The NSW Architects Registration Board
The Byera Hadley Scholarship for Students 2003

Understanding the Sensual Aspects of Timeless Architecture

Paulo Macchia

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All the techniques of representation and all the paths to architecture which do not include direct experience are pedagogically useful, of practical necessity and intellectually fruitful; but their function is no more than allusive and preparatory to that moment in which we, with everything in us that is physical and spiritual and, above all, human, enter and experience the spaces we have been studying. That is the moment of architecture.

Bruno Zevi, *Architecture as Space*, Horizon Press, New York, 1957. p. 60.

Acknowledgements

I would like to express my appreciation of the encouragement and guidance I received from John Roberts through all stages of undertaking the scholarship, and thank my family and friends for their ongoing support.

Executive Summary

The following report is my submission to the NSW Board of Architects as the result of undertaking the Byera Hadley Scholarship for Students in 2003.

The report begins by introducing my interest in considering architecture through the senses and my desire to understand the quality of timelessness, before discussing my proposed destinations and methods of inquiry.

Then I elaborate on my experiences of the three cities; Istanbul, Rome and Cairo, and discuss two spaces from each city which I considered to be timeless and that would best contribute to gaining and understanding of the timeless quality.

I conclude the report by identifying nine aspects which I believe contributed to the timeless quality of the selected spaces.

Contents

Introduction

Beginning, proposing and refining

Figure 1: Concept model for Realm of the Senses project, 2001

During the second year of my architectural studies I developed an interest in considering architecture through sensual perception. This was inspired by a university project, titled The Realm of the Senses, which was a temporary residence for a writer. This hypothetical writer was traveling to a foreign country to explore the sensual experiences it had to offer through its people and its culture. It was while working on this project that I began to explore how architecture communicates with our bodies (and minds) through the senses, as well as how varying spatial arrangements and materials encourage different feelings and states of mind. Using small metaphorical collages helped to convey my ideas and concepts relating to the project and I discovered the way art forms communicate ideas and feelings to others in conjunction with, or as an alternative to, writing and illustration.

Having studied architecture for two and a half years at that time, I wanted to experience some of the spaces I had seen in my studies. I also wanted to experience architecture with all five senses and to partake in, or witness, the use of varying archetypes. In my application for the Byera Hadley Travelling Scholarship, I proposed to further develop this interest in the consideration of architecture through the senses and the use of varied means of communication. I planned to research the role of the senses in different societies and its influence on architecture. This was to be achieved by travelling to three places in search of profound architecture of varying cultures: Rome, Istanbul and Cairo. I would then create a series of textural and sensory sculptural maquettes to accompany the report as a further means of communicating my findings.

I won the scholarship with this proposal.

In the months that followed, the subject of my scholarship was refined. I felt that exploring the original subject was out of my grasp at that stage in my studies and that information would be limited. This meant that I would be discussing my opinions, not facts.

In searching for an associated yet refined subject I considered what I felt was architecturally important. What was that gave particular archetypes of architecture authority, regardless of style, age or scale. The aim of the report changed to gaining an understanding of what gave certain architecture an apparent ‘timeless’ quality. I proposed to develop a first-hand understanding of this phenomenon, with particular attention to the sensual experience. To aid this understanding I felt the form of the sculptural maquettes should become less restricted. The works would not be solely sculptural, but in any form that their development lead to.

The quality, spaces and senses

Figure 2: Interior of Peter Zumthor’s Thermal Bath, Vals

When considering places to travel I was influenced by modern architects such as Jorn Utzon, Tadao Ando and Peter Zumthor. These architects seemed to be influenced and guided by notions of the origins of architecture. Their works stood out because they had a sense of something eternal or divine, and a sense that the architecture was simply right and would always be so. In essence, a sense of timelessness.

In his seminal work, Building and the Terror of Time, Professor Karsten Harries wrote that beauty was derived from the language of timelessness[1]. Although I did consider architecture with this quality to be aesthetically pleasing, I believed that it was appealing to me in a more fundamental way. Architecture with this timeless quality seemed to relate to the order of our experience of the world. Christopher Alexander in The Timeless Way of Building[2], identified this quality as being ‘organic’, and originating from within us, yet he could not describe it simply with words[3]. Alexander showed this by discussing potential words that could be used such as ‘alive’, ‘whole’, ‘comfortable’, ‘free’, ‘exact’, ‘egoless’, and finally ‘eternal’[4], none of which he believed communicated the essence of the quality of timlessness. Although Alexander stated that this quality could not be named, or described simply with words, he recognised that it existed and that it was an essence of architecture that would transcend time, thus describing the quality I referred to earlier as ‘timeless’.

My aim for the scholarship was therefore to gain an understanding of this quality and in order to achieve this I would need to look towards the beginnings of architecture. Rome, Istanbul and Cairo have played a significant role in the development of architecture, each holding examples of the timeless quality of architecture. In each city I nominated five key architectural spaces to experience. In Rome: the Pantheon, the Spanish Stairs, St Peter's Basilica, St Carlino alle Quattro Fontane and Campo de Fiori. In Istanbul: the Hagia Sophia, the Sultan Ahmet Mosque, the Grand Bazaar and the Cagaloglu Hammam. In Cairo: the Mosque of Ibn Tulun, the Giza Pyramids, the Mosque of Sultan Hassan, the Wikala of al-Ghouri and Khan el-Khalili.

Figure 3: Detail of my hand's relationship with the concrete of Tadao Andos Conference Centre, Vitra Design Museum, Basel

These spaces I felt were significant and appropriate for the subject of the scholarship and to explore timeless architecture. Other significant spaces were also listed for each city these were spaces that would contribute to a better understanding of each place, or spaces which I knew less about. However this itinerary of architectural spaces to experience was not final, as there was no certainty of what my experiences would evoke.

My desire to consider the experiences of architecture in terms of the senses arose from what I saw as an aspect lacking in much of the modern architecture I had been exposed to. In the article Hapticity and Time, Juhani Pallasmaa discussed the lack of attention to sensory experience in modern culture and the benefits of considering it for architecture[5]. Pallasmaa wrote that through promoting intimacy and the slow experience of time, architecture had the potential to be profound. Tom Porter also wrote of this lack of consideration in The Architect's Eye. Porter thought that if designers were more aware of the senses they could achieve a much richer articulation of space[6].

When considering the senses, although they can be analysed individually, it is their combination that forms the whole of human experience as Maurice Merleau-Ponty described in Sense and Non-Sense[7]. The profoundness of an experience may be caused predominantly by one sense being stimulated, but it can also add to, and heighten, the stimulation (or lack of stimulation) of the other human senses.

It was through the sensual analysis of experience that I aimed to gain an understanding of the architectural spaces I had nominated. By carrying out this analysis I would further my knowledge of what evoked the sense of timelessness in architecture.

With this insight into the timeless quality, and with a heightened awareness of the senses, I aspired to enrich my own practice and consideration of architecture. I set off to undertake the scholarship on the 21st of May 2003.

Experiencing, considering, responding

In late 2003, I travelled through the Mediterranean for five months passing through Turkey, Italy and Egypt. From my experiences in Istanbul, Rome and Cairo I have selected two spaces from each city to discuss. These were all functioning in some form of their original use, be that places of worship, trade or leisure. They had not yet become museums or fallen out of use, such as Hagia Sophia in Istanbul. These functioning spaces provided the most vivid or profound experiences and allowed me to perceive and interpret the buildings original intent.

In Istanbul, the Mosque of Sultan Ahmed (commonly known as the Blue Mosque) and Cemberlitas Hamami provided the experiences that most strongly evoked notions of timelessness. I had the profound experience of witnessing a midday prayer at the Mosque of Sultan Ahmed. While I sat and observed the space, other tourists had been shown out and by chance I was left to observe the prayer, gaining an insight into the building's true function. At Cemberlitas Hamami I enjoyed many Turkish baths, participating directly with the function of that space. In the seemingly timeless chambers of the bath I had the most sensual experiences of my travels.

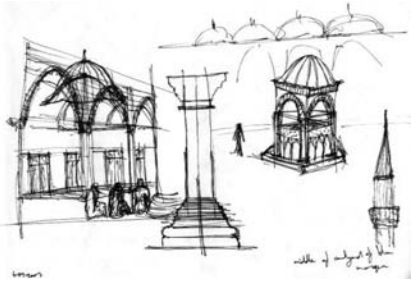
In Rome the Pantheon and the Spanish Stairs seemed to be large forms of furniture extending from and merging with public space. Several times I visited the Pantheon and Piazza della Rotunda on its northern side. Inside the Pantheon I would often escape the heat of the day and explore the infinity of its formal interior, yet I often took my lunch on the surrounding walls

and under the portico of the monument. I sat on the Spanish Stairs several times, day and night, and imagined that it had been used that way for hundreds of years. The steps, which scale the height from Piazza di Spagna to the church Trinita dei Monti, provided one of the more informal relaxed atmospheres in Rome. There people would relax, wait and look out. These two spaces and their surrounds provided civic venues for public interaction where time was lost or easily forgotten and where one was free to contemplate a whim.

In Cairo, I selected the juxtaposing experiences of the Khan el Khalili bazaar and the Mosque of Ibn Tulun. I explored the seemingly infinite bazaars of Khan el Khalili several times. The built patchwork of the bazaar has constantly changed over centuries, added to and changed piece by piece. While the sense of scale and way of life remained similar to how it had been in the beginning. My experience of the Mosque of Ibn Tulun was distinctly profound. Although the mosque was under renovation, the clear geometry, sense of order and generosity of space were in contrast to the sprawl of the Cairo that surrounded its walls. My experiences of these two spaces in Cairo were completely opposing, yet both seemed timeless. One space existed in a constant state of change, giving a dynamic experience of time, while the other provided a place to temporarily exist outside of time itself.

Discussing these six spaces enabled me to consider my responses to each experience in more depth. Although the key to my investigation of these architectural spaces was to actively participate in the experience of the space, I felt it was important to develop my own method of analysis that could be applied to the architectural spaces and the cities they are situated in. The methods of analysis presented in both Christian Norberg-Schulz's *Genius Loci*[8] and Bruno Zevi's *Architecture as Space*[9] seemingly my process.

My own method consisted of discussing my impressions of the city as a whole. I then considered my approach to space, describing the journey through the surrounding area to gain an understanding of the position of the architecture within its environment. After describing the history and origin of these



Figures 4 and 5: Sketch studies of Sultan Ahmed Mosque

spaces, I then wrote a physical description of the architecture, taking note of its form and materiality.

Finally I documented my experience of the space and recorded the possible details of the spaces that produced a feeling of timelessness. This method was carried out by sketching, photographing, making rubbings, exploring plan and section diagrams, recording sound-scapes and collecting objects and substances for possible use in the works, which later became installations.

As time permitted I developed my writing over the four years following my travels. The abundant material I produced and collected allowed me to revisit my experiences and as I did they became more clearly defined in my memory. Thus my responses assembled like a puzzle, piece by piece, paragraph by paragraph, over time as more details came to light.

Figure 6: Detail of the installation Motionless, see Appendix 2

Parallel to my writing, the works evolved and developed in installations. I felt compelled to make the works as I believed they would convey another dimension of my experience. In The Architect's Eye, Tom Porter called for architects to develop alternative means of communication[10] and speculated that by creating a physical object for the experience of the hand and eyes one could gain a better understanding of the kinaesthetic sensation of the built environment[11]. To explore the potential of the idea I established a collaborative relationship with a visual artist, Izabela Pluta, and together we pursued the concepts that had emerged during my travels. The results were two works, Motionless and Entwined, that were publicly exhibited at arts festivals in Sydney and Melbourne (see Appendix). As my experiences were vivid, varying and above all personal, I felt it was appropriate to develop a means of communicating that was expressive and open to interpretation.

(Endnotes)

1 Architecture is not only about domesticating space…. It is also a deep defence against the terror of time. The language of beauty is essentially the language of timeless reality.
Karsten Harries, 'Building and the Terror of Time', Perspecta: The Yale Architectural Journal, New Haven, 1982. p. 59-69

2 There is one timeless way of building. It is thousands of years old, and the same today as it has always been. The great traditional buildings of the past, the villages and tents and temples in which man feels at home, have always been made by people who were very close to the center of this way. It is not possible to make great buildings, or great towns, beautiful places, places where you feel yourself, places where you feel alive, except by following this way. And, as you will see, this way will lead anyone who looks for it to buildings which are themselves as ancient in their form, as the trees and hills, and as our faces are. It is so powerful and fundamental that with its help you can make any building in the world as beautiful as any place that you have ever seen.
Christopher Alexander, The Timeless Way of Building, Oxford University Press, New York, 1979, p. 7.

3 There is a central quality which is the root criterion of life and spirit in a man, a town, a building or a wilderness. This quality is objective and precise, but it cannot be named
Ibid., p. ix.

4 And yet, like all the other words, this word [eternal] confuses more than it explains. It hints at a religious quality. The hint is accurate. And yet it makes it seem as though the quality… is a mysterious one. It is not mysterious. It is above all ordinary. What makes it eternal is its ordinariness. The word "eternal" cannot capture that. And so you see, in spite of every effort to give this quality a name, there is no single name which captures it.
Ibid., pp. 29-39.

5 Our culture of control and speed has favoured the architecture of the eye, with its instantaneous imagery and distant impact, whereas haptic architecture promotes slowness and intimacy, appreciated and comprehended gradually as images of the body and skin.
Juhani Pallasmaa, Hapticity and Time, The Architectural Review, May, 2000.

6 Much of our understanding of environment is experienced through the sense of touch yet, except when the more radical aspects of physical comfort and discomfort are involved, there is probably little conscious awareness on your part of the sensation of handling this book, the chair on which you sit, or the support on which your elbows rest. As designers, our articulation of space could be far richer if we became only slightly more aware of the tactile sense.
Tom Porter, The Architect's Eye, Visualization and depiction of space in architecture, E & FN Spon, London, 1997. p. 29.

7 My perception is not a sum of visual, tactile and audible givens: I perceive in a total way with my whole being: I grasp a unique structure of the thing, a unique way of being, which speaks to all my senses at once. - Maurice Merleau-Ponty, Sense and Non-Sense, Northwestern University Press, Evanston, 1964. p. 19.

8 In Genius Loci, Christian Norberg-Schulz applies the same method of analysis when examining the three cities Prague, Khartoum and Rome. He begins with Image; a description of the natural and architectural images of the city, he then discusses Space; with regards to the landscape and the set-out of the city and its spaces, then Character; the local character and aspects which make the place unique, and finally Genius Loci; the unique spirit of the place.
Christian Norberg-Schulz, Genius Loci, Towards a Phenomenology of Architecture, Rizzoli, New York, 1980. pp. 78-166.

9 Bruno Zevi offers this method for the analysis of architecture:
The criticism of individual works of art may be outlined in the following order:
1) Analysis of the urban environment, of the space surrounding a particular building and partially defined by it
2) Analysis of the architecture, of the spatial conception, of the way the internal spaces are experienced in a living fashion
3) Analysis of volumetrics, of the box formed by the enclosing walls
4)Analysis of decorative detail, of the chromatic and plastic elements applied to the architecture, especially to emphasize volumes 5)Analysis of scale, of the building proportions with reference to human scale.
Bruno Zevi, Architecture as Space, Horizon Press, New York, 1957. p. 74

10 This emphasis on drawing, either as an enrichment or reduction of architectural concepts or as a convenient vehicle for spatial codes, has been in use for around 3,000 years, but has been at the centre of architectural education particularly in recent decades. This places a tremendous responsibility on the young designer to understand the implications both of the limitations and creative potential that drawing can have on spatial thinking. Too often, the student imitates graphic conventions such as the non-spatial' languages originally devised to communicate purely dimensional information to the builder without exploring alternative avenues of expression.
Tom Porter, The Architect's Eye, p. 24

11 Investigations into the potential of tactile, acoustic and kinaesthetic sensation in the built environment is also a facet of the Interior Architecture programme at Oxford Brookes University where, using three-dimensional and computer models, graduate architecture students explore the potential of a multi-sensory design language. There is also evidence that the act of making sculpture begins to move back toward the creation of an object in space that can be experienced by the hands and the body as well as by the eyes.
Tom Porter, The Architect's Eye, p. 39.

Istanbul

I stayed in Istanbul for four weeks during the month of June. I arrived in the early morning on an overnight bus from Ankara, the Turkish capital, and formed my first impressions of the city while passing over the Bophrous. As I looked to the south west from the bus window, the horizontal morning light was gleaming off the multitudes of metallic domes of mosques and the pinnacles of their minarets. The Bogazici Bridge crosses the Bophrous, but also spans the divide between Asia and Europe, and it was that idea of a nexus of cultures that stayed with me through out my time in Istanbul.

The bus wound its way through the city streets and eventually terminated in a market street in Sultanahmet, located on the peninsular formed by the Marman Sea and the Golden Horn. Exiting the bus I was swarmed by touts offering discounted accommodation, and was forced to push past them eventually finding my way to the Bauhaus Guesthouse. I settled into a bare room with a small balcony overlooking the street. From then on I began my days in Istanbul on the rooftop of the guesthouse, taking breakfast and looking across the mouth of the Bosphrous, watching tankers make their way towards the Black Sea.

The morning call to prayer from the many mosques of the city was the first occurrence of each day, yet I emerged on to the street only once the sound of workers and of trade had stirred me. The sweet smell of fresh bread greeted me as I began to walk and observe the bustle of everyday life. Boys carrying deliveries of food on large silver trays over head negotiated their way though pedestrians, chewing on seeds as they walked. Trams and cars would come squeaking to a holt and the gas delivery trucks would sound out their jingle as they slowly passed waiting for customers.

This part of the city hung low from the peaks of the minarets, the worn masonry buildings rarely exceeded four stories as they made up the piecemeal fabric of the city. The nearby bazaars were housed in ancient vaulted arcades, where one could buy silk, food, gold, clothes and brass. At the bazaars on the foreshore of the Golden Horn, Turkish deserts and colourful sacks of spices provided a sensual feast while sponges, chillies

Figure 7: View of the Sultanahmet across the Golden Horn, from Galata Tower

and dried fruit hung in wonder on tight threads fixed overhead. Outside boats sold fish sandwiches as a variant to the usual ‘kebap’ or ‘pidda’ and from here Galata Bridge spanned across the Golden Horn to Galata. Fishermen lined the deck of the bridge, reeling in various local fish and alongside them bananas and knick-knacks were sold by the poor.

Across the Golden Horn, Galata Tower provided marvellous views where one could read the landscape and observe the minarets piercing the spring sky. Below the tower there was a tunnel, through which ran a small tram to the lower end of a modern commercial street. The street ran up the hill towards Taksim Square and was lined with an architecture of glass, more easily associated with Western Europe than Sultanahment. Buildings up to four storeys formed the modern commercial hub of the district, and it was here that cafés and nightclubs fuelled Istanbul’s nightlife.

In Sultanahmet, trucks would spray the narrow streets with what seemed to be disinfectant or pesticide during the night while tourists gathered to watch the light show projected onto the Sultan Ahmed Mosque at night. On two occasions I was fortunate to watch international musicians perform in a luxuriously manicured gated park that was frequent by the upper classes. However most often I would enjoy the night’s temporary relief from the heat in a quiet tea garden on the slope below the Sultan Ahmed Mosque. There, while drinking rose

and apple tea, I would play backgammon with locals and other travellers, puffing the smoke of flavoured tobaccos through a narghile, until the early hours of the morning.

Cemberlitas Hamami

Figure 8: Street frontage of Cemberlitas Hamami

Exiting the market street, I made my way north against the incline of the terrain. The density of low masonry buildings gave way to increasing amounts of greenery and car parking, then rows of smalls shops as I ascended the stair to a raised court to the west of the Sultan Ahmed Mosque. From there I entered the walled garden of the mosque and traversed the shade through to a gate on the opposing side bordering Sultanahmet Square. Trees and timber park benches lined the stone paths of the park as they led past the hippodrome's ancient artefacts: an obelisk removed from Karnak and the Serpentine Column from Delphi. Commercial frontages then lined the busy street as I walked continuously up the slope from the hippodrome to Cemberlitas Square. My path curved to the right and met an intersection revealing Cemberlitas Hamami across a series of traffic lanes and tramlines, the entrance to the which was barely distinguishable among the kebap, pharmaceutical and photograph vendors.

History

Cemberlitas Hamami was established during the Ottoman Empire by Haseki Nurbanu Sultan, the wife of Selim II and the mother of Murat III. The Hamami, and another like it in Uskudar, were built as a source of ongoing revenue that would support Nurbanu's Valide-I Atik Charity Complex in Toptasi. Sinan was engaged to build the charity complex and also designed Cemberlitas Hamami in 1584. Construction was completed after Nurbanu's death in 1586[1].

The bath was planned as a double bath consisting of two identical baths side by side, one catering for each gender. In the past there were separate entrances for men and women. Women entered from Divanyolu street adjacent to the tomb of Sultan Mahmut Part directly into the female dressing room, while men entered from Vezir Han Street.

1 Gurlru Necipoglu, The Age of Sinan, Architectural Culture in the Ottoman Empire, Reaktion Books, London, 2005 p 285.

In 1868 when Divanylou Street was widened, the female dressing room was reduced in size[2] giving it a chamfered appearance, and is no longer used as part of the Hamami. Since that time, both men and women have used the current entrance on Vezir Han Street and have shared the dressing room. The entrance now requires patrons to descend ten steps, as the street level has been built up over time.

Cemberlitas Hamami has been restored and modified many times, the most recent works having begun in 2002, yet it has constantly functioned as a bathhouse since it was established. It is recognised as one of the finest examples of a bath from the Ottoman period.

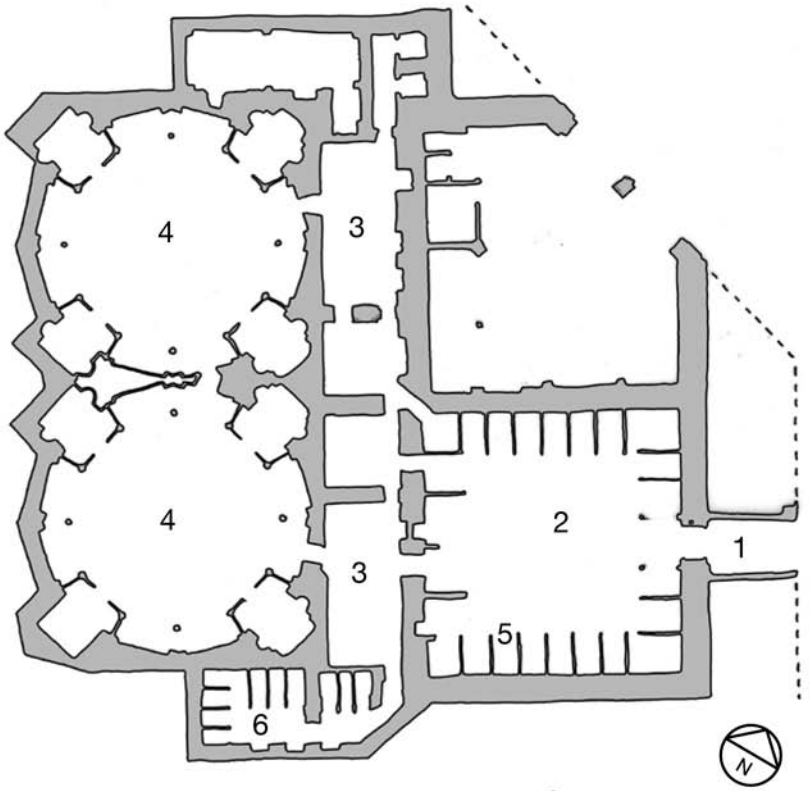
Fabric

The four zinc clad domes of Cemberlitas Hamami are positioned behind a row of attached commercial frontages which address the street, and adjoin the chamfered face of the former womens dressing room. The entrance to the building is through a narrow frontage between commercial spaces and once inside, the bathhouse has three pairs of defined areas: a shared cold area (sogukluk), a pair of warm areas (iliklik) and a pair of hot areas (sicaklik).

Figure 9: Chandelier and timber details of the cold area

The shared cold area is square in plan and is enclosed by a dome lined with white stucco that reaches upwards of seventeen meters at its peak. The dome rests on eight engaged masonry columns and the corners of the room are formed by niches which extend beyond the perimeter of the dome. The room contains three tiers of timber and glass fronted change rooms, the higher levels are accessed via a pair of stairwells leading to tiled mezzanine walkways with simple timber handrails and balusters. The lower level of change rooms are accessed directly from the ground floor. The ground floor is lined with white and grey marble also used throughout the building. The space is naturally illuminated by a windowed copula in the peak of the dome and is supplemented by a three tiered black metal chandelier suspended from the ring of the copula by a series of chains. The thresholds between the cold and warm

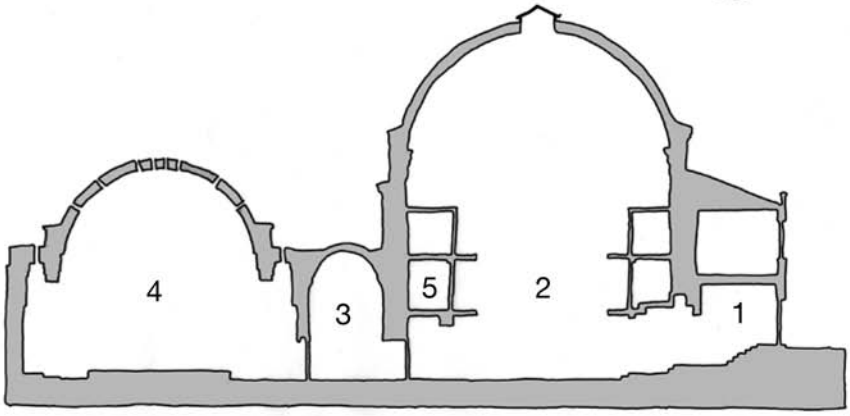
2 http://www.cemberlitashamami.com.tr/, 30th November 2003.



1 Entrance
2 Cold area (sogukluk)
3 Warm area (iliklik)
4 Hot area (sicaklik)
5 Changeroom
6 Bathroom

0 1 2 3 4 5 10

Figure 10: Plan, Cemberlitas Hamami



0 1 2 3 4 5 10

Figure 11: Section, Cemberlitas Hamami

areas are moderated by solid timber doors which have brass handles and exposed counter weights.

The two adjoining warm areas are rectangular and each have three equal domes that are punctured intermittently with holes allowing light to penetrate. The spaces have a maximum height of five metres, the upper part of which is painted white while the lower half is lined with marble. There are two plinths in each space, one with a slatted timber bench and the other with three solid marble washing basins (kurna). Each washing basin consists of a drain-less sink and pedestal. Hot and cold water is dispensed into the basins through copper fittings. The overflow

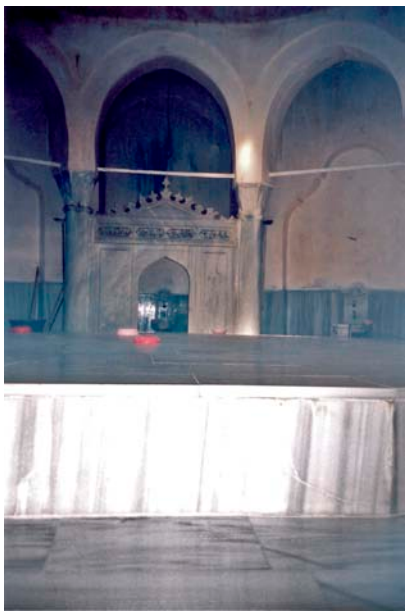


Figure 12: Interior of hot area (sicaklik)

of water is carried away by open gutters at the base of the plinths. Two solid timber doors link these areas to the amenities, which are built as an extension to the building and the hot areas.

The hot areas are twelve sided spaces with overall square shapes. At the centre of each are twelve sided marble platforms that define the alignment of twelve columns. The columns define the walkway around the platform and support the arches that hold up each dome. Square metal sections span the arches slightly above the connection of the arches to the columns. Above this point the white painted masonry dome is stained and below the space is entirely clad in marble. Each hot area has eight antechambers with washbasins on raised plinths lined with exposed gutters while the corners of the spaces form enclosed cubicles (havlet). Each cubicle has three wash basins on a continuous plinth and is enclosed by inscribed marble slab walls with pointed arch doorways and topped by tulip shaped carvings. The hot areas are lit by a single exposed light bulb suspended from the centre of the dome and by one hundred and thirty eight punctures enclosed with glass inserts, known colloquially as 'elephants eyes'[3]. The inserts are geometrically arranged on the dome and are seen to stud the dome from the exterior.

Experience

Figure 13: Typical detail of marble basin

As I stepped into the entrance of the bathhouse, the bright light and sounds of traffic faded away. I paid admission at the threshold of the cold area and looked inside toward the men waiting on lounges and sitting on the few steps around the edge of the room. The order of that preparatory space relaxed my mind and the subtle quality of filtered light on the marble interior was gentle on my eyes. The scent of soaps and bathing oils were strong as I ascended the stairs to a raised timber dressing room. I undressed and wrapped myself in a cotton cloth (pestemal) identical to the dozen or so suspended on a high line across the room and those many neatly folded and piled on dark timber shelves. I replaced my shoes with modern plastic sandals, walked past the large chandelier now at eye level, and descended the stairs with the key to my dressing

3 http://www.cemberlitashamami.com.tr/

room on a bracelet. I took hold of the brass handle on the door leading into the warm area and felt its weight gracefully hinge as the counterweight encouraged its movement. As I passed through the doorway, the stale warm air made its way into my lungs. I sat completely alone on the pedestal of a washing basin. I opened the taps, mixing the cold and hot water in the basin, and then poured the water from the basin over myself with a small plastic bowl. The simplicity of this ritual intrigued me as my anticipation of the hot area grew. Once thoroughly rinsed, I moved to a similar door to the last, still wrapped in my wet cloth.

Hot wet air engulfed my body as I emerged into the bathing space. Slowly my eyes adjusted to the darkness and I walked around the rhythmic path of the walkway, taking a seat on the hot stone platform. The stone was wet, as seemed all the surfaces in the steaming interior, and the height of the platform was as comfortable as a seat. The air was thick and full of the sounds of flowing water and the slapping of skin being caused by masseurs (tellak) treating their customers. As I laid down along one side of the platform, I rested my head on a small plastic bowl similar to that which I had used earlier. From this perspective I realised the length of each side of the platform was a generous body length. I absorbed the heat of the stone through my back and thighs and sweat began to bead over my body as I gave in to the relaxing calm and stared at the

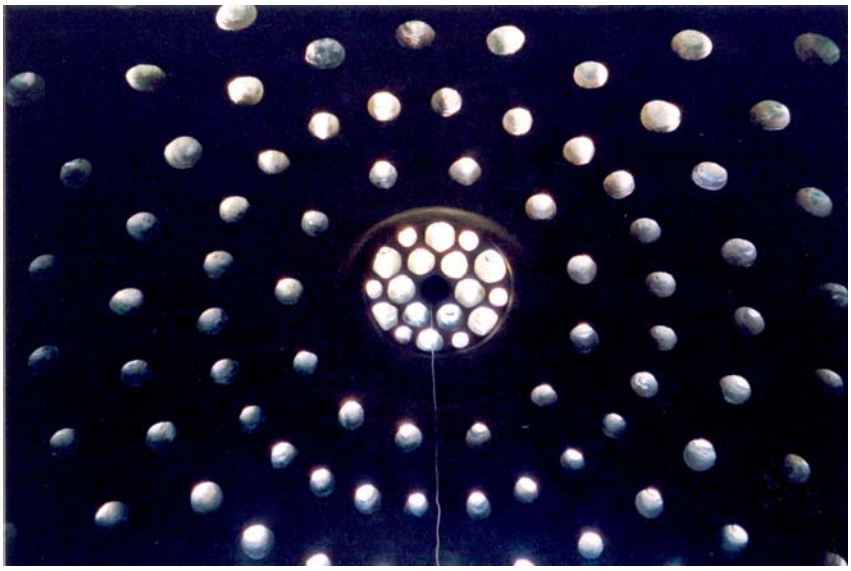


Figure 14: Domed ceiling of bathing hot area (sicaklik)

punctuated dome above. The glass inserts caught bright strands of light from all directions with the edge of the dark dome and its punctures in contrast, each clearly defined.

My masseuse arrived and gestured that I should rinse at one of the basins along the perimeter wall. After doing this, I returned to my former position and the masseuse lathered me thickly in floral scented soap before rubbing all over with a rough mitt (kese), which removed several layers of skin. Then as he compressed an inflated towel into my chest, covering my body in soap, and applying oils for the ensuing massage my sense of touch was heightened.

When the massage was over, I entered the refuge of a corner cubicle and rinsed my enlivened body. The cubical provided respite from the heat, owing to the cold flowing water, as well as privacy from the crowd of men reclining on the hot platform. After some time, I returned to the platform and enjoyed the heat once more, before leaving when the thick air had become almost unbearable. My masseuse was waiting in the intermediate space and after he helped me rinse again, I wrapped myself in a fresh cloth and he smothered me in towels. I returned to the cool fresh air of the dressing room and changed into my clothes. My skin now had a more intimate awareness of the presence of my clothing.

When I left the building my senses were flooded with the smell of rubbish and brightness of the mid afternoon light, yet the supple quality of my muscles and my new awareness of the air passing over my skin were constant reminders of my experience.

Sultan Ahmed Mosque

It was late morning and once again I walked the familiar path from the market street towards the Sultan Ahmed Mosque. Climbing the steps to the raised court of the mosque, I took a path which led towards the parklands at Sultanahmet Square. I meandered through the ordered configuration of the foliage and paused at the fountain at its centre facing southeast.

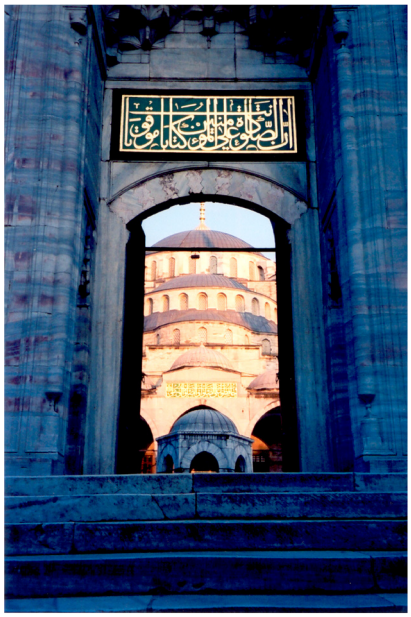


Figure 15: Gated entry-way to the courtyard to the Mosque

There, in the clear morning light, I viewed the competing forms of the Sultan Ahmed Mosque, to my right, and the Hagia Sophia, to my left. The visual juxtaposition of these forms emphasised their unique place in western history and I imagined the rivalling masses as the backdrop to a theatre of cultural change. In anticipation of its interior I walked towards the six minarets of the Mosque and exited the park. Passing along the periphery of the hippodrome I followed a path adjacent to the stone wall enclosing the mosque complex. I entered through the central gate taking in a view the form of the mosque above the gated entrance to courtyard set in another stone wall.

History

Sultan Ahmed became ruler of the Ottoman Empire at the age of fourteen and his desire to model himself on, and to even surpass, the legendary glory of Sultan Suleyman is physically manifested in his mosque's relationship with the Mosque of Suleyman, by Sinan.

Sultan Ahmed took upmost care in choosing a site for his mosque due to the political significance of the building. He engaged Mehmed Agha, a former student of Sinan[4] as chief architect. The site of the hippodrome, overlooking the Sea of Marmara, was preferred because it required only the demolition of two large palaces designed by Sinan for the couples Mihrumah-Rusterm and Ismihan-Sokollu, which the Sultan purchased from their heirs.[5]

The location of the Mosque in such a sparsely populated area led many to believe it was superfluous, yet Sultan Ahmed pursued the project unrelentingly. Ahmed wished the Mosque that would bear his name to have six minarets, surpassing that of Suleyman by two. However this caused controversy, as it would equal the number of minarets at the Sacred Mosque of Mecca which also had six minarets. To avoid conflict Ahmed funded the erection of a seventh minaret at Mecca thus enabling his Mosque to have six minarets without challenging the

4 Gurlru Necipoglu, The Age of Sinan, Architectural Culture in the Ottoman Empire, Reaktion Books, London, 2005. p. 514.

5 Ibid. p. 514.

inherent authority of the original sacred site[6]. The foundations of the Sultan Ahmed Mosque were laid in 1609 and it was inaugurated in 1617, that same year the then twenty-eight-year old monarch passed away.

The construction of the Mosque required the remodelling of the hippodrome, a grand urban gesture that located it at the edge of parkland opposite the Hagia Sophia to the northeast. The elevation addressing the park now hosts modern light displays on its façade which are viewed nightly by international and local visitors, while the Mosque continues to function as a place of worship for the faithful.

Fabric

Figure 16: The domed collonade forming the perimeter of the couryard

The Sultan Ahmed Mosque complex has three main areas: the walled enclosure, courtyard and mosque proper. It also has three satellite structures: the mausoleum, madrassa and garden platform. The Mosque is symmetrical around a central axis, while its domed masses reach their peak on the vertical axis stemming from the centre of a quatrefoil plan.

The perimeter wall of the complex is faced with grey marble and the fenestration has iron grilles set within it. There are five gated entries set into the wall, one of which is on the central axis. The enclosure is paved and planted and within it lie the exterior wall of the courtyard and the washing spigots, which are located underneath a walkway on either side of the mosque. The external wall of the courtyard has two rows of fenestration, a top row of pointed arch punctures and a lower row of rectangular punctures, each housing iron grilles. The horizontal top edge of the wall is succeeded by each gateway, decorated with stalactite-like niches, through which access is gained to the raised level of the courtyard.

A colonnade roofed with equally sized domes uniformly zinc clad, while individually decorated, encloses the courtyard. The domes, with their geometrical painted motifs, are carried on arches of alternating red and white stone that rest on columns of grey marble that bare steel tension members spanning above their capitals. The courtyard surface is paved with grey

6 Ibid. p. 515.

Figure 17: The washing spigots being used on the exterior of the Mosque

marble and rises in two large steps to the height of the floor of the Mosque in the areas under the colonnade. In the middle of the courtyard stands a fountain of modest height, hexagonal in plan and roofed by a zinc dome. The windows along the wall of Mosque have iron grills which give views into the interior. The main entrance is at the midpoint, on the central axis.

The quatrefoil plan of the Mosque is centred on a circular plan thirty three meters in diameter, above which the central dome rises to forty three meters in height. Four half domes descend from the central dome, each with three half domes below them, forming a three tiered pyramidal composition as viewed from the exterior. The four corners of the central dome rest on massive fluted pillars that define the orthogonal arrangement of the Mosque's interior, while the remaining corners of which are each roofed by lower domes.

The central axis of the Mosque ends at the sculpted marble mihrab indicating the direction to Mecca and to its right is a timber pulpit (minber). The lower levels of the interior surfaces of

1 Walled enclosure
2 Courtyard
3 Mosque
4 Mihrab

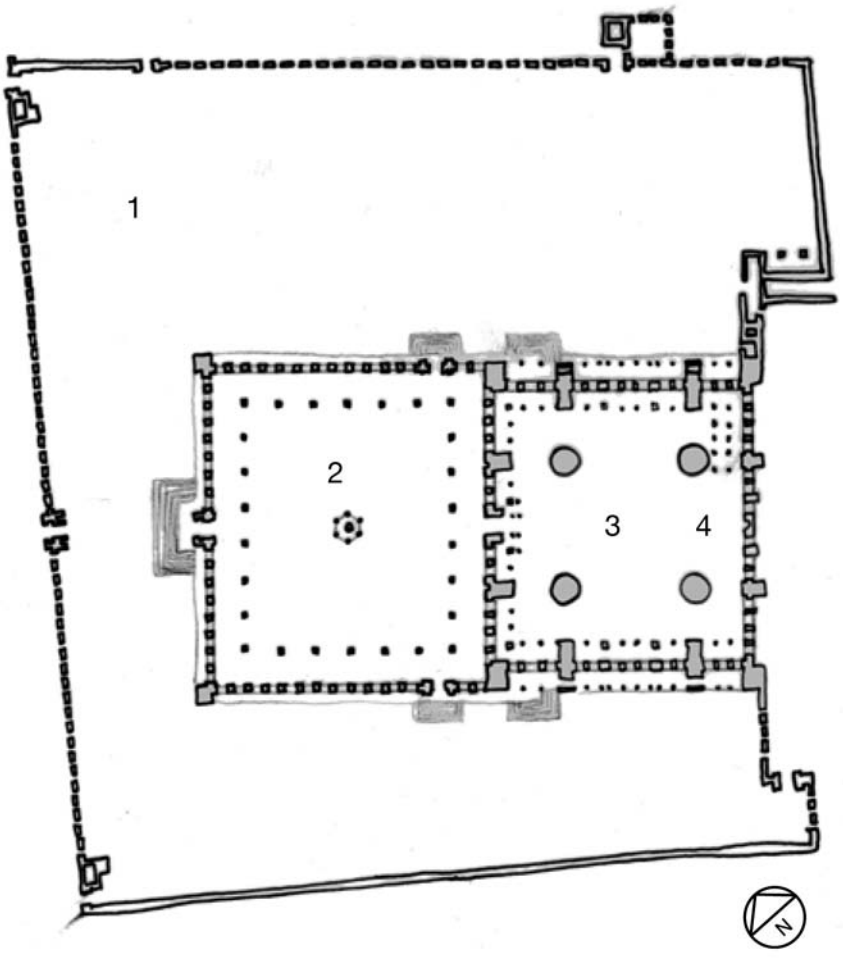


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Figure 18: Plan,
Mosque of Sultan Hamed

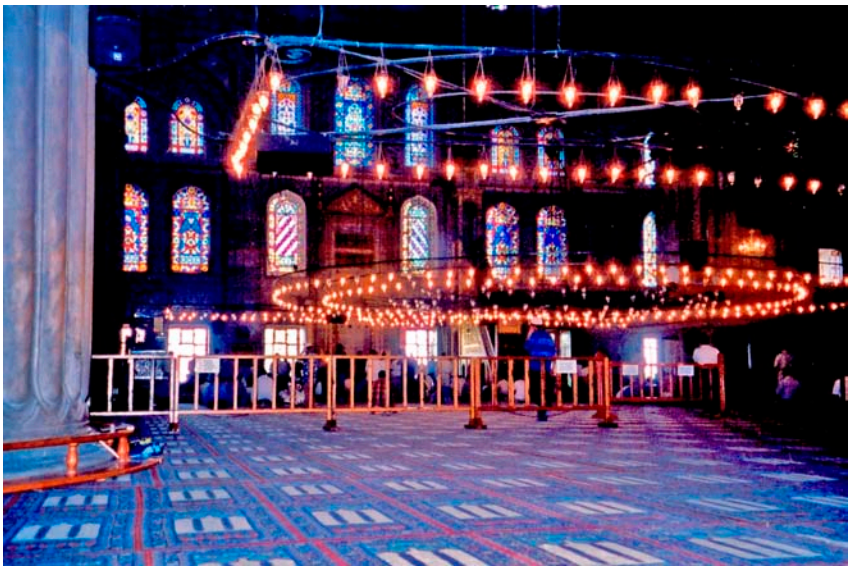
Figure 19: Detail of one of the six minarets

the Mosque are clad in thousands of ornately painted Iznik tiles, while the upper areas have white stucco decorated with Islamic calligraphy and painted with elaborate geometric patterns of red, blue, green and gold. Similar colours are found in the carpet lining the floor of the Mosque which is constituted of repeated modules whose decoration is aligned with the mihrab. The Mosque is lit with over two hundred and fifty windows, which are located in the external walls and also line the base of each section of the domed roofs. All the windows are of stained glass with repetitive motifs. The natural light is supplemented with circular chandeliers of black metal. These are suspended from the ceiling by chains, and hold small glass lotus-shaped vessels, housing modern light bulbs. Six circular minarets of stone, reaching unequal heights, define the corners of the Mosque and its courtyard. Their fluted shafts each carry three balconies and are topped by cones of zinc surpassed with an ornament of three spheres and a golden crescent moon. Similar ornaments ordain each of the vertical peaks of the building.

Experience

Ascending the stairs to the level of the courtyard I passed through the central gate and stood in the interior of the Mosque. The repetitive colonnade grounded my view, while my eyes traced across the rhythm of the columns. I imagined each interval of space as a measure of movement; as a built measurement of time. From this horizontal sweep, the heaped grey masses of the mosque's elevation drew my attention

Figure 20: Interior of the Sultan Ahmed Mosque



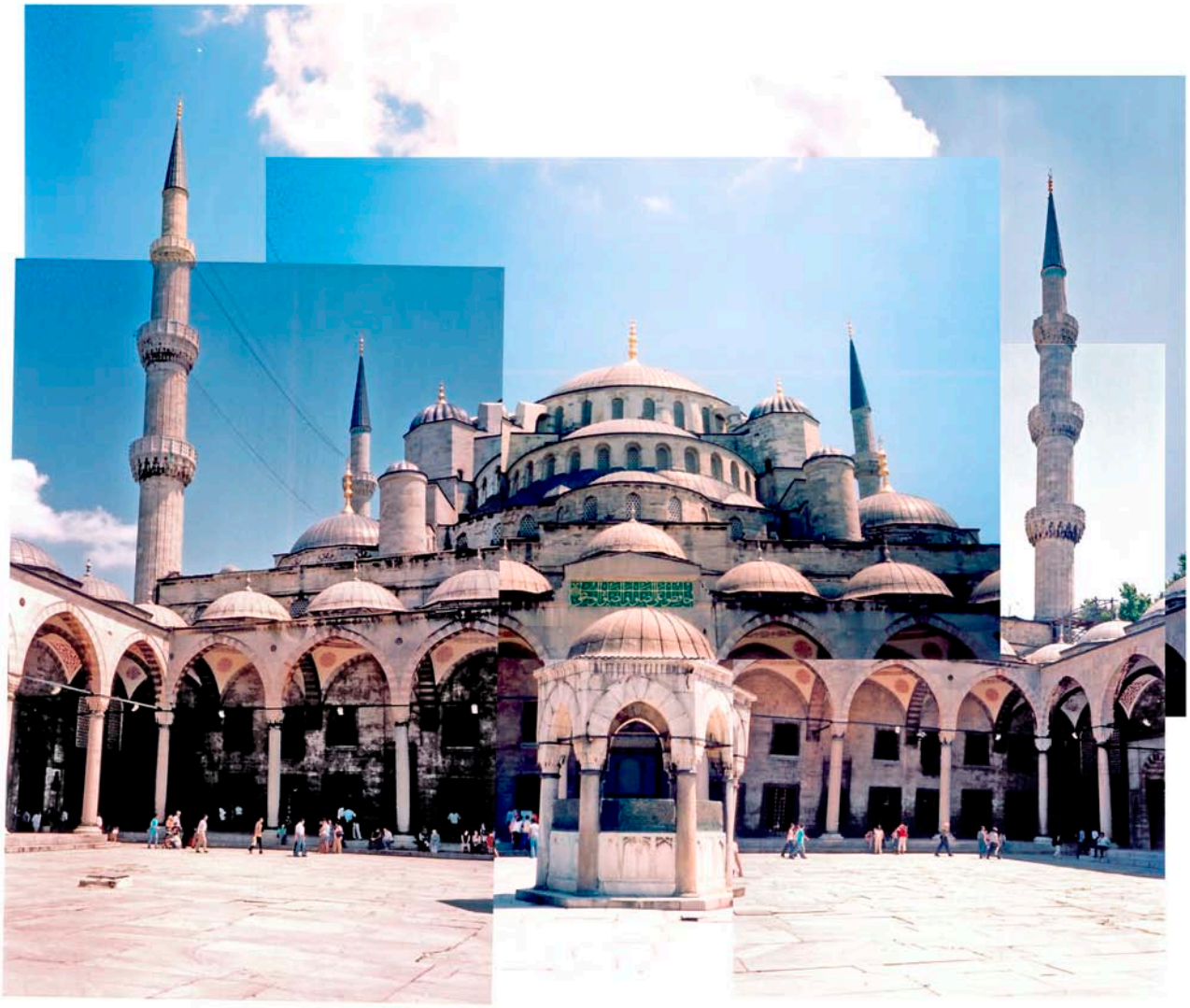


Figure 21: Photo-collage of the courtyard elevation

upwards. Domes seemed piled upon each other in a stratified hierarchy anchored by the vertical mass of the buttresses transferring their weight. A thin black line marked the edge of each spherical zinc form, emphasising their harmonious volumes. The whole composition of elements seemed both static and dynamic, as if hung from above and growing in width while descending.

I became aware of the presence of other visitors as they conversed and adjusted their ensembles of packs in the shade of the colonnade. The morning sun was becoming more direct overhead so I sought shade the steps of the colonnade, imitating other visitors. The faint sound of birds was pleasant and I extended my feet onto the stone paving, feeling the impressions of the softly delineated joints in my soles. The varying orthogonal masses of marble had worn round edges,

Figure 22: Detail of the ceiling's ornate decoration

each edge forming one half of a small recess that criss- crossed a network though out the entirety of the court.

My concentration was abruptly broken and drawn to a young boy who having ceremoniously extended a concertinaed group of postcards, questioned how much I was willing to pay for them. Disappointing the youth I declined his offer and rose to make my way into the mosque. Passing through the repetitive bays of the colonnade I arrived at the exterior wall of the mosque and gained a limited view inside though an iron grill. Cool air passed over me from within Mosque and I perceived that the immense detail of the decorative interior became lost in itself.

I moved to the central entrance of the Mosque, through which I intended to experience the grandest entry. However my path was blocked as that entry was reserved for practicing Muslims, and I was instead encouraged to use a side entrance located the courtyard. Continuing along my previous path through the colonnade, I found a gateway and exited the courtyard, making my way along a raised pathway adjacent to the Mosque which lead to the alternate entrance. I removed my shoes and socks, placed them on a shelf already occupied with countless pairs of other shoes, walked with bare feet over the cool stone and entered through a wide door into the dark interior.

The carpet of the interior was short and rough. I scrunched my toes against it, feeling its neutral temperature, while my eyes consumed the intricate decoration of voluptuous ceiling. Each

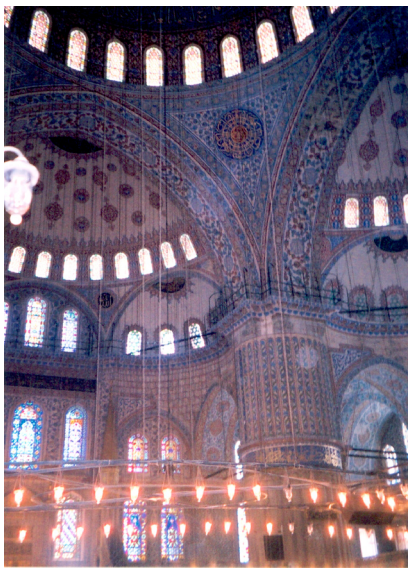


Figure 23: The countless chains suspending the chandeliers in the interior of the Mosque

arch seemed to lead to another, or to a dome or semidome. The patterned decoration of arches and domes playfully enticed my eyes thoughtout the space. I made my towards one of the four pillars that dominated the space and sat facing the mihrab across a timber partition which defined the space for the faithful. While continuing to observe the details of the interior I became distracted by small groups of people talking. Monophonic mobile phone jingles intermittently rang out in various areas of the Mosque. I gradually became accustomed to the murmurs of my fellow visitors and again focused on the interior fabric of the Mosque.

Masses of iron chains suspended from the ceiling held a plane of chandeliers that lit the space. The chandeliers held exposed bulbs, which were harsh on my retinas, yet I dwelled with them for quite some time. Hanging low, they defined the horizontal space through which people moved, while the chains holding up the chandeliers extended into the realm of the divine, evoking a feeling of tension set against the colourful light that passed though stained glass windows.

The crowd fell silent as the Imam began speaking Arabic in a deep monotonous voice, which slowly filled the space through a electronic sound system. My attention had drifted to the patterns of the carpet and its smell of dry dust, when the Imam commenced reciting a prayer which then enlivened the space and flooded my senses. Each reverberation of his voice through the speaker system reinforced the physical sensation of the

Figure 24: Detail of the relationship between my feet and the prayer carpet of the Mosque

prayer, as it seemed to both penetrate my body and emanate from it. Within the repetitive state of the prayer I began to experience a cyclic notion of time, the varying tempo of which brought me quickly to attention and then slowly lulled me into relaxation. Then the Imam fell abruptly silent and brought to an end what had seemed one long moment in time.

When the lengthy prayer had ended, I contemplated the sanctity of what I had witnessed and turned to view the others in the space. The Mosque was now less densely populated and it seemed that the other visitors had been escorted out for the midday prayer although I had been unaware of this taking place. I remained in the Mosque, trying to recreate the sound of the prayer in my imagination. As I relived the experience, I lost myself in the repetitive and varying qualities of the prayer, unable to ascertain the individual sequences I had heard.
My thoughts welled up and I felt I could not comprehend experiencing anything more. I rose slowly and exited the Mosque, collected my shoes and made my way outside into the intense light of the searing midday sun.

Rome

I spent the month of July in Rome. I arrived by Intercity train from the south of Italy and as the train slowed and passed the ruins of aqueducts on its way towards Termini Station I became aware of the age of the city. It seemed that this area represented a point in history where all the other tracks to destinations throughout the country originated from.

Figure 25: Bridge over the Tiber

I stayed at the Casa Olmata near Santa Maria Maggiore, in a shared room overlooking a cobble road. In the heat of July, businesses were winding down, or were already closed while the owners took refuge on the coast. Yet the numbers of tourists seemed to increase as the month went on. The metro was close to my hostel and its deep network of tunnels made traversing the city easy. Buses were always beyond capacity and people had no sense of personal space. Passengers were packed in much like canned anchovies, in an otherwise generous city. The uneven stone roads and paths made it hard going as a pedestrian. The thousands of dented scooters that were left in any available space, were the preferred means of transport by the locals.

As the heat rose towards mid summer, the flow of the Tiber was low, and the only escape was to take a train ride to the beach or to enjoy a gelato in the shade. Exploring the city on foot in the bright light I would often pass entire blocks of exposed archaeological ruins. As I walked along thoroughfares towards interspersed monuments, the stratification of the

Figure 26: Typical scene on the streets of Rome

Figure 27: An exposed archealogical site in the city of Rome

city's foundations anchored my mind in its ancient history. Piazzas and junctions throughout Rome were home to these built manifestations of time. Along with the ceaselessly flowing fountains, these monuments were set amongst up to six storey building of masonry architecture. The city's fabric was made up predominantly of concrete, brick and terracotta buildings and the fading ochre façades gave the impression the city was a natural extension of the earth it was founded in.

A few times I joined the crowd at football matches held at the Olympic Stadium. The energy of the crowd was unparalleled. They chanted in support of their team, all wanting the same thing and when a goal was scored the stadium shook with their enthusiasm. In the courtyard of St Peters large crowds also gathered as the Pope celebrated mass outdoors. These crowds were made up of people from many different places, yet they too were united in worship.

Figure 28: An example of the large crowds that gather around the Trevi Fountain

Crowds formed in the open public spaces of the city at night, such as Trevi Fountain or the Spanish Steps. By the earlier hours of the morning however, people were forced to flee these places, as the street cleaners washed away the day's debris with high pressure hoses. By chance, one evening I enjoyed a classical recital in the amphitheatres of Renzo Piano's Auditorium, my only experience of modern architecture in this age-old city. However most often I would spend my nights reflecting on the days events with fellow travellers, who were also drawn to this city. We enjoyed local wine together on the roof of the hostel while making the most of our view of the colosseum under lights, set against the built horizon.

Pantheon

Leaving my accommodation, I walked through small streets formed by buildings with addresses of even height and emerged from their ochre facades into Piazza Venezia. This large traffic junction was dominated by the monument built to celebrate the unification of Italy. As I negotiated my way through the traffic, it began to rain lightly. I headed north along Via della Minerva which brought me to the rear of the Pantheon. The weathered bricks of the building's exterior came into view as I descended the slope of the cobble stone road. In the shade of the building,

I walked along the small parapet of a retaining wall and gained a view through the portico columns into the vast space it sheltered. People were sitting on the terraced levels around the perimeter of the building and also in the shade, resting and eating. I walked beyond the busy outdoor eating areas of the restaurants in the Piazza and passed the central fountain before turning to observed the building's full façade.

History

The Pantheon is a temple originally devoted to the seven deities of the mythology of the Roman Empire. Marcus Agrippa, son-in-law of Augustus, built the original temple in 27 BC. Domitian rebuilt it after it was destroyed by fire in 80BC. After and second devastating fire, the temple currently on the site was rebuilt by Hadrian in 120BC[7]. The architect is unknown.

7 William L. MacDonald, The Pantheon: Design, Meaning, and Progeny, Harvard

Figure 29: Photo-collage of the portico of the Pantheon

The first Christian emperors abandoned the building and eventually it was given to the Roman Catholic church in 609AD It was then consecrated as the Church of Mary and all the Martyr Saints (Santa Maria ad Martyres)[8]. Centuries of damage, plunder and repair have left the Pantheon in its current dilapidated state. The original marble veneer panels have been removed from the exterior, as have the bronze roof tiles. In 663 Pope Urban VIII ordered the portico's bronze ceiling be melted and reused to make bombards for the fortification of Castel Sant'Angelo[9]. Ephemeral additions, such as bell towers, were at times added above the intermediate block, although none remain. The multi-coloured marble floor which is now in place was laid in 1873[10].

The Pantheon has been used a tomb since the Renaissance and is currently used as a Roman Catholic Church. The tombs of Italian kings Victor Emmanuel II and Umberto I, and his queen Margherita, are housed in the building, while the artists Raphael and Annibale Caracci and the architect Baldassare Peruzzi are also buried there. Perhaps the best preserved monument in Rome, the Pantheon has been continuously used as a place of worship for almost two millennia.

Fabric

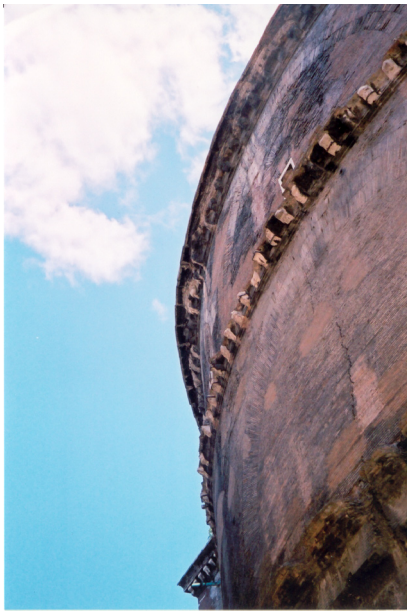
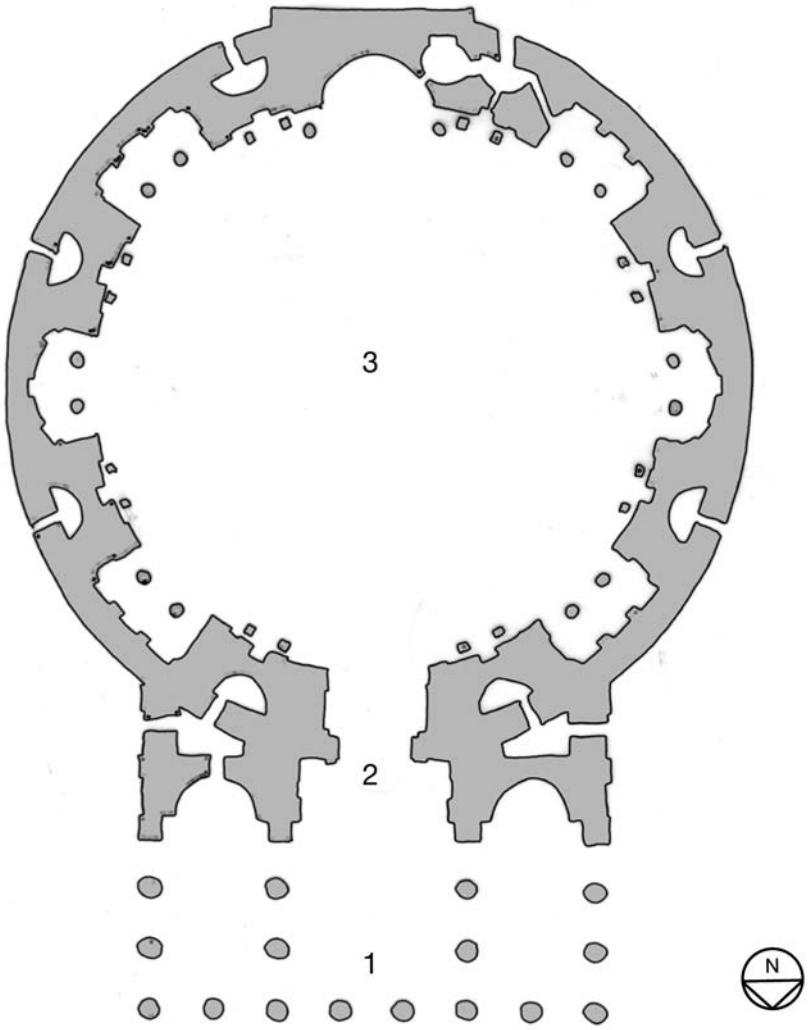


Figure 30: Detail of the Pantheon's brick

The configuration of the Pantheon is formed by three distinct parts: the portico, an central structure and the rotunda. The exterior of the rotunda is of exposed brick with various scattered openings. Three cornices horizontally divide the rotunda. Atop the third cornice a terrace encircles the rotunda in line with the top of the intermediate structure. Half the rise of the dome, clad in lead, is visible above the rings of structure buttresses, which support its weight, giving it a bowl like form. The intermediate structure, also of exposed brickwork, rises to the line of the top cornice of the rotunda which then continues along the peak of the its faces. The portico consists of eight columns which form part of the façade, and an additional eight columns which form three aisles, the widest centred on the entry and the remaining two inline with semi domed niches in wall of the intermediate.

University Press, Cambridge, 1976. P. 13.
8 Ibid. p. 14.
9 Ibid. p. 18 -19.
10 Ibid. p. 35.

1 Portico
2 Entry
3 Rotunda



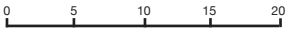


Figure 31: Plan, the Pantheon

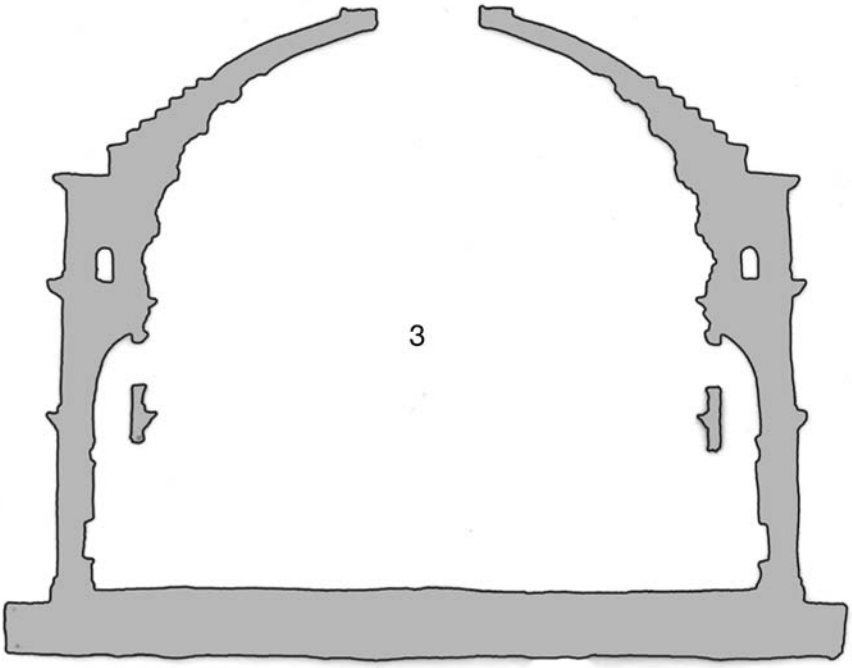


Figure 32: Section, the Pantheon

These grey granite columns, each a monolith, have an entasis and bear Corinthian capitals and bases of white marble. They support the entablature that carries piers and arches on which rest the wooden trusses of the tile roof. The face of the triangular pediment is of stone, lined with cornices and bears a reconstructed bronze inscription thought to match the original. Along the central axis is a barrel vaulted space through which the intermediate structure forms the entranceway and houses large bronze doors framed by bronze pilasters.

Figure 33: The coloured marble of the Pantheon's interior

The interior of the rotunda is formed by an equal cylinder and dome of over forty-three metres in diameter aligned on a vertical axis. The floor is paved with squares and circles in squares of multicoloured marble and granite tiles aligned diagonally and centering on a circle. Towards the centre of the rotunda are four ornate bronze fittings that drain water through the floor. The cylinder is divided unequally in two by a pair of red and yellow marble cornices, the upper part being less in height. On the lower level there are eight large recesses, two of which are the entrance and the semi domed apse. The transverse opposing pair are orthogonal and the remaining four are curved in plan, all of which are screened by Corinthian columns of yellow marble.

Between the niches eight aediculae, or tabernacles, housing white marble statues are based on podia and carry alternating triangular and segmented pediments on Corinthian columns of varying colours. The walls, piers and niches of the upper cylinder are lined with varying coloured marble which in some places has been reconstructed with plaster painted like marble. The hemisphere of the concrete dome rises from its equator in line with the higher cornice. The amorphus concrete was shaped by a mould forming five rows of coffers, one hundred and forty in total, diminishing in size towards the peak. The coffers form a grid, rib like in appearance, which becomes a flat surface beyond the fifth row. As the dome raises and become almost horizontal a bronze lined ring forms the eight point three metre oculus at it peak.

Experience

Seeking shelter from the light fall of rain, I made my way on to

the level plane of the Pantheon between the towering columns of the portico. The unerring scale of the columns gave the space a feeling of majesty, however the vagrants, their dogs and the smell of urine and sweat drew my mind towards the ground plane crowded by tourists. In the shade of the portico, my eyes adjusted as I looked up towards the exposed structure of the roof, which revealed the logic of its construction at an unattainable height.

Then as I entered I was pushed against the massive bronze doors as a group of tourists existed. Their massive bulk failed to give way resisting me uncontested. The corner-less space engulfed me as I passed the group and my eyes were drawn upwards as I breathed the clear, still air. Stationary, I gained a sense of arrival as the edges of the space seemed to extend over, around and beyond me, enclosing my view. This immense peacefulness persevered through the constant chatter of the people I shared the space with. In place of the solemn silence often found in places of worship, visitors conversed applying the etiquette of visiting a ruin to the Pantheon. Their video recorders oscillated out of sync as tour guides gave embellished histories of the building in many languages.

As I moved towards the middle of the space my path was obstructed by a barricade that prevented me walking on the wet area in the centre of the floor. The ephemeral quality of the barricade reinforced my feeling for the material and weight of the space, and its perseverance against the ages.

I progressed through a horde of people to the opposite side of the barricade, and near a bronze fitting in the floor, I kicked my thongs off allowing the heat to drain from my feet into the marble. The surface of the floor and its joins had a soft smoothness I attributed to over a century of wear.

Through the automatic flash of cameras I observed the contrasting bright artificial light that reflects in the marble lining of the niches, against the gentle ambient light on the patinae of the concrete surface of the dome. My eyes were more at ease looking and tracing their way across the dome, constantly

being drawn to the apex by the enticing perspective given by the diminishing coffers. A patch of pinkish concrete, which appeared to have been cleaned, disturbed the seamlessness of this phenomenon, it drew my attention away from the otherwise continuous quality of the surface. A group then approached and crowded the area. I slipped my thongs on and moved to a vacant bench seat on the western side of the interior.

The marble lining of the wall was cool on my back as I reclined. Paying closed attention to the junction of surfaces above the door, I observed the repetitive nature of the interior elements

Figure 34: Photo-collage of the Pantheon's dome

as they broke down the vast scale of the space into portions of a human scale. This offered me an understanding of the overall dimension of the space, while constantly drawing my eye around the circumference, from one element to the next. As my eyes drifted over the marble surfaces of the interior I caught the sight of falling rain flickering in sunlight.

All at once I felt connected with the nature of the outside world. Through the Oculus rain fell into the interior creating a spectacle, while the bulk of the building sheltered and kept me dry. The direct morning light was reflected on the marble floor and I then became aware of the smell of rain. The uniform curve of the dome above seemed to relate to the domed sky I imaged above it, enclosing my upward view. The dome floated effortlessly.

The crowd of people grew louder as the sounds of others reverberated and forced each of them to raise their voices. I felt it was time leave. I walked past the multitude of faces retracing my steps to exit the rotunda and returned to the quiet rain of the piazza to contemplate my experience.

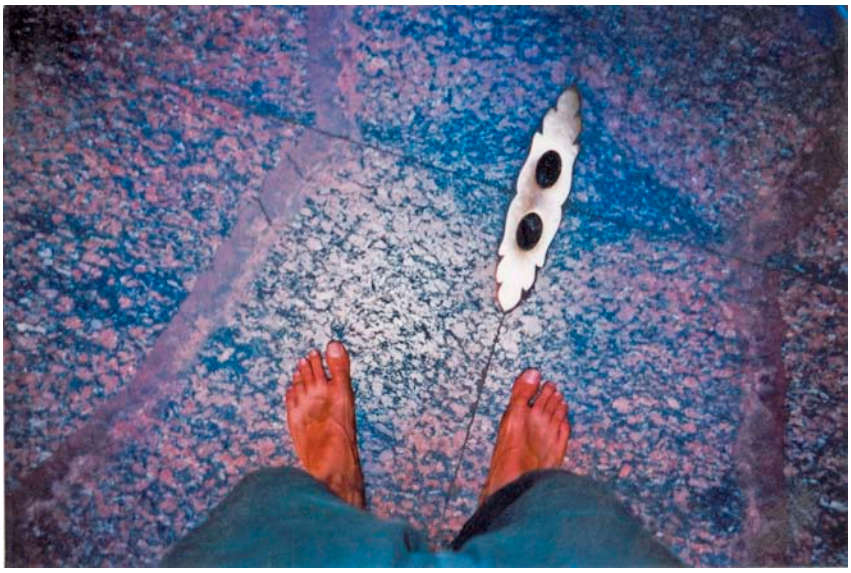


Figure 35: Detail of the relationship between my feet and the stone floor of the Pantheon

Figure 36: The Barcaccia at the base of the Spanish Stairs

Spanish Stairs

In the late afternoon I set out to Termini station walking along via dell' Olmata between the repetitive façades typical of the wide buildings in Piazza Santa Maria Maggorie. People where relining in the shade on the steps of the freestanding church to avoid the deep heat of the Piazza, which was sparsely populated with others on the move. I joined the busy pedestrian traffic on Via Cavour and continued towards Termini, then descended the stairs into the Metro from the front of the massive structure.

Negotiating my way through a small crowd I purchased a ticket and boarded the steamy, plastic interior of a carriage. At the third stop I alighted from the train and ascended back to street level via an escalator that lead to long corridor lined with tile mosaics. A dense crowd moved in both directions of the corridor, while most of those that exited tended to turn left into Piazza di Spagna, as did I. It was here that I glimpsed the Spanish Stairs framed by the ochre masses adjacent to it. I walked against the crowd towards the fashion and gelato outlets of Via Condotti and turned to face the Spanish Stairs on their cental axis.

History

The Spanish Stairs were built to unite Via del Babuino with Via Felice They rise from the fountain known as the Barcaccia, attributed to Pietro and Gianlorenzo Bernini[11], to the church known as Trinita dei Monti. In June 1660 Etienne Gueffier, the French onarchy's correspondent in Rome, died and left a testament providing a sum of money to be used in constructing a monumental approach to Trinita dei Monti[12]. However in 1667, a nephew had contested Gueffier's will, demanding half, and the project was all but abandoned[13].

In 1717 an investigation was ordered by Pope Clement XI Albani to determine the interest that the remaining half of the bequest had accumulated. The sum was found to be sufficient

11 Linda Boyer Gibbes, An Eighteenth-Century Roman View Painting: Panini's Scalinata della Trinità dei Monti, The Metropolitan Museum of Art Bulletin, New Series, Vol. 30, No. 4. (Feb. - Mar., 1972), p. 180.

12 Todd M. Richardson, Bernini and the Trinità dei Monti, The Art Bulletin, Vol. 62, No. 2. (June, 1980), p. 287.

13 Gibbes, p. 181

Figure 37: The view along Via Condetti from the Spanish Stairs

and architects were engaged to submit drawings for the stairs. Several projects were made between 1717 and 1720, including those by Alessandro Specchi, whose ideas were later assimilated by the chosen architect of the stairs, Francesco de Sanctis[14]. Later a proposal to mount a number of statues depicting French historical figures on the balustrades was made, though they were never realised.

When the stairs, then known as the Scalinata della Trinith, were completed in 1725, they became an immediate attraction for Romans and tourists alike and a favorite subject for artists[15], a phenomenon that has continued over almost two centuries.

Fabric

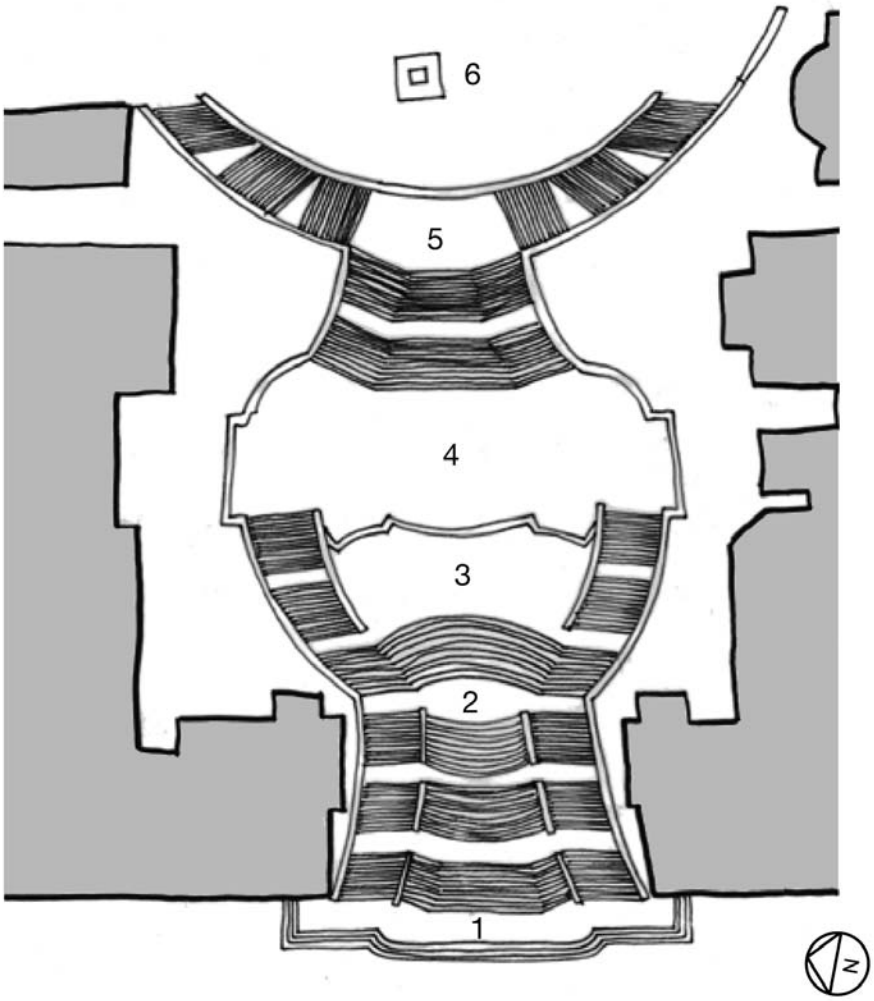
The one hundred and thirty eight steps of the Spanish Stairs rise on an axis between the Barraccia, now below street level in Piazza di Spagna, and an obelisk located on the uppermost platform. The ascent is made in two rises, both of which are variations of a protruding volume formed by surrounding stairs, with central flights in front. Both variations are uniformly lined in white travertine with a pitted grey porous texture indicative of the stone's volcanic origins.

The Spanish Stairs begin with three simple rectangular stairs forming a platform which separates the main rise of stairs from

14 Christian Norberg-Schulz, Late Baroque and Rococo Architecture, p. 28
15 Gilles, p. 82.

Figure 38: A crowd gathered around the Barcaccia

1 Initial platform
2 Midpoint of first rise
3 Landing
4 Central platform
5 Midpoint of second rise
6 Obelisk



0 5 10 15 20

Figure 39: Plan, Spanish Stairs

Figure 40: A crowd gathered at the base of the Spanish Stairs

street level. From the base three flights of stairs rise with the articulate step detail that is consistently found throughout the stairs. A broad low step, the nosing of which has a radius, and which is similar in detail to a typical stone cornice. The three flights are defined by two rows of banks, which extend at the height of the top stair of the flight, and two intermediate landings. The middle flight is convex in plan and protrudes the neighbouring pair which forms a central space on the platform marking the midpoint of the first rise.

From this platform one continuous stair rises traversing the width of the structure. The central section is concave and leads to a generous landing, paved in dark stones, while on either side additional stairs rise in two flights to a large central platform marking the midpoint of the composition of stairs and the end of the first rise.

The central platform is also paved in dark stone, though is divided into five areas by longitudinal bands of travertine. Each of these areas has a central square of travertine with a drain set in the middle. The vertical surface that spans the two platforms is formed by stone clad engaged columns that frame panels of painted ochre render and a central panel of marble bearing inscriptions. Decorative stone cornices and balusters, holding a wide stone balustrade, top this composition.

The second rise of the stairs begins from this platform as one continuos stair of three sections. Again the central section protrudes from the others, which are splayed, as the two flights ascend to a platform. There, two steps make the final rise of three flights in opposing directions around the convex platform which is the summit of the Spanish Stairs. In the centre of this segmented platform is a tall obelisk, set on a stone plinth. Below the platform's vertical surfaces are similar to those of the central platform.

The entire complex of stairs and platforms is continuously framed by a solid balustrade of uniform detail, similar to the banks of the first rise. This highlights the uniform material and detail of the stairs unite the composition as a whole.

Figure 41: Piazza de Spagna

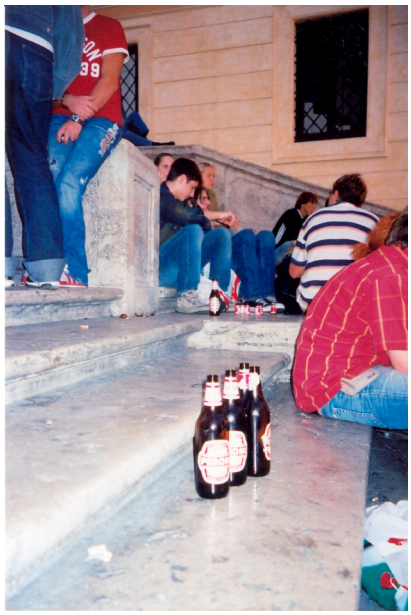
Experience

Standing at the intersection I observed the fleeting crowds passing in front of those situated on the stairs. The grand mass of the stairs formed the backdrop of the scene and seemed a cohesive whole integrated into the topographical and built landscape.

A slight cooling breeze moved through the open space of the piazza as I moved across the hot, dark surface of the street. I sat amongst a string of people lining the ring of steps surrounding the Barraccia, enjoying the cooling atmosphere emanating from the water that issued from the fountain. The water was clear and bright, the sound of it's flow was soft against the loud conversations and occasional passing automobile. Those that surrounded the fountain all peered inwards while the live qualities of gushing water occupied their eyes in a way that I recollected as being similar that of a campfire at night.

I arose and moved towards the base of the stairs. The area to the left of the stairs was crowded as the adjacent buildings cast their shadow over it. Ascending the stairs I passed touts moving between those reclining, inciting them to purchase roses or small toys. The dense crowd, holding cameras and gelati, thinned as I climbed the stairs and drew further away form it's base. I crossed a landing then began to climb the second flight of stairs and my mind gave way to the monotonous effort my body. The repetitive nature of my movements paused as I traversed another landing and then began again as I made my way up the third flight. Throughout the ascent my fingers drifted across the smooth surface of the balustrade that continuously accompanied me at the perimeter of the stairs. The consistency of it's texture and form accentuated the notion of the stair being made of many similar parts forming one whole.

Figure 42: A group of youths seated on the stairs



Arriving at the large space at the midpoint of the stairs I took a position between individuals leaning on the balustrade and looking out towards the street below. The deep balustrade was a little below shoulder height and took my weight comfortably as I leant onto it, resting on my forearms. The travertine was smooth and cool, polished by the thousands of human bodies that had rubbed against it's surface before mine. There I quietly shared the view of the people below, also using this great network of platforms as a position to view the theatre of the city beyond.

Figure 43: Detail of the relationship between my feet and the travertine surface of the stairs

The sun began to give in to the cluttered rooftops that formed the horizon and I moved to the stairs at the opposite end of the platform and descended them slowly and paused to sit on the next flight. Groups of people were now distributed evenly, inhabiting various positions across the stairs that were recently engulfed in shade. Above the conversations of the crowd music sounded from a guitar nearby and I reclined against the steps again resting on my forearms. I traced my fingertips over the pitted surfaces of the worn travertine steps and studied the milieu of bodies passing through the piazza.

The deep steps were pleasant to lean against as their incline was not steep. The rounded edges of their nosing held my legs comfortably and filled my hands as I raised my torso and leaned forward. The people around me were primarily using the stairs as a place to rest and it seemed that this was the designer's intention as the various human scales of the steps accommodated the body more naturally when reclining than when traversing their low proportions.

Figure 44: A crowd resting on the balustrade of the central platform

As the light dimmed I rose and descended the stairs passing between many contented people occupied with conversation. I stepped off the stairs and again felt the heat rising from the street, a sensation that was absent on the light surface of the stairs. Then making my way between the designer stores addressing via Condotti, I pushed through the crowds and left the peace of the stairs behind.

Cairo

I spent the month of September in the Egyptian capital Cairo. I arrived by plane and watched on my personal monitor as the city drew near. In the east I could make out the Pyramids of Giza and the fragile line of a wall, which marked the edge of the city and the beginning of the desert. West of that wall a sprawl of flat roofed concrete buildings worked its way towards the Nile, and as the roads grew in size, they led to the built-up urban centres of Cairo. In the dry heat and in the heart of one of those urban centres, I found my accommodation.

Figure 45: The view from my room at the Garden City Hotel

I stayed at the Garden City Hotel in Downtown Cairo. The rooms were meagre and dim, the beds hard and the water tasted like chlorine. My room had a widow with a view on to a lush enclosed courtyard garden. The garden sounded of birds chirping, and its dense green foliage was entirely at odds to the city which surrounded it. The hotel was a good place to base myself for my daily exploration of the city. To the west was Qasr el-Nil Bridge, over the Nile and to the east was probably the largest traffic junction in Cairo, Sadat Square. Each day this massive round-a-bout would mark the beginning and end of my explorations. Nearby there was a metro station as well as a bus station and the nine lanes which orbited that island dominated by taxis, black, white and battered.

Being a pedestrian in Cairo was at times problematic. The wide avenues of insencently horn honking traffic that divided the city did not stop to allow people to cross but was traversed by the pedestrians constantly risking life and limb. The buses in Cairo also rarely stopped to allow passengers to board or alight. This was usually achieved by a running jump, which caused a lot of deaths, directly amongst some the most intense and erratic traffic in the world.

When my destination was too far, or it was too hot to travel on foot, I took a taxi. Most taxi drivers took immense personal pride in the appearance of their vehicles. In a bid to attract more customers they would fit out their interiors with neon lights, velvet, tassels and low voltage electronic accessories, as many as the surface area of the dashboard would hold.

Figure 46: A typical scene on the streets of Cairo

The dazzling taxi interiors were a vibrant extension of Cairo. They also offered me a new perspective the city, one that I would never have experienced on foot. The series of above-ground expressways rose beyond the crawling pace of the crammed streets. From my position in the passenger seat, the orthogonal concrete architecture of the city passed by me. For brief periods of time I would be elevated at great speed and gaze across the flat rooftops of Cairean dwellings, most of which were mounted with aerials that competed with minarets against the flatness of the horizon. The taxi would then slow and return to ground level and I would witness the many places of trade which lined the streets.

Figure 47: Looking out at Cairo from the interior of one of the city's many taxis

On foot, the streets were dusty, hot and dry though each day was made more tolerable by an abundance of fresh juice vendors. These could be identified by the wealth of mangos, lychees, canes and papayas adoring their shop fronts, waiting to be liquefied.

Whether I had set out on foot, took the Metro, caught a bus or hired a taxi, my nights most often ended at an ahwa (coffee house) at Sadat Square. Enjoying refreshing lemon juice, I smoked sheesha with the locals and would I look out in wonder at the ceaseless life in the square.

Mosque of Ibn Tulun

Through the thick polluted air I made haste for the metro station under Sadat Square and embarked the fluorescent interior of a train. Departing the train at Sayyida Zeinab Station I walked through a quiet used-book market under a highway overpass and soon became disorientated. Very few intersections in Cairo had street signs, so after noticing the silver domes of the Mosque of Mohammed Ali atop a limestone spur to the east, I followed them in the general direction of my destination.

Bare concrete orthogonal masses disorderly abutted each other enclosing the streets which blended into one another. Finding myself in one of the city's cemetery complexes, where many of the homeless took shelter, I sought directions to a main street. From there I climbed a small hill in the hope of discriminating the unique minaret of the Mosque of Ibn Tulun from the chaotic mass of the city. After making it out I descended and trod the broken footpaths past a bakery, grocers and workshops where scraps of lead were being melted down and recast. Finally the mosque's simple perimeter wall was visible through the irregular forms surrounding it.

Figure 48: The Mosque of Ibn Tulun set within the chaotic jumble of the city

History

In the ninth century the Abbasid caliph of Bagdad sent Ibn Tulun from Samarra to Egypt as Governor. He founded his own capital, al Qatai, however nothing but the mosque bearing his name and a nearby aqueduct have survived from Ibn Tulun's city[16].

The mosque of Ibn Tulun took three years to construct and was completed in 879 AD. The mosque was built to accommodate the growing Muslim population who's numbers had out grown the room available. Although established as a place of worship, the building has had a turbulent history and has had many incarnations.

In the thirteen century the neighbourhood had fallen into decay, the mosque of Ibn Tulun was used as a caravanserai for North African pilgrims on their way to Mecca. In the nineteenth century the mosque was used as a factory, and later as a lunatic asylum.[17]

During its history of mixed uses the mosque had deteriorated and been restored numerous times. It first underwent renovations in 1177 and then again in 1296-1297[18]. During the nineteenth century the mosque again became used as a place of worship with the most recent renovations having begun in 1997.

Figure 49: Detail of the plaster reliefs found on the many arches of the arcades

However, despite its turbulent history, the mosque of Ibn Tulun remains the oldest mosque in Egypt in its original form.

Fabric

The mosque of Ibn Tulun is built of plaster lined brick and consists of four arcaded halls (riwaq) enclosing a courtyard. The largest hall forms the sanctuary of the mosque on the qibla side. The sanctuary (qibla riwaq) has five aisles parallel to the prayer niche, the other three sides have two aisles each. The arches of the arcades are pointed and rest on rectangular piers decorated with four engaged columns at the corners. The walls of the mosque are crowned with open brickwork crenellations, a repetition of the Samarra stucco motifs decorating the interior walls.

16 Doris Brehrems-Abousief, Islamic Architecture in Cairo, An Introduction, The American University in Cairo Press, 1989, p51.
17 Ibid. p55.
18 Ibid. p52 -55.

1 Enclosed space (ziyada)
2 Courtyard
3 Sanctuary (qibla riwaq)
4 Mihrab

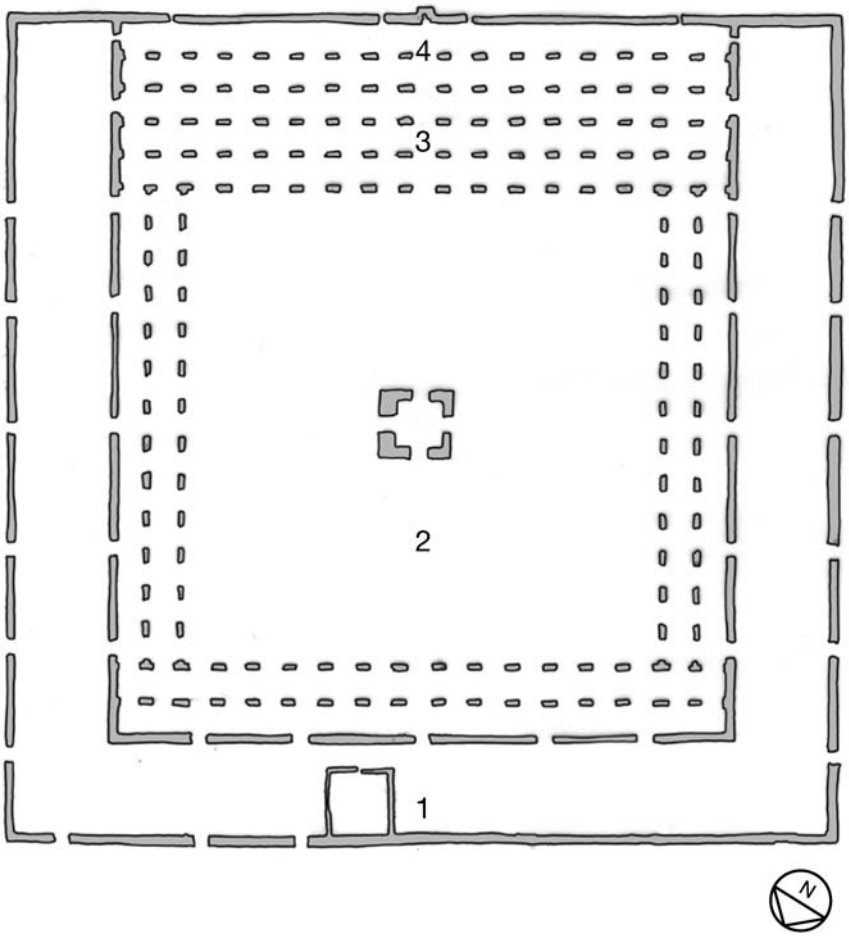


Figure 50: Plan, Mosque of Ibn Tulun

Figure 51: The unique minaret of the Mosque

On the three minor sides the mosque is surrounded by an enclosed space (ziyada) separating and protecting the mosque from the noise and bustle of the street. In the three arcaded halls there are nineteen doors, each corresponding to another door in the ziyada. There are three more doors on the qibla side.

In the three minor arcades pointed arch windows with stucco grills, flanked with colonnettes, pierce the upper part of the walls. The windows alternate on the outer wall with blind niches and there are altogether one hundred and twenty eight windows in the mosque. The arrangement of the windows is independent of the arches and because of this not all arches have a centred window.

In the centre of the courtyard there is an ablution fountain which was added to the mosque in the thirteenth century. The fountain is in a rectangular room, covered by a dome with an inscription band of Quranic text.

The only stone element in the mosque of Ibn Tulun is the minaret. The minaret stands on the north side of the ziyada, slightly off the axis of the main prayer hall. The origin of the unique stone structure, particularly the outer staircase, the subject of controversy among historians and connected with a legend.

Ibn Tulun was said to be sitting with his officials and absentmindedly winding a piece of parchment around his finger. When asked by someone what the gesture meant, he answered out of embarrassment that he was planning the shape of his minaret.[19]

Experience

After locating the signed entrance to the mosque I made my way towards the gateway in the masonry wall. I ascended several stairs and found myself in a cool dark space cluttered with signs and objects associated with the renovation works. Looking inwards through the bright light of the courtyard I found it difficult to make out the ordered details of the nearby sanctuary. I donated the requested amount to a man at an improvised table and he offered me canvas bags to wear over my shoes. As the mosque was under repair I wore the bags in place of removing my shoes, as is customary. As my eyes adjusted to the dim light of the interior I was permitted to enter and was alone in the mosque with the subtle din of working metal tools.

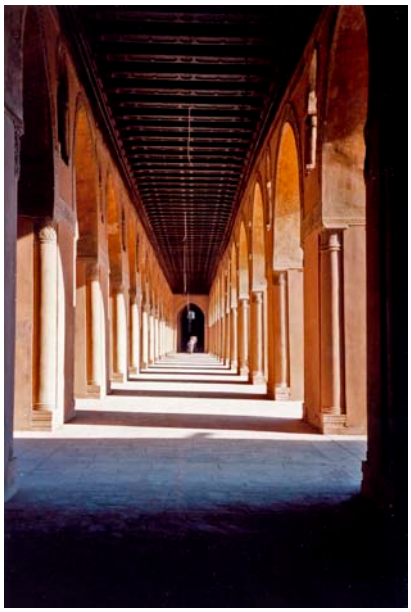
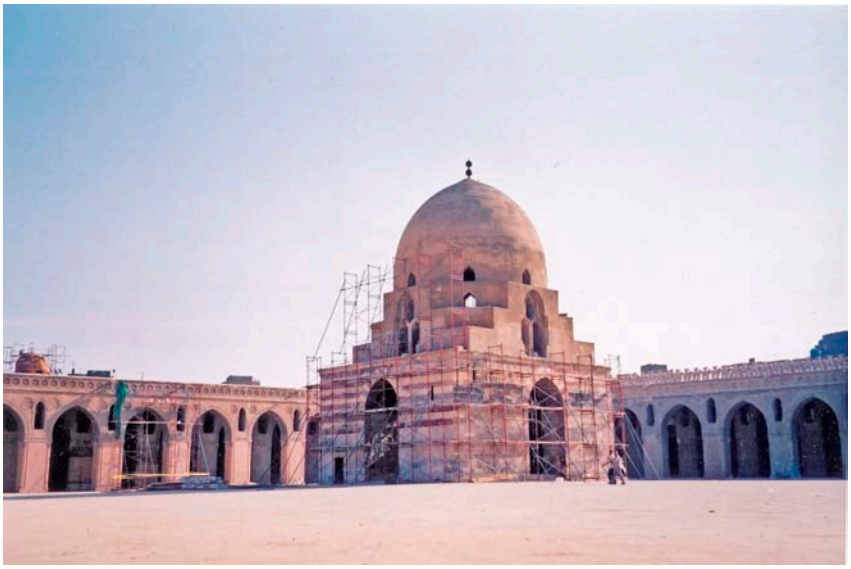


Figure 52: The repetative structure for the arcades

19 Doris Brehrems-Abousief, Islamic Architecture in Cairo, An Introduction, The American University in Cairo Press, 1989, p55.

Figure 53: Detail of the relationship between my feet and the floor of the Mosque.

Figure 54: Steel scaffolding surrounding the Mosque's fountain



Making my way into the sanctuary I became aware of the calmness of the mosque. The repetitive nature of the structure and finishes relaxed my mind and the chaos of city became a distant memory. I meandered through the piers of the arcade observing the makeshift prayer mats facing the prayer niche that lined the floor. The mats had modest decorative motifs and complimented the honest feeling the building had while under repair. The ceiling of the arcade was staggered and lined with dark timber. Power cables hung in equal distances awaiting their bulbs in the quiet darkness. The bright light that illuminated the sandy courtyard penetrated less and less through each row of piers, as did a slight breeze, making the outermost wall the most sheltered and dark surface of the mosque.

My canvas shoe bags hung low and brushed along the sandy pavement as I entered the open courtyard and again felt the sun on my exposed skin. In the centre of the courtyard the stone fountain had an ensemble of red scaffolding assembled around its circumference that also penetrated its dark interior. The presence of this fine, temporary metal structure reinforced the permanence of the stone fountain and portrayed the structure as an extension of the material of the earth. The stone minaret also had a fine lacework of scaffolding reaching up on all sides, yet the simple geometry of the masonry structure stood clear and proud.

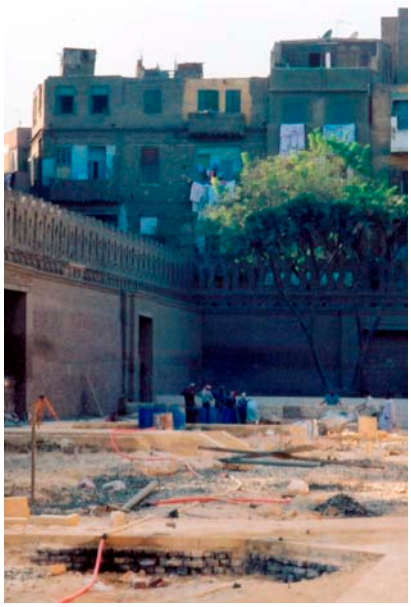


Figure 55: Renovation works underway in the grounds of the Mosque

The earthy tones of the internal wall of the courtyard were succeeded only by the crenellations atop the outer wall. They were of open brickwork that stood vivid against the clear blue sky and seemed to be a repetition of the stucco reliefs decorating the various surfaces of the mosque. That internal wall cleared the skyline of the looming concrete jumble and gave the mosque a feeling as if it were a world of its own, a microcosm of peace in a chaotic cosmos.

As the feeling of the sun on my skin intensified I retreated to the shade of the opposite arcade. I passed through the variable subdued light of the arcade towards a doorway to the perimeter courtyard, running my fingers along the smooth stucco of the piers that told of the imperfections of the hand worked surface. I could not perceive the bright exterior through the fine dark grill of a window and was drawn to a door leading to the perimeter courtyard. Standing on the limit of the arcade the intense light overcame my eyes once more. Through it, I noticed the myriad of concrete residences that where not visible from the courtyard, stacked upon each other overlooking the mosque. Here I found the workmen which I had attributed the constant quiet construction noise that could be faintly heard in the mosque as they manually worked metallic hand tools.

Complementing the dinking of hammers and chisels the chirping of birds could be heard from the few fruit trees. Finding the serenity of a setting akin to that of the desert was not often possible in the Cairo I had experience up until then. Turning towards the interior of the sanctuary I walked across the level stone plane and approached the place of my entrance. I removed the canvas bags from my feet, then exited the simple geometry of the mosque descending the stairs towards the traffic, and my eyes were once more overwhelmed by the complex details of the rambling street.

Figure 56: People engaging in trade on the streets of Khan el-Khalili

Khan El Khalili

Crossing Sadat Square in the relatively early morning calm I signalled a taxi and asked to be taken to Khan el Khalili. We headed east along main roads with the windows down allowing the cool morning air to fill the car. The façades of the dense city were relentless and rarely gave way to open space, only allowing for more congested roads to cross our path. Having past under a footbridge spaning the road we pulled over and I paid the driver. He had dropped me between the stone mosques of Abu Dahab and Al Azhar in small area paved with dirty asphalt. Busy people walked in every direction. Stationary, I was accompanied only by an indifferent mule carrying a tall load of fruit and vegetables. Away from the road I could perceive the beginnings of a fruit market along a small lane, though across the road there were fluctuating crowds in a square. I assumed this area was part of the khan and walked under the road through subterranean walkways, that lead to a small court. Organised clusters of people were alighting air-conditioned coaches and filing down the street nearby. I walked towards the street and peered down the slope into what was undoubtingly the central street of the khan.

History

A definitive history of the Khan el-Khalili has not been recorded and the origin of the Khan is the source of much speculation. De Thevenot made an early reference to Kan el-Khalili in 1656- 58. He reported that there was a market held on Bazaar Street, Khan el Khalili was at the end of that street, which had an open courtyard where white slaves were sold every Monday and Thursday[20].

Early records of the Khan were also published in 1876 with the release of *Baedecker's Egyptian travel handbook*. In Baedeker's Egypt, the district was described as a former centre of the commercial traffic of Cairo, said to have been founded as early as the end of the thirteenth century, on the site of ruined tombs of the Caliphs by the Mameluk sultan El-Ashraf Khalil. In 1929 the eighth revised edition of Baedeker's Egypt re-dates the Khan to 1400, founded by Garkas El-Khalili, master of the horses to Sultan Baarquq, on the site of the palace of the Fatimaids[21].

20 Fekri A. Hassan 'Selling Egypt: Encounters at Khan El-Khalili' in Sally MacDonald and Micvhael Rice editied 'Consuming Ancient Egypt' UCL Press, London, 2003. p.114
21 Ibid, p. 114.

In a more modern handbook, *The 1963 Hachette Guide to Cairo, Alexandria and Environs*, the founding of Kahn el-Khalili is dated to 1292, on the site of the tombs of Fatmite Caliphs. Yet the 1974 Parker and Sabin guide states that the Khan was founded by Amir Garkas al-Khalili in 1382 as a Caravansary[22].

Though the exact origins of the Khan cannot be determined, the stone gates attributed to the Mameluks can still be seen among the piecemeal fabric which has remained a lively place of trade for more than three centuries.

Fabric

Khan el Khalili is located in the east of the city in an area known as Islamic Cairo. Bound by the Al Azhar highway to the south and by the forecourt of the Mosque of Sayyidna Hussein to the east, the khan district sprawls to the north and west assimilating with the areas that surround it.

From the forecourt of the mosque a wide thoroughfare descends the slight slope approximately through the middle of the Khan. Narrow streets cross this axis in perpendicular rows servicing the frontages that are located deeper in the fabric. The semi regular organisation of these spaces becomes more random as they progresses deeper. To the west the arrangements become arbitrary and haphazard.

In the central northern area the remnant stone gateways of the original structures that occupied the site form part of the fabric of the larger spaces of trade. Otherwise the allotments are small and packed tightly together holding buildings two to three stories in height of mud brick, stone and concrete. The orthogonal structures have mostly flat roofs and house shop fronts of timber and glass, though some of the modern frontages are framed with aluminium and metal roller shutters.

Spanning between the opposing facades of the streets are a network of ropes and cables which support make do shade structures of fabric, tarpaulins and sheet metal. This tapestry of interweaving material can be dense and times merge with

22 Ibid, p. 115.

1 Al Azhar Road
2 Midan Hussein
3 Main street of khan
4 Mosque of Sultan Hussein
5 Subterranean walkway
6 Pedestrian bridge

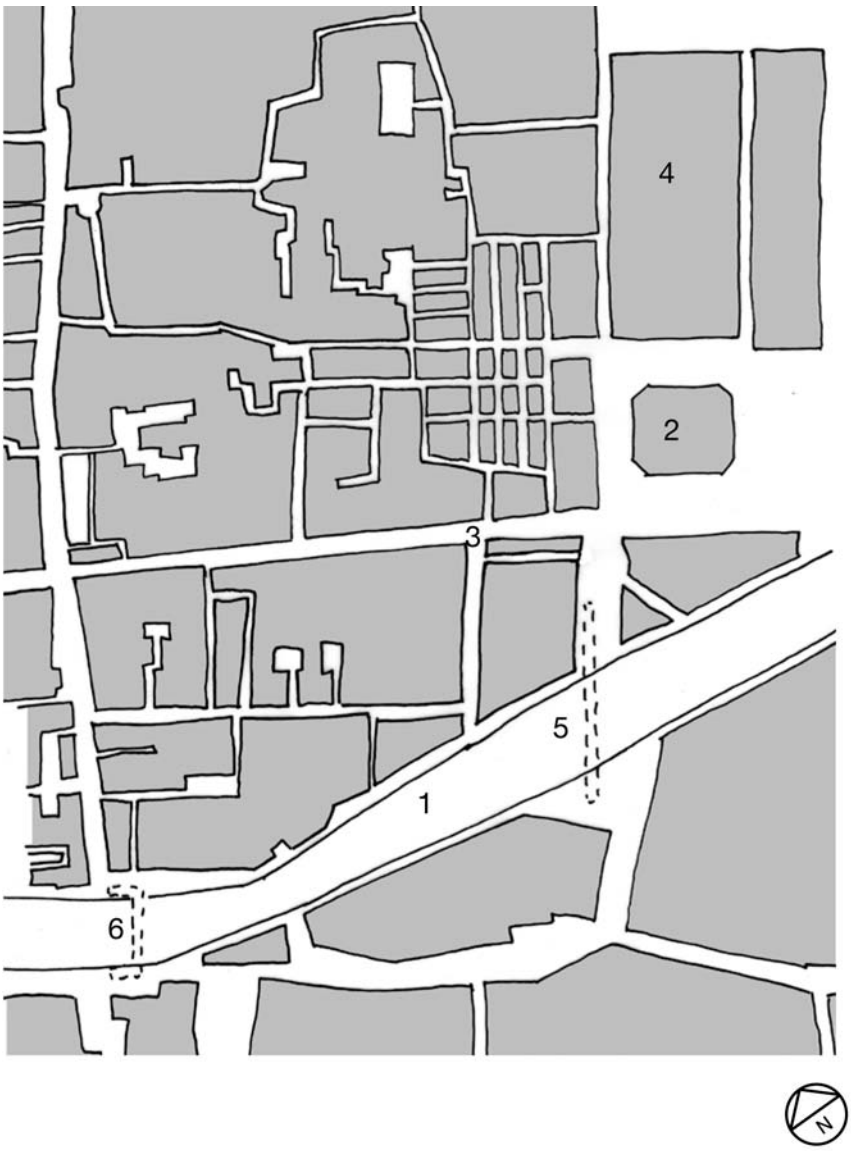


Figure 57: Indicative plan of the main thoroughfares of Khan el-Khalili

the ensemble of chaotic fenestration and signage dressing the buildings.

Below the shade structure the paving is of stone, concrete and asphalt depending on the hierarchy of the zone it is located in. Each zone holds groups of artisans or traders according to their specialty, be it perfumes, copper or gold.

A large part of the physical fabric of the khan is occupied by the ubiquitously reproduced Egyptian statues and souvenirs. A sample of what can be found includes a life size sarcophagus, cleopatra's dress, tut's hair, Egyptian gowns, belly dancers' costumes, scarves, vests, shawls, hats, totebags, men's ties, purses, Egyptian aprons, wall hangings, rugs, tapestries, headdresses, masks, chokers, pencil holders, costume

Figure 58: Temporary shelters andmerchandise lining the streets of the

accessories, armbands, collars, belts, cuffs, wallets, spectacle-cases, magnets, key chains, boxes, postcards, mosaics, mother of pearl, mugs, ornaments, scarabs, plates, pyramid lamps, perfume bottles, toy camels, thimbles, spoons, crystals, vases, alabaster, soapstone, Egyptian coffee-makers, earrings, buckles, books, colouring-books, wrappings, gold jewellery, mummy-beads, rings, necklaces, cards, book-marks, puzzles, games, stationary, chess-sets, brass items, tambourines, perfumes and papyrus[23].

Experience

The nexus of Midan Hussein and the central street of the Khan was marked by a small garden in the centre of a paved area. I walked around the garden towards the north, away from the large crowds that were forming and entered the Khan through a narrow street which penetrated its edge and found an area dense with tourist merchandise.

Smells of Arab spices filled the air as vendors prepared food at the edge of the street and I walked in the shade down the narrow path lined with buildings three stories in height. The upper two floors of the buildings seemed like any others in Cairo, though the open frontages of the lower floors were ordained with masses of Egyptian wares. Brass objects, traditional gowns, sheeshas and other items were displayed in the depths of the spaces, most of which were without artificial

23 Ibid, p. 122.

ight sources. The merchandise displays were so abundant that they usually hid the buildings fabric from view and the most spectacular displays were of ornate sheesha hoses hung at regular intervals from the lintels of the openings.

I paused in the fast paced atmosphere as conversations fluctuated during constant activity of trade based on negotiation. Here I contemplated the architecture of the Khan. The narrow widths of the street had allowed the buildings to overshadow it and it appeared that the structural capacity of the building techniques gave a consistency to the height and span of the buildings. There were consistent piece meal additions that contributed to the existing layers of fabric in a chaotic and ‘ad-hoc’ manner. This apparent process of continuous addition to the Khan gave it an ageless character as if the fabric was constantly in a state of change.

I continued along my path and soon turned south entering the central street. Here the width of the street allowed the bright light to penetrate it, reflecting in the dirty asphalt, and tourists seeking souvenirs such as alabaster pharaoh busts dominated the trade activity. I crossed the street to escape the heat of the direct sun and made my way into an area which was predominantly occupied by stationary sellers. There was less activity on the facades and in the stores which hung incandescent light bulbs that eliminated the quality of shadow that had enriched the previous area.

Heading west I came to a section populated by fabric merchants. There, the narrow streets were heavily congested with consumers and vendors negotiating prices in between bales of cloth and clothing under hanging shades of similar materials. I passed through the heavy air, musty with the smell of both new and old fabric, making way for hurried men carrying mountains of fabrics on trolleys that weaved through the crowd, warning of their approach by making hissing and clicking sounds. My eyes were busy enjoying the assortment of hanging fabrics and the space was so densely populated that I was doing this over peoples shoulders while those behind me pushed me forward and I lost track of my feet. Eventually the

flow of people took me to the edge of the fabric section. There the complex scents of jasmine and myrrh filled my nostrils as I emerged onto a relatively wide street near the footbridge I had seen earlier from the taxi.

Perfume vendors occupied most of the frontages with large numbers of blank metal canisters on their shelves holding the essences which they mixed by request. I left the stone paving of the street and made my way onto the concrete floor of a perfumery, gazing at masses of canisters with faded text scrawled on them. Then a vendor encouraged me to follow him up a metal spiral staircase located in the far corner of the rectangular space. The stairs lead us to a small four sided room with no windows. Each wall of the room was wall lined with glass shelves and mirrors that refected the refection from the opposing mirrors into infinity. The ceiling of the room was low and from it hung a small chandelier that cast bright light onto the thousands of small glass vessels lining the shelves. The delicate containers were of many shapes, such as camels, flowers and lamps, each being small enough to be placed on the palm of my hand. The vendor presented many vials for me to smell in order decide on what I would like to purchase. My attention however, was focused on the alluring display of glass while the presence of the many essences in the small space flooded my olfactory senses and made the essences almost indistinguishable from each other.

With the strong scents overwhelming me, I descended the stairs and made for the open air of the street. I then came to an area dominated by gold merchants. Their businesses were conspicuous among the other sellers as their air conditioned spaces bore glazed facades void of the hanging merchandise or piecemeal additions that characterised the other frontages of the khan. This area seemed to have undergone a modern refurbishment and had its own unique atmosphere.

Here the facades displayed richly coloured 24 caret gold jewellery that reflected the fluorescent light of the interior, where negotiations took place seated in the silence of the sealed spaces.

Following the sound of tools working metal I made my way north towards the area known to house the coppersmiths. The storefronts were open on the street and artisans crafted copper and other metals while seated on the ground or standing at benches. The fine, dark debris from the metal work smeared the floor of the workshops and the street gave them a sense of continuity, while the air smelt of grease and metal. I continued on and passed through an area that offered replica antiques for sale. Then I passed through a stone gateway into a large vertical space which housed many shopfronts and cafes selling polished brassware, refreshments, or both. The space was dark and a small amount of light penetrated through the windows and reflected back and forth between the polished surfaces of decorative plates and the vessels. Smoke from sheeshas ascended the air and dissipated against the overarching ceiling which enclosed the space. The ground was busy with activity as people we seeking light meals as the day drew towards its midpoint.

I took a seat at one of the cafes and ordered a lemon juice. The timber chair and tin table were familiar to me now as I had become accustomed to them at the coffee houses across the city. My juice arrived in a glass with a straw and I began to consider the khan. The drink was refreshing and eliminated the traces of grease and metal from my palette, though I could not clear my thoughts as more people entered the space and their conversations became louder. I finished my drink, paid my account and sought to escape the rising population of the space. I exited that area of small cafes out into the street and headed to Midan Hussein to hail a taxi that would deliver me to the peace of my hotel. There, with my view of the courtyard, I would contemplate the complexity and logic of the Khan.

Conclusion

While experiencing the six architectural spaces I have discussed in the report I have gained an understanding of the aspects that I believe contribute to the timelessness quality of architecture. I have nominated nine of these aspects as examples of those I found. These aspects include:

Darkness and Light

The presence of both darkness and light in an architectural space adds a quality of depth to the space which is not possible with one and not the other.

The Mosque of Ibn Tulun offered a vivid contrast of light and darkness. In the shadows of the arcades relief for ones eyes could be found from the intense Egyptian light which lit the court. While in the court one gained an opposing view into the deepening darkness of the parallel arcades that suggested the infinite, as the light failed to penetrate to the exterior walls.

Louis Khan wrote of such qualities as necessary in architecture and that the presence of natural light emphasised the qualities of the darkness[1]. The configuration of Cemberlitas Hamamicontrolled the variance of light in distinct stages, each successive area of the hamami growing darker. It was as if one was journeying into the depths of the space. It was the profound experience of the play of light in the bath chamber where the light penetrated the dome and shone through the steam onto the wet stone interior surfaces.

In both the examples above, it is sunlight that is utilised to create the timeless qualities, though one could image the spaces seeming even more profound by moonlight. In either case it is the dominant use of natural light and variable darkness that creates the sense of timelessness. The natural light varies as conditions change, and the darkness invites a closer look which triggers the imagination.

Signs of wear

As signs of wear emerge in architecture any notion of it's pristine nature is eroded and its susceptibility to time is evident. Juhani Pallasmaa wrote of the defined formalities being broken down

leading to a heightened intimacy[2]. This intimacy is achieved when the function of the space and its environment begin to define its texture and form.

The Spanish Stairs provide evidence of this humanisation of architecture, making it more comfortable and easier to relate to. The constant use and wear of the travertine steps over hundreds of years has given the steps a sense of comfort one would normally associate with a worn pair of jeans .The kind of comfort that can only be achieved by wear, through use, over time.

The state of decay of the exterior of the Pantheon adds to the enduring quality of the interior, while the worn floor alludes to the material's density and resistance. Peter Zumthor wrote that signs of wear increase one's consciousness of time passing and the human lives that have been acted out[3].

At a fundamental level, the signs of wear become of primary importance when considering a work of architecture as a functioning thing. It is the signs of wear that form a connection with ones experience in the present moment as well as an earlier presence and the behaviour of the individuals before that time.

Traces of workmanship

The trace of a human process that shapes material enlivens our understanding of the spaces that are created and engages our mind in the logic of the matter which forms them.

The Mosque of Ibn Tulun provided such an experience as the plaster lining of the piers that formed the arcades varied in surface. The simple surface of an engaged column, or the decorated surface of a pointed arched each had an imperfect quality from their construction insitu which implied that careful consideration was made as each surface was defined by hand.

Alvar Aalto suggested that without this presence of human error the richness of life could not be expressed in architecture[4]. The presence of such qualities can be found in the Sultan Ahmed Mosque. The interior volumes of the Mosque entice the eye

across its surfaces clad in thousands of ornately painted Iznik tiles. On close examination the tiles reveal a variance derived from the nature of the fabrication. When the individual nature of each hand painted tile is discovered a reconsideration of the interior of the mosque takes place and the contribution of each tile to the overarching effect is fully understood.

Traces of workmanship that reveal the process of making communicate how the space came into being and furthers our appreciation for is detail, while the slight error or variance in finish created during construction can impart a sense of authenticity to the architecture, relating it to the human condition, as if it is aware and accepting of imperfection.

Haptic intimacy

One has an increased awareness of the fabric and nature of a space when an intimately haptic relationship is formed with it. This is most likely to occur when it is required due to the function of a space and both Cemberlitas Hamami and the Spanish Stairs encourage intimacy through the nature of their functions.

The Spanish Stairs are a place to dwell. While spending time there sitting, one develops an understanding of the travertine, of its porosity and texture and an appreciation for the sensibility of the space. This intimate relationship with the Spanish Stairs renews our awareness of our own body and encourages a slow experience that leads to deep understanding of the space.

Juhani Pallasmaa wrote of this slow experience yielding a gradual understanding through the body and skin[5]. He asserted that an understanding gained through touch had a greater impact on the individual.

In the Cemberlitas Hamami the close relationship of the body to the stone platform in the bathing space endows a memory of the physical qualities of the material in one's muscles. This is exemplified in one's body as it carries the heat gained form the experience afterwards.

In both the Cemberlitas Hamami and the Spanish Stairs the timeless quality is evoked by the fabric of the space requiring one to be intimately aware of it. This first causes one to make more astute observations, considering the relationship of the fabric and oneself, which then results in one reflecting their own nature.

Sense of the whole

A defined sense of the whole of a work of architecture leads to an understanding of it and to a psychological acceptance of what it is without ambiguities of its measure.

The Spanish Steps and the Pantheon both convey a sense of the whole before they are experienced. This is due to their ability to be perceived in their entirety from their surrounds and in the case of the Pantheon the ability to be circumnavigated as if an object. Having gained the sense of the whole, this understanding of the space then allows an uninterrupted communication of the architecture's edict.

Peter Zumthor wrote of the value of this clear impression of the inherent statement[6]. He also stated the importance of the sense of the whole not being depleted by the presence of inconsequential details. Again, this can be observed in both the Spanish Stairs and the Pantheon, where the nature of each part of the building's details contribute to the sense of the whole and where, as Christopher Alexander described, each part can be understood as a whole itself[7].

When the finite measure of each part of a work of architecture is understood, the whole of the architecture can be accepted or processed. Then a confidence emerges in one's perception which enables one to be certain of the ability to comprehend the work of architecture in its entirety.

Monumentality

Monumental architecture captures our attention and focuses our thoughts. It is the clarity of a grand gesture that results in a monument and the Sultan Ahmed Mosque and the Pantheon both possess this clarity and indeed have a monumental presence.

The Sultan Ahmed Mosque is both monumental in the grandeur of it's interior as well as its scale and position in the city. The ornate interior of the mosque captivates one's mind in its achievement of ornament and volume. While the exterior, with its domes clad in zinc and six minarets, can be seen throughout the city. In this way the mosque can be used in navigating the city and it continues to have a presence in ones mind while anywhere in Cairo, particularly when destined for the mosque. Arriving at the mosque one has a sense of the completeness of the composition and it was this that Louis Khan believed derived monumentality.

Khan described monumentality as achieving a whole which cannot be added to or changed, and that has a sense of eternity[8]. The Pantheon also has this sense of a whole and a clear presence in the fabric of Rome. When approaching the portico of the Pantheon one is first confronted with the scale of the structure before the composition of the interior is revealed, a composition which itself is at a scale that inspires wonder.

The fabric of a monumental building is a physical manifestation of human aspirations, and it is our awareness that the space was achieved by human effort that inspires awe. This in turn leads to an attempt to understand the human effort required in the grand gesture, then we can understand our relationship with it. When the monumentality of a space captures our attention it can instill within us feelings associated with pride or purpose, and thus this feeling of timelessness, or of Khan's eternity, which cannot be added to or subtracted.

Human Scale

When architecture is derived from a human scale the resulting fabric relates to the body of the user and allows them to gain a physical understanding of the fabric through their relationship with it. The Spanish Stairs and the Cemberlitas Hamami both allow this understanding as aspects of their design appear to have been derived from the human scale.

The Spanish Stairs rise in a manner that provides for a comfortable ascent and each rise then gives way to a platform which allows for period a of rest before the next. The resulting incremental composition is sympathetic for the human scale while the incline of the stairs also makes them comfortable to recline on. When reclining one also notices that the nosing of the stairs fills the hand comfortably and that it is the natural position of ones hands when leaning forward of backward.

The Cemberlitas Hamami also relates to the body in a comfortable way. Through out the space marble washing basins (kurna) are designed to be sat beside when washing one self. The basins are always set on a plinth and when seated next them one's legs can bend and relax between the levels of the plinth and floor while the height of the basin is comfortable to lean on or draw water out. In the bathing space the length of each side of the stone platform is a generous body length and the geometry of the platform establishes the order of the columns and their structure, which then form the space. While laying on the stone the relationship between ones body and the space can be clearly observed and this instils a feeling of being connected to its structure at it outset.

Both the Spanish Stairs and Cemberlitas Hamami are comfortable spaces for one to interact with as their design has considered the human scale. This comfort, that both encourages and welcomes use, is found in the whole composition but also in the many increments that contribute to the whole. As one relates to an increment, such as the nosing of the Spanish Stairs, and develops and understanding of it a simultaneous understanding is constructed of the whole composition, hence the connection that is made is deep as in one's mind the whole can be understood from the logic of its smaller parts.

Water

The presence of water in architecture provides relief as its softness contrasts with the otherwise hard surfaces of architecture and the presence reinforces the impression of the experience on the mind.

In the Cemberlitas Hamami the presence of water changes the way one experiences the material of the space. Also through out the Hamami separate taps dispense hot and cold water that then mixes in basins before it is poured over the body. The presence of water in two modes reminds one of its nature and of the effects it has on the body and heightens ones sensual awareness of the space. Also, between the body and the marble surfaces an increasingly intimate connection is formed as the sweat of the bather is mixed with water that is present in the bath and the distinction between the two elements is lost. The bather then feels in a way connected to the entire wet surface of the bathhouse at a level that seems to penetrate the skin.

Tadao Ando wrote of the ability of water to bring the mind *from ideological thought down to the ground level of reality*[9], thus anchoring the mind in the present moment.

At the Spanish Stairs the Barraccia fountain provides a focal point for the axis of the composition which demarcates the edge of the whole. People are drawn to the flowing water as its nature promises cooling refreshment then are captivated the continuity of the flow. This is a source of intrigue and while concentrating on the flow one's mind is cleared of thoughts and relaxes, an experience which has a primordial appeal similar to looking in to a fire.

Ando wrote of this phenomenon as a *sustained sense of tension*[10]and believes that a sense of spirituality can be awakened through humanities relationship with elements of nature, such as water, in architectural space

Cohesion

Architecture that is informed by the logic of its place forms a cohesive unity with its physical surrounds while drawing from the areas cultural history. The cohesion with the physical surrounds integrates the architecture into the place while building on an understanding of the living patterns ensures its relevant significance to people of both the past and future.

This interconnected nature of the cohesive architecture can found in the Mosque of Ibn Tulun and through is relationship with the fabric of Cairo. The Mosque continues the scale of height and span of the surrounding buildings and is constructed of similar in material, creating a continuous kinaesthetic as one passes between the spaces. The consistency is also heightened by the open court which gives the building a sense of being extension of the street and public realm, or another outdoor space associated with it. Although in this example it is the Mosque that came before the fabric currently surrounding it, the cohesive aspect can be seen in the resulting quality of their relationship, and could be applied when inserting architecture into existing fabric.

Tadao Aando describes his own process of composing architecture as beginning with seeking the logic of place and an understanding of *the age-old customs people will carry into the future*[11]*,* and it the case of the Mosque of Ibn Tulun we can see that the local culture has continued its logic of construction methods long into the future.

Peter Zumthor also described the significance of this characteristic of cohesion. Zumthor wrote that some buildings fit into their places in such a way that it would be unimaginable for them not to be there, that they themselves become part of their surroundings and appear firmly anchored in there[12].

The Spanish Stairs are an example of the phenomenon that Zumthor describes. Their integration into the contours, the built fabric and the street result in a built landscape that unites these otherwise competing aspects of the place and combines them to achieve a comfortable unity. The use of local materials also relates the stairs to the greater fabric of Rome

When architecture is cohesive with its surrounds and it simply fits within its place, one is not able to imagine the place without the structure. This experience instils the feeling that the architecture has always been there and in a similar way will always remain there. This notion opposes the passing of time and has a sense of omnipresence which brings to mind the quality of timelessness.

Through the sensual analysis of my experiences I have identified the nine aspects discussed above and begun the process of establishing a knowledge of what it is that evokes the sense of timelessness in architecture. Simply because of the subjective nature of the aspects, which were derived from the senses or feelings I experienced, if would be impossible to attempt to derive the exact number of those that evoke the timeless quality. As such the number of aspects that I have presented as the conclusion of the report is not exhaustive, rather I have focused on discussing the key aspects to a substantial extent.

Also it is worth noting that the timeless quality is not dependent on the presence of a particular aspect, or a combination of a number of them, though I believe that when experiencing a work of architecture the greater the number of these aspects that are perceived, the more potent the quality of timelessness will be.

I believe that through a practice of architecture which considers this insight, as well as others like it, and which is pursued with a heightened awareness of the senses, the timeless quality is achievable. This timeless quality appeals to us in fundamentally human way and I believe that it should be held as the overriding objective of architectural practice.

(Endnotes)

1 I would say that dark spaces are also very essential. But to be true to the argument that an architectural space must have natural light, I would say that it must be dark, but that there must be an opening big enough, so that light can come in and tell you how dark it really is – that's how important it is to have natural light in an architectural space.
Louis Khan, in Robert Twombly (ed), Louis Khan Essential Texts, W.W. Norton & Company, New York, 2003. p. 53.

2 … haptic and multi-sensory architecture makes the experience of time healing and pleasurable. This architecture does not struggle against time, it concretizes the course of time and makes it acceptable… A distinct "weakening" of the architectural image takes place through the processes of weathering and ruination. Erosion wipes away the layers of utility, ration logic and detail articulation, and pushes the structure into the realm of uselessness, nostalgia and melancholy. The language of matter takes over from the visual and formal effect, and the structure attains a heightened intimacy. The arrogance of perfection is replaced by a humanizing vulnerability.
Juhani Pallasmaa, *Hapticity and Time*, The Architectural Review, May, 2000.

3 Naturally, in this context I think of the patina of age on materials, of innumerable small scratches on surfaces, of varnish that has grown dull and brittle, and of edges polished by use. But when I close my eyes and try to forget both these physical traces and my own first associations, what remains is a different impression, a deeper feeling – a consciousness of time passing and an awareness of the human lives that have been acted out in these places and rooms and charged them with a special aura. At these moments, architecture's aesthetic and practical values, stylistic and historical significance are of secondary importance.
Peter Zumthor, Thinking Achitecture, Birkhauser, Basel, 2006. p. 25-26.

4 We can say that architecture always contains a human error, and in a deeper view, it is necessary; without it the richness of life and its positive qualities cannot be expressed.
Alvar Aalto, 'Inhimillinen virhe' (The Human Error), Goran Schildt, editor, *Nain puhui Alvar Aalto* (Thus spoke Alvar Aalto), Otava, Helsinki, 1997.

5 Our culture of control and speed has favoured the architecture of the eye, with its instantaneous imagery and distant impact, whereas haptic architecture promotes slowness and intimacy, appreciated and comprehended gradually as images of the body and skin.
Juhani Pallasmaa, 'Hapticity and Time', The Architectural Review, May, 2000.

6 There is no interruption of the overall impression by small parts that have nothing to do with the object's statement. Our perception of the whole in not distracted by inessential details. Every touch, every join, every joint is there to reinforce the idea of the quiet presence of the work.
Peter Zumthor, Thinking Achitecture, Birkhauser, Basel, 2006. p.15.

7 When discussing an ageless character - It is not necessarily complicated. It is not necessarily simple… It comes simply from the fact every part is a whole in its own right.
Christopher Alexander, The Timeless Way of Building, Oxford University Press, New York, 1979. p. 22.

8 Monumentality in architecture may defined as a quality, a spiritual quality inherent in a structure which conveys the feeling of it's eternity, that it cannot be added to or changed.
Louis Khan, in Robert Twombly (ed), Louis Khan Essential Texts, W.W. Norton & Company, New York, 2003. p. 21.

9 The elements of nature-water, wind, light and sky-bring architecture derived from ideological thought down to the ground level of reality and awaken man-made life within it.
Tadao Ando, 'Towards New Horizons in Architecture', in Kate Nesbitt (ed), Theorizing a New Agenda for Architecture, An Anthology of Architectural Theory, Princeton Architectural Press, New York, 1965-1995. p 460.

10 When water, wind, light, rain, and other elements of nature are abstracted within architecture, the architecture becomes a place where people and nature confront each other under a sustained sense of tension. I believe it is this feeling of tension that will awaken the spiritual sensibilities latent in contemporary humanity. Ibid. p 460.

11 I compose architecture by seeking an essential logic inherent in the place. The architectural pursuit implies a responsibility to find and draw out a site's formal characteristics, along with it's cultural traditions, climate and natural environmental features, the city structure that forms a backdrop, and the living patterns and age-old customs people will carry into the future.
Tadao Ando, 'Towards New Horizons in Architecture', in Kate Nesbitt (ed), Theorizing a New Agenda for Architecture, An Anthology of Architectural Theory, Princeton Architectural Press, New York, 1965-1995. p 461.

12 To me the presence of certain buildings has something secret about it. They seem simply to be there. We do not pay any special attention to them. And yet it is virtually impossible to imagine the place where they stand without them. These buildings appear to be anchored firmly in the ground. They give the impression of being a self-evident part of their surroundings and they seem to be saying "I am as you see me and belong here"
Peter Zumthor, Thinking Achitecture, Birkhauser, Basel, 2006. p. 17.

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List of Illustrations

Appendix 1

Experience: Expectation, and reality

Whenever a journey to a new place is undertaken, whether the traveller has seen images or heard descriptions of the place before or not, they will have a preconception of what they will find. If they have read travel books about this place they no doubt will have read descriptions of the place and seen images of it. However when they arrive at the place they will discover aspects of it they had not imagined. Steen Eiler Rasmussen describes this in Experiencing Architecture[1] highlighting the level of understanding gained from experience as apposed to viewing an image.

Also, as the experience of a place cannot be totally preconceived, neither can the difference between the reality of a place and its description. Below are two images of the Mosque of Ibn Tulun. As I discovered the renovations had been making slow progress for many years and would continue to do so for many to come. This contributed greatly to the differentiation of what I had come to expect from the picturesque image and the reality of the scaffold cladded mosque and its experience.
It is however the reality of the place which was important to the report, not the idealistic portrayals of the places. The method used in the report relied on first hand experience and the real facts of what happened was discussed, not the idealised concepts of the architecture.

When writing to his mother Gustave Flaubert, a French writer who travelled to Egypt in 1849, accurately defined the clarity his travels had brought him[2]. This clearing up of the details was key to Flaubert's experience, as it was to the report. Everything described in the report was true to reality giving an accurate portrayal of my experience of each architectural space at that point in time.

(Endnotes)

1 Anyone who has first seen a place in a picture and then visited it knows how different reality is. You sense the atmosphere all around you and are no longer dependent on the angle from which the picture was made. You breathe the air of the place, hear its sounds, notice how they are re-echoed by the unseen houses behind you.
Steen Eiler Rasmussen, Experiencing Architecture, The M.I.T. Press, Cambridge, 1964. p. 40.

2 You ask whether the Orient is up to what I imagined it to be. Yes it is, and more than that, it extends far beyond the narrow idea I had of it. I have found, clearly delineated, everything that was hazy in my mind.
Gustave Flaubert, in Francis Steegmuller (ed), Flaubert in Egypt, A Sensibility on Tour, Penguin Books, New York, 1996

Appendix 2

Motionless
installation works
wallpaper, vinyl, light bulbs and chord

Containers Village
Nextwave Festival, Melbourne
collaboration with Izabela Pluta
March 2006

Entwined
200 meters hemp rope, 1 piece

Sculpture by the Sea 2006
collaboration with Izabela Pluta
on-site photographs

produced with the assistance of the
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