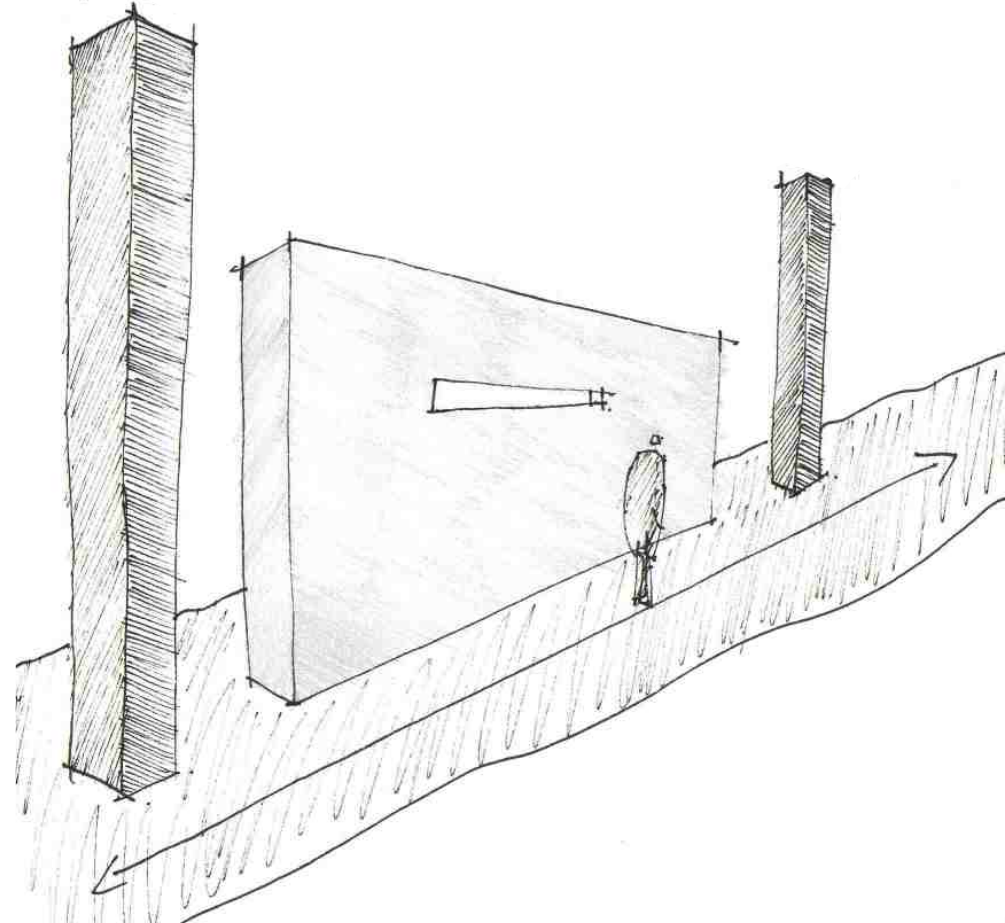


04

Precedent Study



+ Precedent study

The following precedents focus on the responses and influences regarding circulation, movement and views created by the architect. The perception and experience created by the buildings are studied on a theoretical and practical level, to ensure that the authors building responses adequately to the problem and its intention.

NEW ACROPOLIS MUSEUM (2009), ATHENS, GREECE BY BERNARD TSCHUMI

Located in Athens's historic area of Makryianni, the New Acropolis Museum stands less than 300m south-east of the Parthenon, at the entrance of a network of pedestrian walkways that link the key archaeological sites and monuments of the Acropolis. This location was carefully selected to enable a dialogue between the Museum's exhibition spaces and the Acropolis buildings (wallpaper.com: 2010).

The renowned architect of the New Acropolis Museum, Bernard Tschumi, states that the building has two layers; one leads to the excavations. It is quite unusual that you actually have to save and show the finds, so the whole building is on stilts. The ground floor is really structured so as to reveal the excavations, which is why you have all the glass, including the glass ramp leading to the galleries. The second layer has all the sculptures and the artefacts related to the Acropolis. This part of the building, its geometry, follows the street's geometry and pattern. But the top room, the glass enclosure, is really all about the Parthenon, it is absolutely parallel to it. This is why the building makes this strange shift on the top floor, and why the corners seem to stick out over the street (*ibid*).

"We first articulated the building into a base, middle and top, which are designed around the specific needs of each part of the program. The base of the museum floats on pilotis over the existing archeological excavations, protecting and consecrating the site with a network of columns placed in careful negotiation with experts so as not to disturb the sensitive work.



fig. 4.1. Museum in relation to the Acropolis and the view towards the iconic monument. (wallpaper.com: 2010)

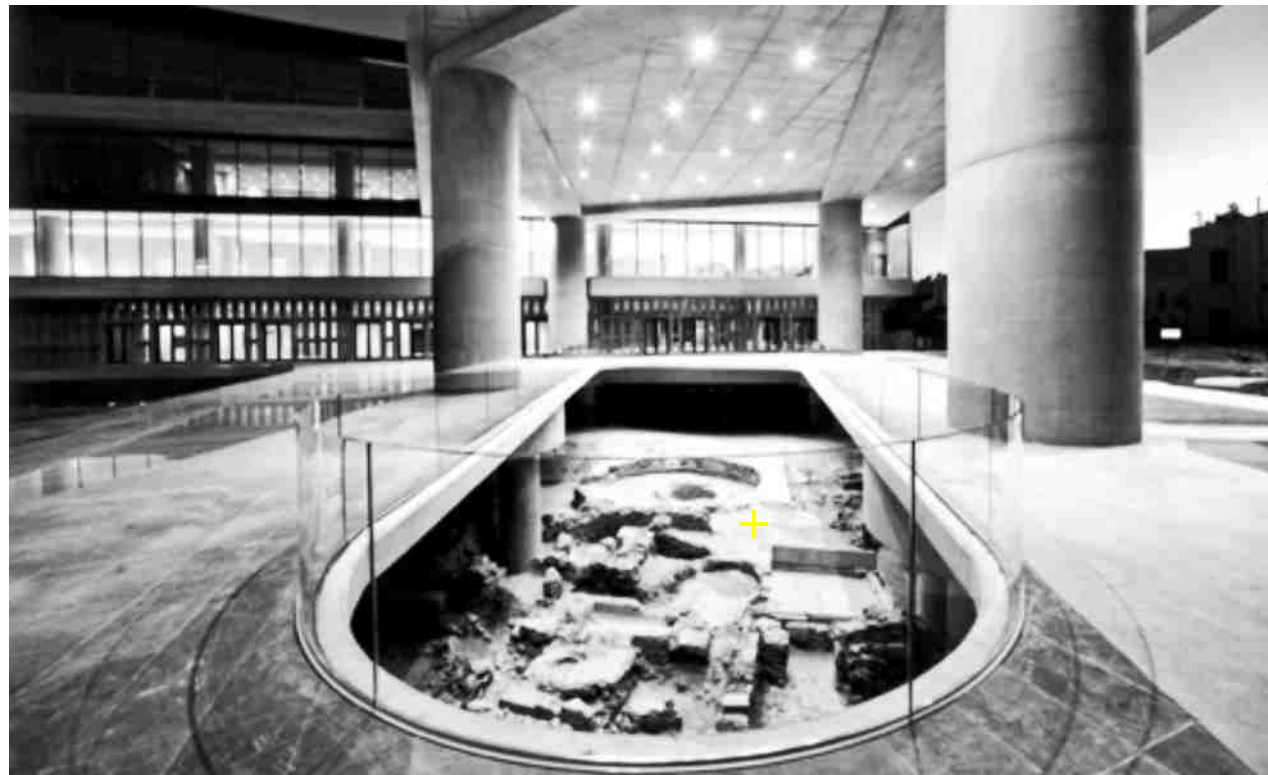


fig. 4.2. Image of archaeological excavations under the museum. (wallpaper.com: 2010)

This level contains the entrance lobby as well as temporary exhibition spaces, an auditorium, and all support facilities. A circulation route narrates a rich spatial experience from the city street into the historical world of the different periods of archeological inquiry. The visitor's route through the museum forms a clear three-dimensional loop, affording an architectural and historical promenade that extends from the archeological excavations, visible through a glass floor in the entrance gallery, to the Parthenon Frieze in a gallery with views over the city, and back down through the Roman period. Movement in and through time is an important aspect of architecture, and of this museum in particular. With more than 10,000 visitors expected daily, the movement sequence through the museum artifacts is designed to be of the utmost clarity" (*ibid*).

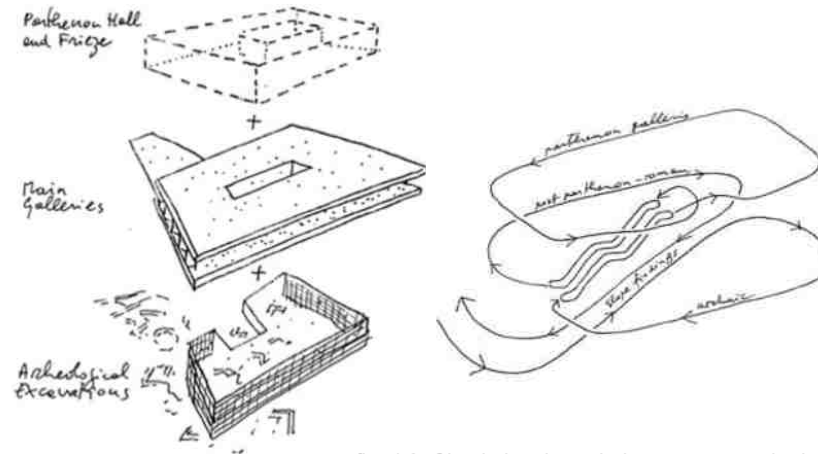


fig. 4.3. Circulation through the museum and relation shown to the Parthenon. (wallpaper.com: 2010)

Materials have been selected for simplicity and sobriety: glass, concrete, and marble are the materials of choice. Perfectly transparent glass gently filters the light through a silkscreen shading process. Concrete (both precast and cast-in-place) provides the main building structure and is the background for most of the artwork. Marble marks the floor: black for circulation, light beige for the galleries. Tschumi says that the construction has progressed according to exacting standards so that the building will age gracefully, despite the heavy traffic of an international travel destination (*ibid*).

To conclude, the New Acropolis Museum is relevant to the author's study, regarding its proximity and location to the Parthenon and Acropolis. It celebrates the ancient monument on the hill and the architect illustrates the respect the building shows to the Parthenon. The Acropolis' strong axial premise, influences the shape of the museum and its orientation. Through studying the circulation and movement patterns of the museum, the author identified that each floor contains important historical information. The narrative created through circulation, informs the visitor about the various historical "parts" of the Acropolis, but also about archaeology. The views up to the Acropolis from the museum, illustrates the iconic presence of the Acropolis.

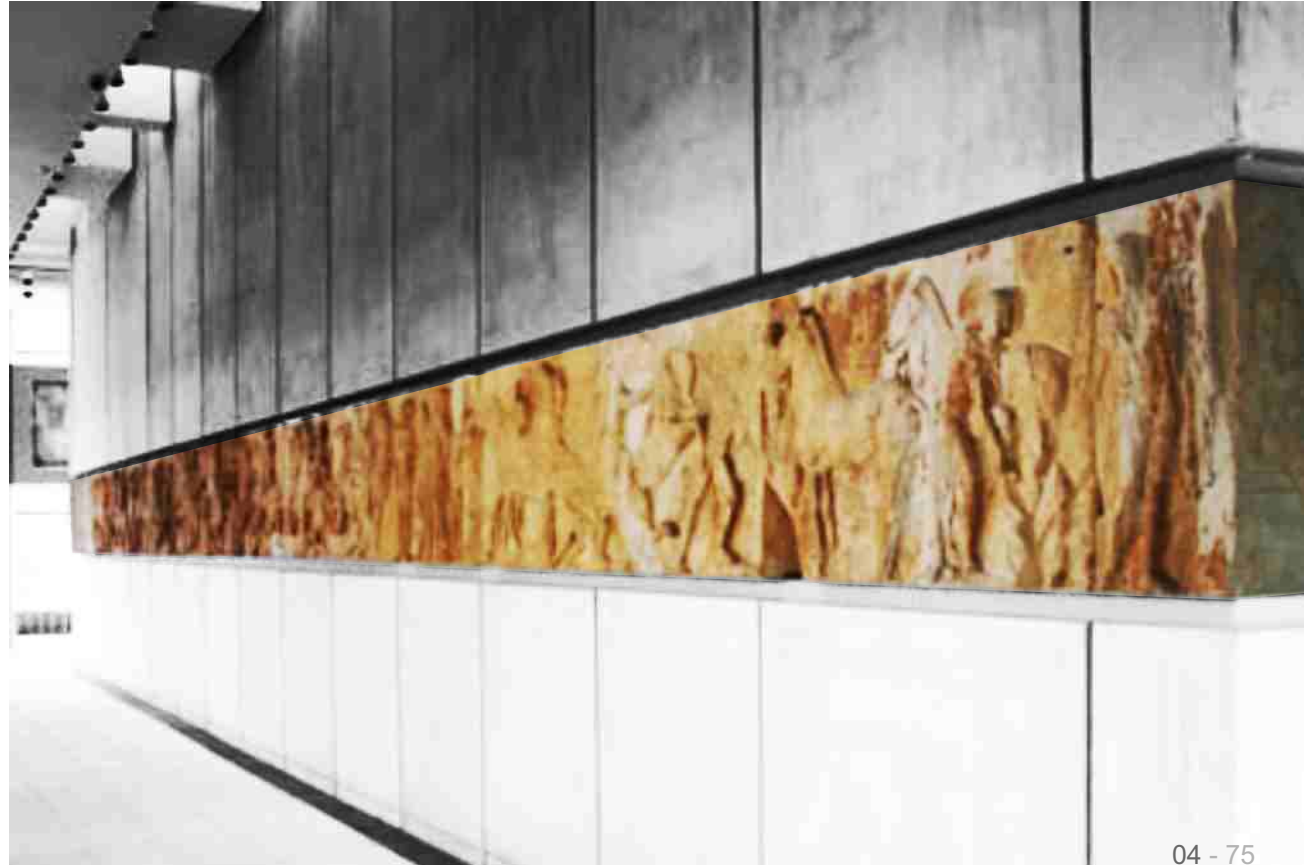


fig. 4.4. Exhibition space of the "Parthenon" gallery in the museum. (*ibid*)

BRION CEMETERY (1972), SAN VITO D'ALTIVOLE, ITALY, BY CARLO SCARPA (1906 - 1978)

The study of the Brion Cemetery involves the circulation and material textures used by Scarpa. The spaces created by the architect are studied and his approach will be used to respond to the spatial issues in the author's proposed project.

The Brion-Vega cemetery is located outside of San Vito d'Altivole, Italy. Designed by the world renowned Italian architect, Carlo Scarpa in 1969, it is an enclosed necropolis for the Brion family. The tombs, chapels, gardens and pathways were carefully designed and detailed by Scarpa. Scarpa said the project was "The place for the dead in a garden. I wanted to show some ways in which you could approach death in a social and civic way; and further what meaning there was in death, in the ephemerality of life." The experience is broken up by using a segmented path. Symbolic themes of life and death bring each segment together to form a cohesive whole. The family tomb surrounds an existing village cemetery. It is enclosed on all sides by a wall and separated from its surroundings. It abandons the grid (1986:64).

Scarpa uses form, texture, space and sequence to create the symbolic nature of the path. The main entrance is located inside the village cemetery. The entry, called the propylaeum, is located adjacent to the mausoleums. One of four destinations in the cemetery, it is one of two places of repose. The path narrows as one begins their journey to the platform. A glass door opens by recessing into the concrete floor. Even when fully recessed, it still must be stepped over, acting as a third threshold marker. When fully closed, the closure joins together to form a rough crucifix. When open, the closure is a fragmented pattern. After passing this threshold, the path now appears to float on a pool of water. Turning left, one enters the meditation platform (*ibid*).

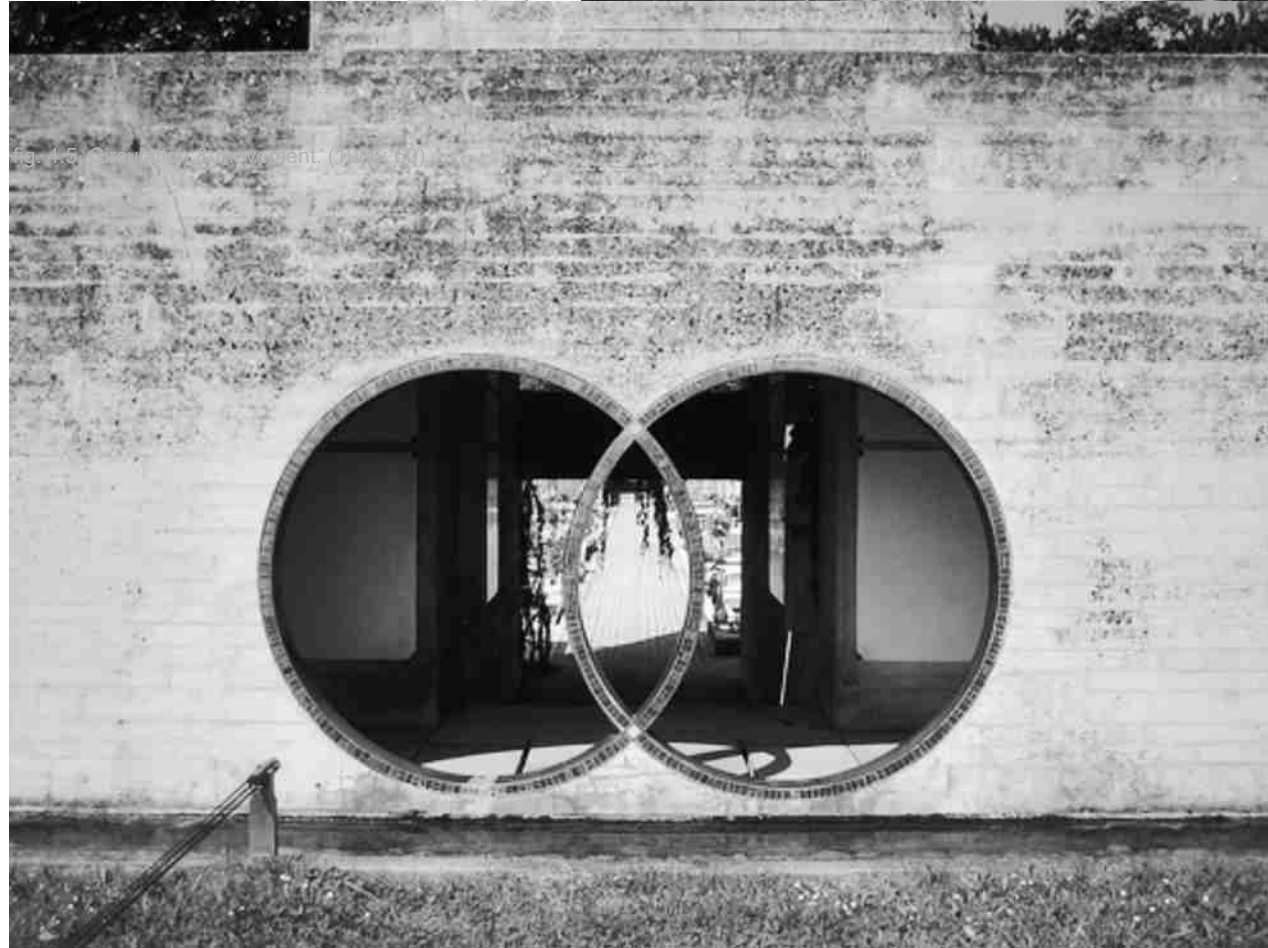


fig. 4.5. Circulation through the cemetery. (1986: 64)

fig. 4.7. Scarpa creates various spaces with views towards the landscape through the use of contradicting geometries. (1986: 62)

As one travels straight to the chapel, the path here is more open and provides experiences along the way. The long linear path is first open on one side and then closes. A perforated wall forms the enclosure on the right. The perforations allow slices of light to enter the space. Two steps up mark the threshold to the chapel. The path terminates as one reaches a large door with a smaller door set inside it. The wall on the left opens up here revealing the second means of entry, a secondary path used for village funeral services. The chapel is rotated 45 degrees off of the alignment of the path (1986:68).

The paving patterns and floor inlays further emphasize the diagonal orientation of the chapel. A pool of water marks this as the second place of repose. Surrounded on three sides by water, it also appears to float from certain views. A second door leads one out to the Priests' Cemetery. This path is concrete slabs that appear both above and below the surface of the water. The idea of straddling two worlds is further emphasized as one takes each step along this segment of the path. As one exits the cemetery this way, one has come full circle. Instead of following the path in back out, a second entrance transitions one back into the world. It suggests the unity of one's existence. The symbolic story of this experience is unique to each visitor. Each symbol is open to interpretation. The transcendent nature of the space provides individual insight to each visitor.

In conclusion, the way in which Scarpa created the sequence of spaces and their experiences, through the use of a path, influences the visitor emotionally and spiritually. Through these symbolic uses of space and movement, the visitor is made aware of his surroundings and influenced by what he experiences, by means of space and textures. These design interventions of path and space relationship, will be included in the authors project in the same practical manner, to create a tranquil experience for the visitor.



fig. 4.8. Linearity of path emphasized through the water channel. (1986: 68)

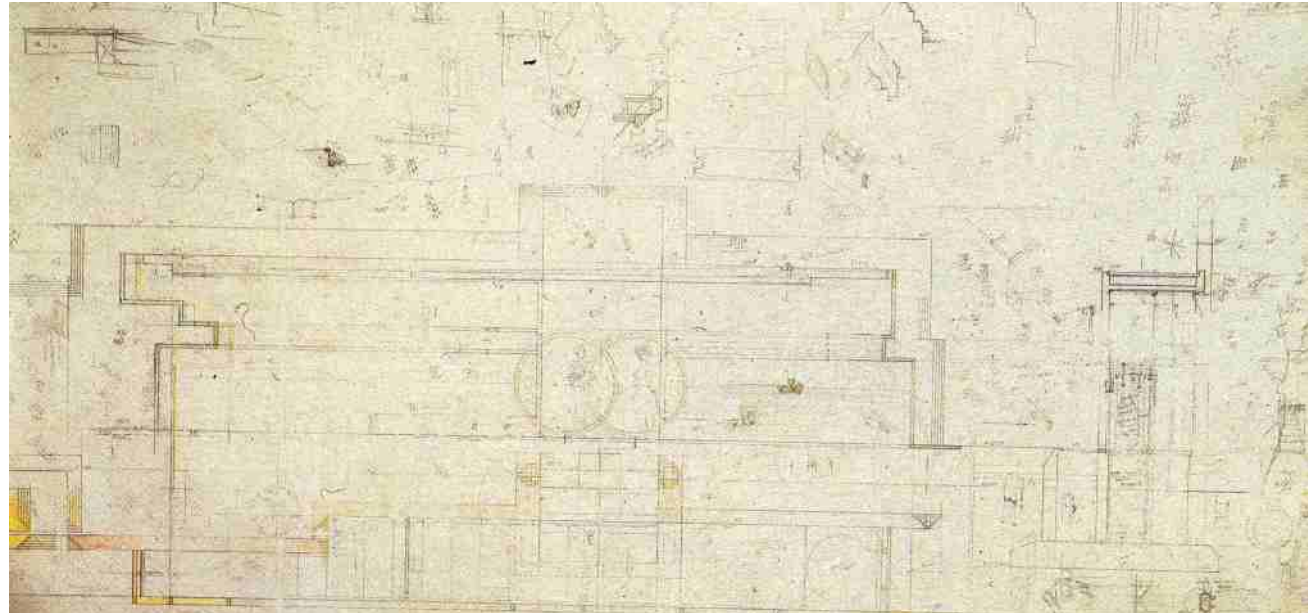


fig. 4.9. Elevation sketch by Scarpa, studying the geometry. (1986: 70)

FOSSAR DE LA PEDRERA (1986), BARCELONA, SPAIN, BY BETH GALI

The Fossar de la Pedrera's (Cemetery of the Quarry) design illustrates the movement and circulation in a more linear manner. The movement from certain points of interest through the landscape, narrates a journey of memory to the visitor.

Fossar de la Pedrera built in 1984 by the Spanish architect Beth Gali, is a part of Montjuïc cemetery. It was used as a common grave for 4,000 people executed by the Franco regime, particularly during the 1940's. The remains of Lluís Companys, the last president of the Generalitat de Catalunya during the Civil War, executed at the top of the hill at Montjuïc Castle in 1940, were moved here in 1985, and the space was dignified as a memorial garden. There are also a number of other graves and tributes to foreign and Spanish Republicans of different shades, and a tribute to the Holocaust (bethgali.com: 2010).

The monument is designed as a narrative to the visitor, creating a linear path, drawing the visitor to various interventions through the site. There are various symbolic references, for example the concrete plinths, commemorating the people that were executed. The gentle and subtle manner in which Gali used the natural landscape to emphasize the circulation and movement through the various spaces are noted by the author. The way in which she carved the narrative pathway into the landscape and gently guiding the visitor above the ground and also underneath to various points of interest.

The author intends to use these principals of Gali and acknowledge the majestic landscape and emphasize the *genius loci*. The principals of symbolic meaning given to certain elements in the design will also be explored, so that the visitor can acknowledge history and be informed about it on a physical and experiential level. The concept of simple but "bold" statements in the landscape to inform the visitor also through the architecture will be explored. The way in which Gali draws the visitor through the landscape and creates inquisitiveness is also studied by the author.

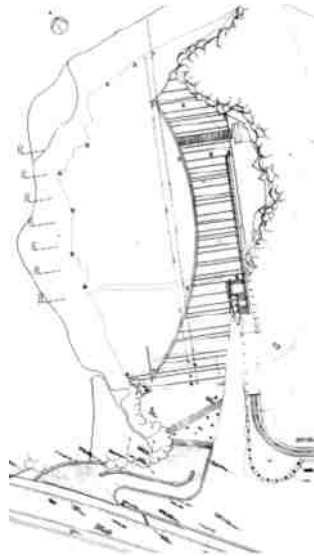


fig. 4.10. Plinths with the names of known victims act as visual remembrance. (bethgali.com: 2010)



fig. 4.11. The funeral procession would lead down to the grave terraces through a series of concrete hatches. (ibid)

THE ALHAMBRA (1390), GRANADA, SPAIN, ARCHITECT UNKNOWN

The study of the Alhambra by the author is focussed on the Mirador, which means a balcony or viewing platform. The Alhambra is a palace and fortress complex constructed during the mid 14th century by the Moorish rulers of the Emirate of Granada in Al-Andalus, occupying the top of the hill of the Assabica on the southeastern border of the city of Granada, now in the autonomous community of Andalusia, Spain.

The mirador as viewing platform also exists in numerous locations in the Albaicin. Squares overlooking the Alhambra have come to be defined as miradors by providing a stage for the display of the Alhambra across the valley, giving Granada the name of “city of miradors” (2001:59).

Miradors are constituted as a sequence of spaces connected through a system of movement from one significant viewing platform to the next. This is incorporated in a larger spatial system linking monument, historical buildings and squares. Prieto-Moreno drew a plan of the Albaicin, highlighting the system of spatial sequences and views that time and again captures and frames the Alhambra (ibid).

To conclude, the mirador is studied by the author to investigate the notion of viewing platforms in the landscape, framing certain views of significance. These miradors were incorporated into the city of Granada to capture and frame views of certain iconic structures. The Alhambra is one of these iconic fortress structures of importance.

Therefore, the Fort becoming the framed view (importance) and through a sequence of spaces created for viewing various iconic monuments within the city of Pretoria from the Fort, essentially becoming miradors in the landscape, but still respecting the importance of the Fort. Evidently the Fort becomes a mirador towards the city as well.

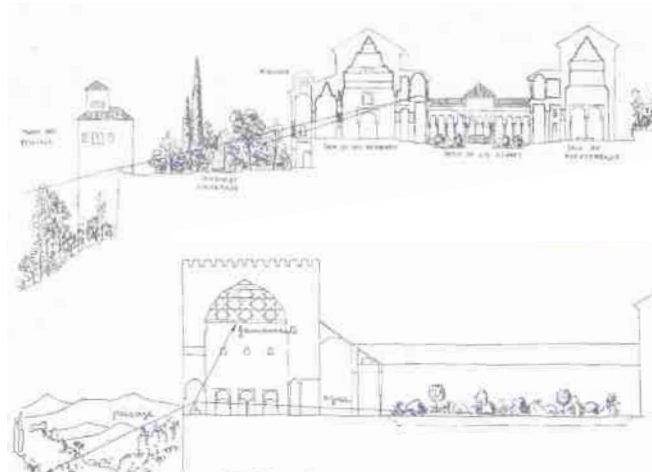


fig. 4.12. Mirador as viewing platform on top of the Silla del Moro tower. (2001:78)



fig. 4.13. Alhambra seen from the San Nicolas mirador in the Albaicin. (ibid)

CONSTITUTIONAL COURT(2006), JOHANNESBURG,
SOUTHAFRICA, OMM DESIGN WORKSHOP

Only a certain part of the Court building will be studied by the author, namely the Great African steps and the relationship to the Old Fort.

In 1893 a high-security prison was built on the Braamfontein ridge in Johannesburg. A few years later, the building of a series of Forts around it strengthened the establishment and gave it military capacity. That site became a landmark. It was known in some circles as the Johannesburg Fort and in others as Number Four, the name given to the frightening section in which black men were jailed (2006:15).

The relationship of the Court building to the Old Fort commemorates the historical value of the Fort and its importance in the context, which can be noticed in the approach up the hill with the fort in the background. The court building does not compete with the Fort.

The approach to the entrance of the Court building from the parking area is up the Great African Steps. As described by one of the architects of the court, Janina Masojada, The Great African Steps are many things, many places. They begin simply as a place between, a seam: as you wonder up the hill towards the entrance verandah of the court, towards the Constitutional Square and the grassy ramparts of the Old Fort, you pass between the solid stone wall of Number Four Prison on the right and, on the left, the west elevation of the Exhibition Gallery of the new Court building (2006:165).

The walk up the Great African Steps is a wondering route. The steps are interrupted by a path that follows the zig-zagging route one would naturally take when climbing a hill. This principle and hierarchy created by the architects, is studied by the author, to emulate the dramatic, but subtle approach towards the entrance of the building. As the author's site is of similar topography as that of the Court building, the same approach and wondering route will be investigated.

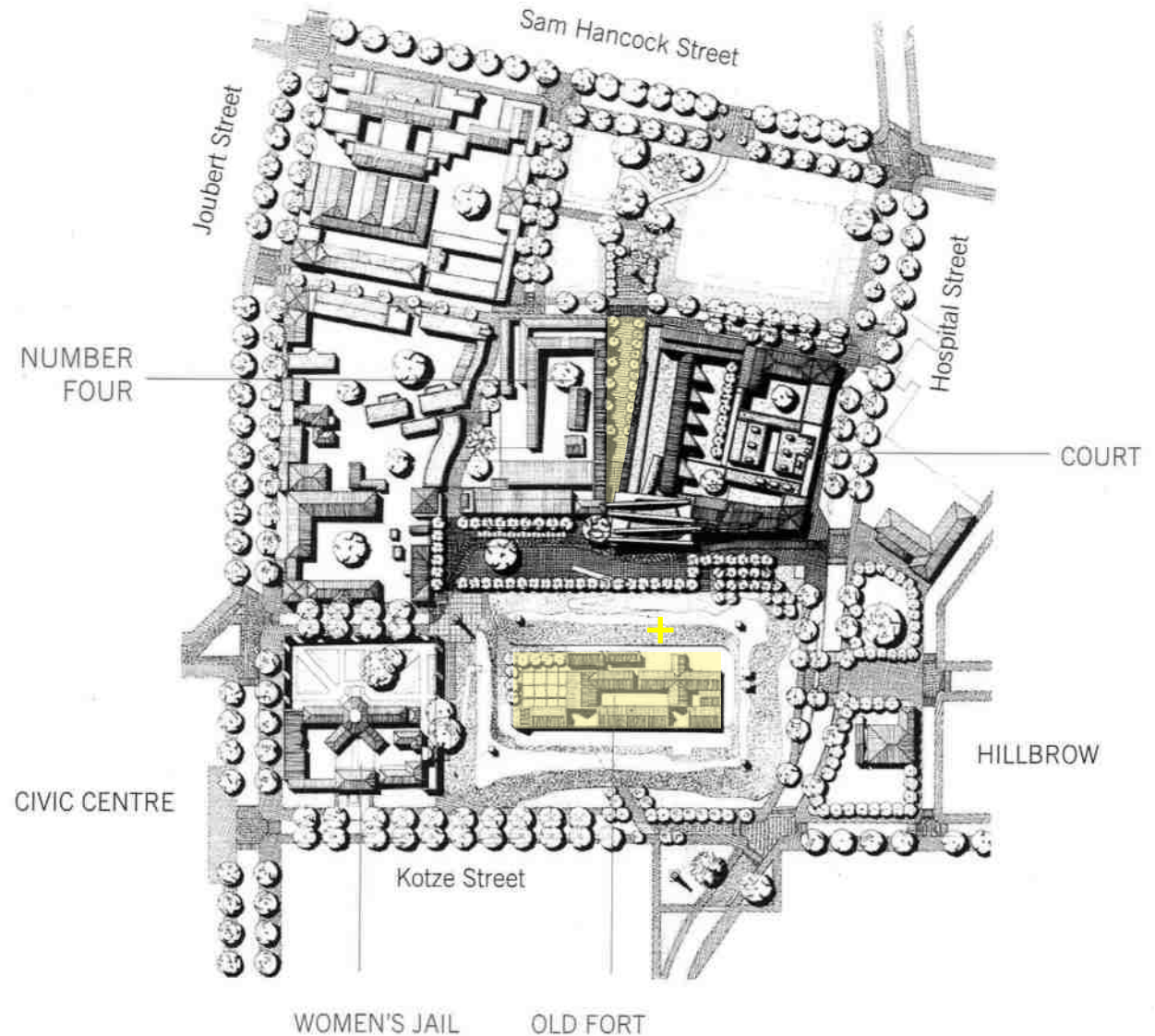


fig. 4.14. Architect's drawing showing the relation of the Court to the city. (2006: 16)

Rural associations extend to the making of places on the steps to pause and sit in the sun, the stepped bricks terracing as in the landscape, inviting rest. The bricks that pave the path were taken from the now demolished Awaiting Trial Block (2006: 165).

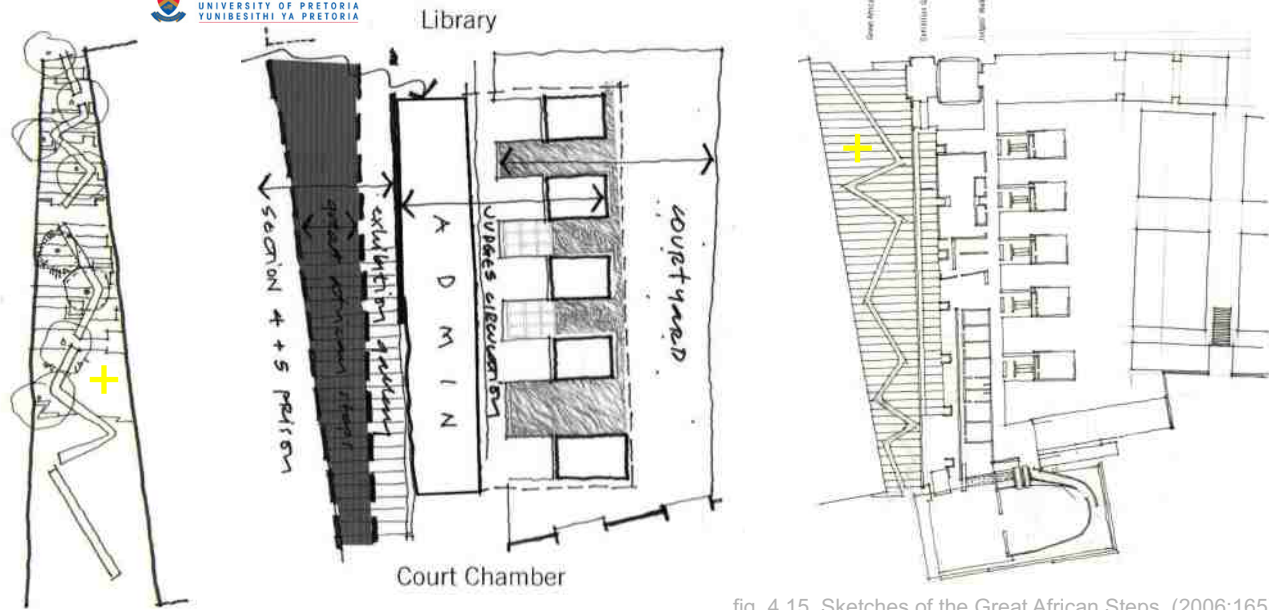


fig. 4.15. Sketches of the Great African Steps. (2006:165)



fig. 4.16. The approach towards the entrance of the Court. (2006:165)

THEORETICAL PRECEDENTS

The theoretical precedents are studied by the author to justify certain decisions made in the design process. These precedents are used in relation with the practical precedents, to understand them better, so the author will be able to apply the principles relevant to his design.



An axis is essentially a linear condition, it has qualities of length and direction, and induces movement and promotes views along its path.

AXIS

According to architectural theorist, Francis Ching (1943), the axis is perhaps the most elementary means of organizing forms and spaces in architecture. It is a line established by two points in space, about which forms and spaces can be arranged in a regular or irregular manner. Although it implies symmetry, it demands balance. The specific disposition of elements about an axis will determine whether the visual force of an axial organization is subtle or overpowering, loosely structured or formal (1996: 322).



For its definition, an axis must be terminated at both of its ends by a significant form or space.

The axis is used by the author to create a linear link between certain elements, with the Fort still being the main focus, with respect shown to the Fort and its importance in a subtle manner. The principle will be discussed further in Chapter 5, to show its relation to the design decisions made by the author.

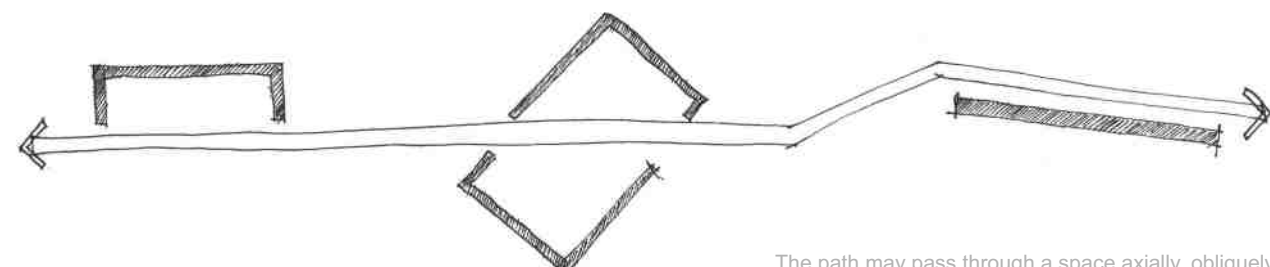


The notion of an axis can be reinforced by defining edges along its length. These edges can be simply lines on the ground plane, or vertical planes that define a linear space coincident with the axis.

PATH - SPACE RELATIONSHIP

All paths of movement, whether of people, cars, goods or services are linear in nature and all paths have a starting point, from which we are taken through a sequence of spaces to our destination (1996: 252).

The path - space relationship is studied by the author to use the principle in the connection of buildings and spaces through the path. The path becomes the circulation movement and exhibition spaces through the landscape, this relationship to the spaces are therefore very important.



The path may pass through a space axially, obliquely or along its edge. In cutting through a space, the path creates patterns of rest and movement within it.

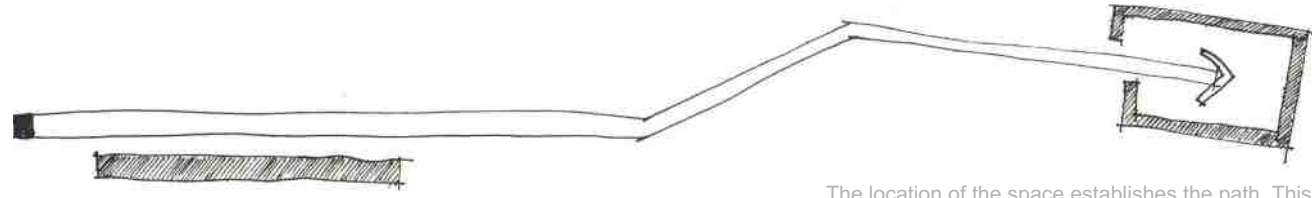
The nature of the configuration of a path both influences and is influenced by the organizational pattern of the spaces it links. The configuration of a path may reinforce a spatial organization by paralleling its pattern (*ibid*).

The path relates to the narrative of the experience of the visitor. The path flows into various functional spaces, which guides the visitor through the narrative of the historical icons and fortification.

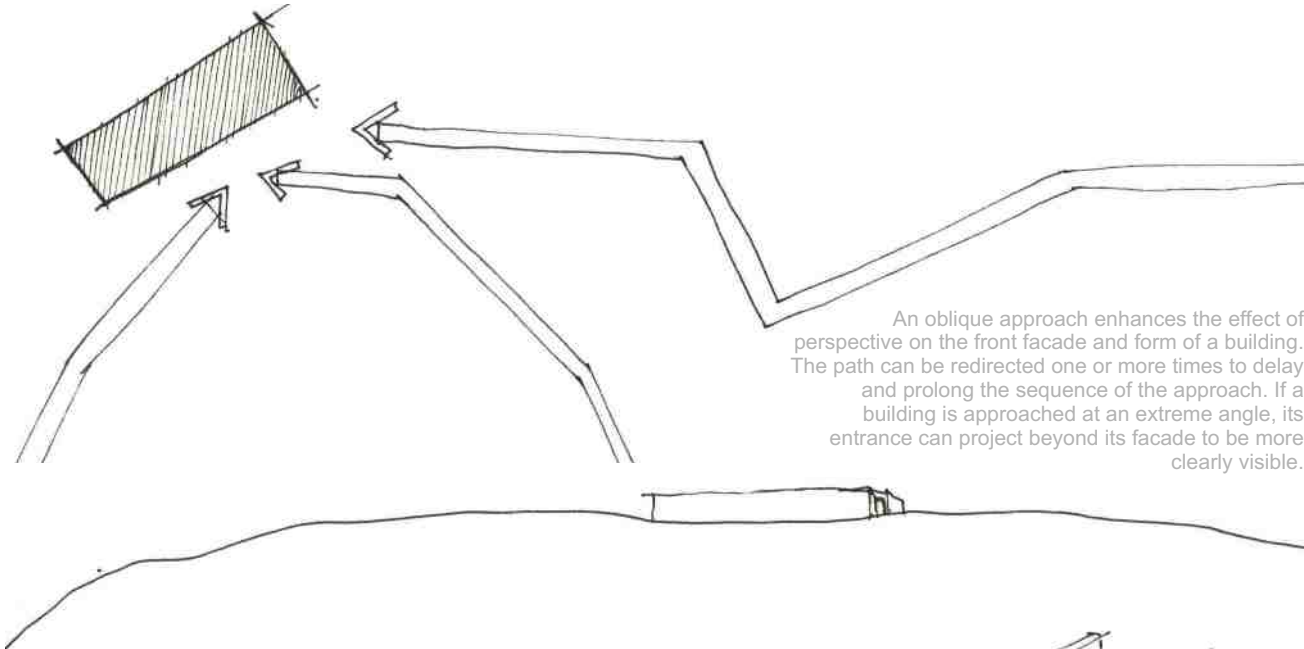
APPROACH

The approach to a building and its entrance may vary in duration from a few paces through a compressed space to a lengthy route. It may be perpendicular to the primary facade of a building or be oblique to it. The nature of the approach may contrast with what is confronted at its termination, or it may be continued on into the building's interior sequence of spaces, obscuring the distinction between inside and outside.

To conclude, these design principles are studied by the author to evidently justify certain design decisions made. These principles are used to emphasize the importance of the building within the landscape and the way in which the user experiences the buildings, but also the landscape. The *genius loci* of the site becomes hierarchically as important as the buildings themselves.



The location of the space establishes the path. This path - space relationship is used to approach and enter functionally or symbolically important spaces.



An oblique approach enhances the effect of perspective on the front facade and form of a building. The path can be redirected one or more times to delay and prolong the sequence of the approach. If a building is approached at an extreme angle, its entrance can project beyond its facade to be more clearly visible.

