIDELINES AS PER COMPARISON BETWEEN CASTELVECCHIO AND VICENZA (CONT.)

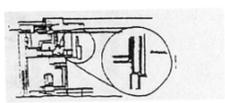
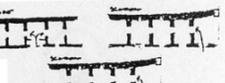
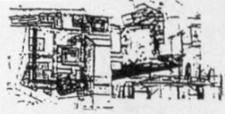
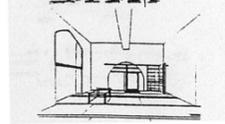
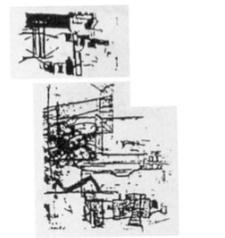
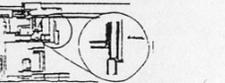
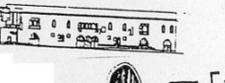
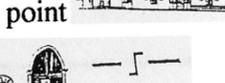
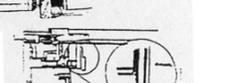
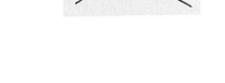
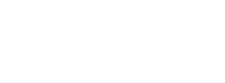
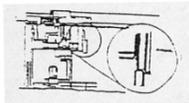
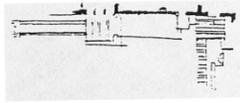
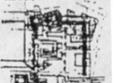
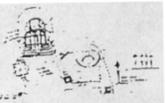
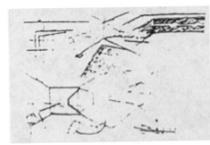
CASTELVECCHIO				VICENZA						
PROBLEM	INTERVENTION BY SCARPA	EXAMPLES	SKETCHES	INTERVENTION BY EISELE	EXAMPLES	SKETCHES				
Movement	Control	Display found fragment		Control	Return footprint to prison					
		Change entrance axis			Return interior courtyard					
		Alter movement patterns in first level galleries			Movement through space with visual and physical sequencing					
		Create secondary focus in gallery space before Cangrande space								
		Bridges					Reinforce vistas of church dome, Torre dei Signori and columns			
		Overview					Reinforce patterns of past footprints			
		L-shape versus use of V-shape					Reinforce angle of tower			
		Floor patterning					Marker	Openings and their relationship to the wall plane		
		Labyrinth quality where Cangrande is the reference point							Access to Roman remains	
		Entrance to museum							Bridge	
Cangrande Space										
Engage the viewer	Marker	Window 'screen'								
		Woven curtain that does not fit the door								
		Openings and their relationship to the wall								

Table 8.1 GUIDELINES AS PER COMPARISON BETWEEN CASTELVECCHIO AND VICENZA (CONT.)

<u>CASTELVECCHIO</u>			
PROBLEM	INTERVENTION BY SCARPA	EXAMPLES	SKETCHES
		Dichotomy of inside versus outside	
	Use of integrity by emphasizing each part in relation to the whole	Separate old and new	
Lend cohesiveness to whole	Scale of magnitude and proportional harmony	L-Shape	

<u>VICENZA</u>		
INTERVENTION BY EISELE	EXAMPLES	SKETCHES
	Dichotomy of inside versus outside	
	Return 'ghosts' or memories of the past	
Integrity	Buffer between old and new	
	Datum that threads design together	
Scale and magnitude and proportional harmony	Use Palladios scale and proportioning system from the Basilica	
	Use form of past footprint in plan and element	

occurring, the reality of sequencing, or the recognition of the different paths that move through the spaces can simultaneously be seen. Then there is the concrete support for the Cangrande statue itself—this might be recognized at various intellectual levels, it is an element that occurs in other ways throughout the museum which, in turn brings the focus of this discussion to one of scale, and then back again to layering phenomenon initiated by observing the folding of the corners, or how each piece of the exhibit steps back upon itself.

Architecture can be rich in form and symbolism. Whether from nature or nurture, the way we relate to our world is a reflection of the past. Again quoting Ruskin: "...we may live without architecture but we cannot remember without her."¹³⁷

The reason that Scarpa's work is so important to us is that he teaches us to 'see' differently by joining the signifier and signified, the concrete and abstract, through his details whether we are conscious of this or not our unconsciousness feels the intuitive 'rightness' of his architecture which transcends and unites the past, present, and future. Therefore we have learned that god is not in the bicameral man, but the details.

¹³⁷The Lamp of Memory, 62

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APPENDIX A

Name Ryan Date Oct. 17, 1995

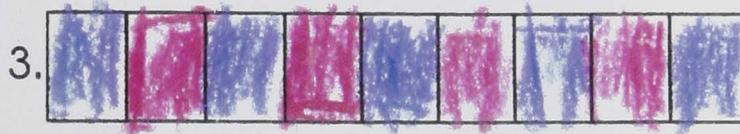
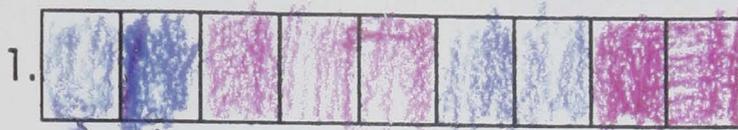
CYCLES

Patterns All Around

Unbottled Symphony

Patterns in Music I

Play several of the musical glasses. Color the squares to show the tune you played. Color only the squares you use.



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FIGURE A.1 PATTERNS IN MUSIC

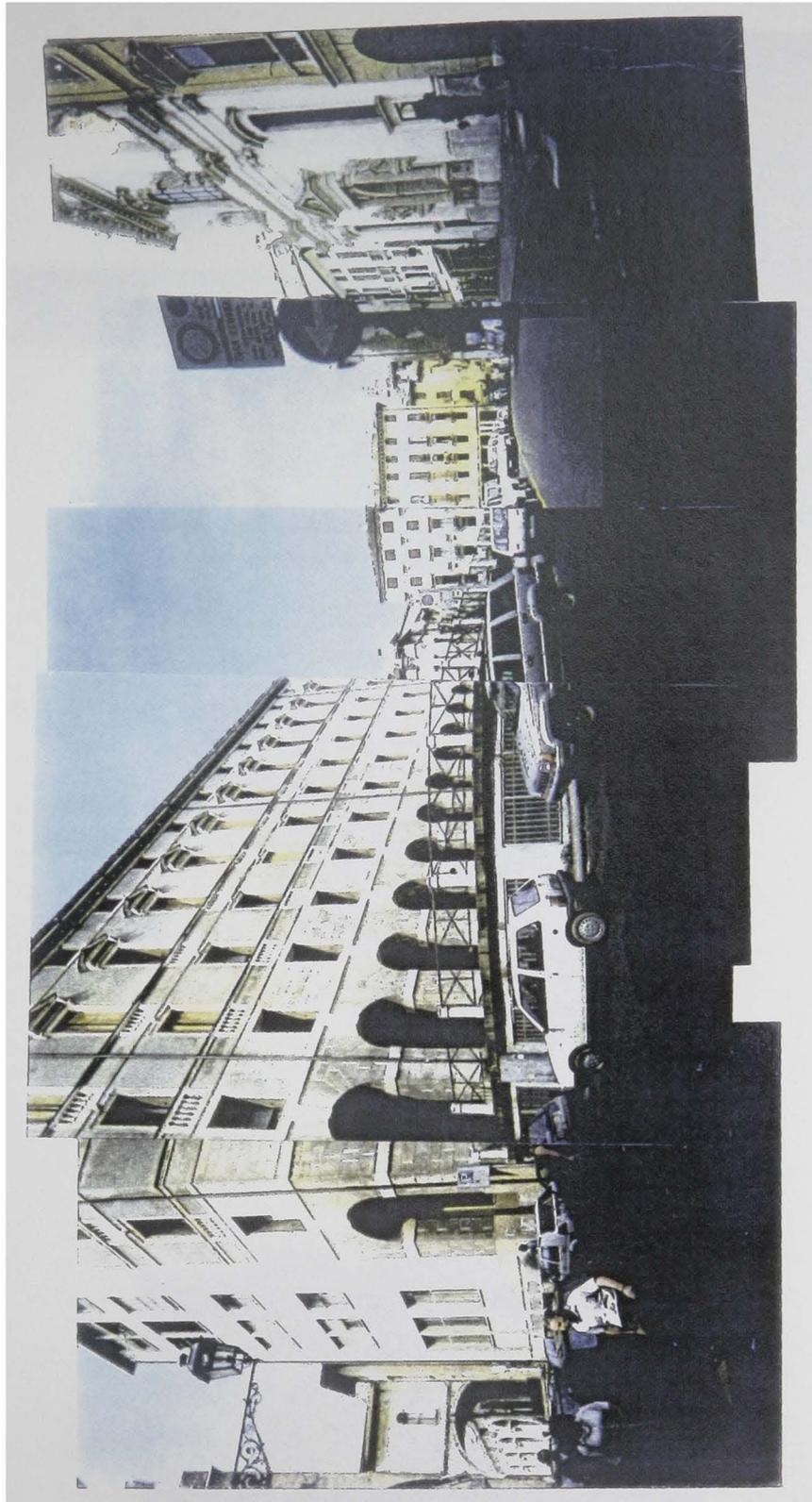


FIGURE A.2 PALAZZO PODESTRILE



FIGURE A.3 PALAZZO PODESTRILE #2

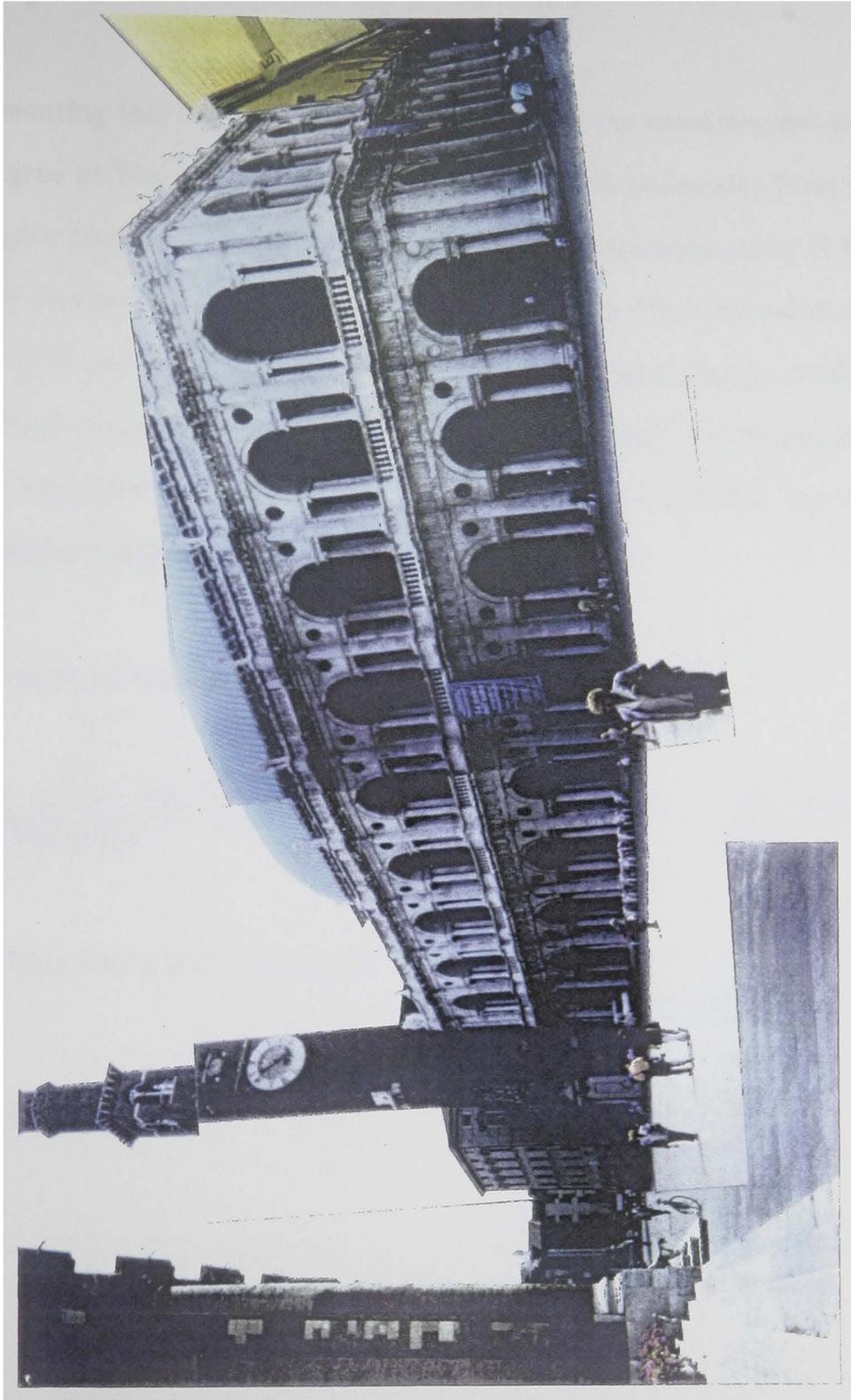


FIGURE A.4 PIAZZA DEI SIGNORI FACING THE BASILICA