

Theoretical discourse

Cemetery as Garden, Cemetery as urban Space

Architecture at the Funeral: Between Nature and Artefact

Architecture Nature and the Constructed Site

Materiality and Time

The Place of Memory

The Journey: Referential and Experiential Time

Buildings are Geological Agents

Cemetery as Garden, Cemetery as Urban Space

When one looks at the etymology of the term used to describe burial spaces it clearly relates back to place of rest and peace. The word “cemetery” is derived from the Greek word Koimitirion, meaning “place of sleep”. The German word friedhof can be translated into “court of peace”. It is only the English word “graveyard” that has a purely functional implication.

Due to the overcrowding of the churchyard, cemeteries started to develop on the outskirts of towns, initiating the development of a new burial typology. This resulted in the development of a landscape adorned with architectural cemeteries, places on the peripheries of developed cities which later developed into the modern cemetery typology of today (Curl 2002).

A cemetery is not only a place for the dead, but also a place for the living.
(Curl 2002)

According to Kienast, as quoted by Zavraka (2007:2), modern cemeteries can be seen as dual landscapes. They are spaces where we lay the dead to rest, therefore they become places for the dead. They also act as spaces where those who are dealing with the loss of a loved one can grieve, therefore they become places for the living. Thus we can go even further to state that cemeteries can be viewed in two different lights, firstly as places of remembrance, and secondly as places of emotional expression. These dual approaches towards cemeteries can be seen as part of the evolution of human existence. Thus cemeteries can be seen as much more than pure burial spaces, but rather as a series of meaningful layers (Zavraka 2007). Anne Whiston Spirn states that open landscapes can be described as “human being and activity in the world”; thus landscape can be seen as a metaphor for being. If this statement holds true then one can view cemeteries as “metaphors of non-being”. Therefore the relationship between the cemetery and the landscape should find a balance between the physical and the metaphysical, the man-made and the natural.

As the first and last garden, the cemetery occupies a special position within the typologies, whereby the different cemetery cultures express a great deal about the specific understanding of nature and the social conditions ... Northern cemeteries are traditionally woodland resting places, whereas Mediterranean graveyards are reminiscent of built cities. They are a different city, the city of the dead.
Vogt quoted by Zavraka (2007:3-4)

Gunther Vogt’s statement (Zavraka 2007:3-4) raises an important observation that separates two different cemetery typologies relating to culture, topography, and views of death. The first cemetery can be viewed as a garden, a landscape that relates to the natural and the ideal, while the second cemetery can be viewed as an urban place of gathering and grieving.

Burial ground as garden landscape:

It can be said that the garden is the outermost expression of place. Thus the cemetery as ultimate garden can be seen as the outermost expression of pure nature. The term “garden cemetery” can be related back to lawn or rural cemeteries (Zavraka 2007:4).

The garden as burial ground becomes a place where those who have passed on can find a final resting place that shelters and protects them; thus forming a peaceful and protected landscape reminiscent of the Garden of Eden. It is an artificial landscape composed of natural materials, a resting place for the dead, and a spiritual space for the living (Zavraka 2007:4).

Burial ground as urban space:

Burial grounds as urban places can be seen as the opposite of the typology of burial grounds as landscape gardens. These built burial spaces relate to the gathering and grieving of mourners within a city of the dead, situated on the periphery of Mediterranean cities – a typology of burial which can be seen as opposing the healing condition of the garden typology, resulting in a more formal and monumental condition. These urban spaces in the Mediterranean landscape become ultimate monuments of the built environment, acting as reminders of the past and death. They ultimately become representations of the built environment for the dead within the urbanised landscape of the living (Zavraka 2007:5).

In comparison to the garden cemeteries that foster healing and transcend the pain of loss, urban cemeteries are set as reminders of death and humanity’s limits as immortal beings.

Cemetery as Garden

- House of the soul
- Amorphism
- The healing journey from earth to heaven
- A sacred landscape
- A spiritual meditative landscape
- A non-material house for the soul

House of the body

- Formalism
- A place of worship
- The human condition
- Brutality
- A material house for the body

In conclusion, the two different typologies of death both relate to aspects that have to be addressed but do not fully come into play in either. The garden landscape of the dead can be seen as a non-material natural house for the soul that symbolises peace and healing, a transition between earth and heaven, whereas the urban cemetery can be seen as a material resting place for the body, a place of worship, and a space that speaks of the human condition.

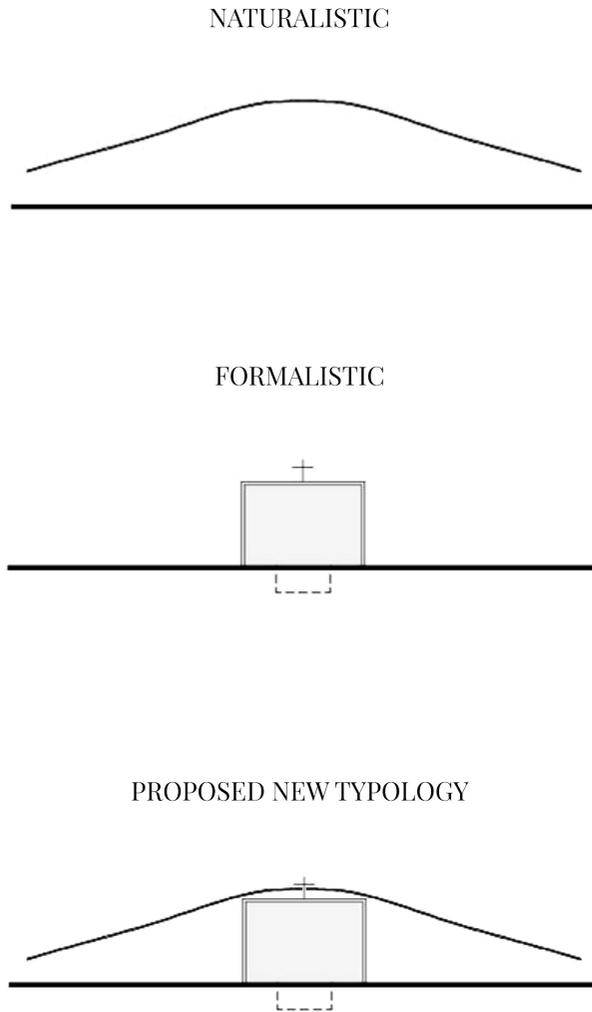


fig 8.1. Diagrams illustrating two different types of burials grounds and how the proposed programme can be seen as a combination of the two. (edited by Author, 2015)

Architecture at the Funeral: between Nature and Artefact

The search for balance between the architectural artefact and the natural landscape has been a recurring phenomenon throughout the history of architectural design. Architectural development has since the primordial hut challenged the natural landscape, forming a dialectic relationship between the built environment and natural phenomena (Mota 2014:1).

Funerary architecture is a condition where the designer is faced with a situation where he/she must mediate between different experiences in order to make sense of the natural phenomenon of death. When one looks at the metaphysical aspects of the funerary process and death, it can be said that there is a sense of liminality associated with the event. This liminality addresses a series of conflicting aspects that the architecture should mediate in order to bring calmness and peace to the memory of event and space (Mota 2014). In making sense of the situation the architecture should be able to transcend the physical and incorporate the eternal and sublime. Mota further states that funerary architecture should go beyond the programmatic function of public or private, and also incorporate strong symbolism and memorable experiences (Mota 2014:1).

Ancient funerary monuments are found at the basis of archaeological finds, which indicate the relationship between the built and the natural throughout history. These act as beacons which relate to the relationship between man and nature, and nature and architecture, as inseparable aspects in relation to the journey of death. Thus an understanding can be reached on how architecture with relation to the processes of death relates back to time, place and memory (Mota 2014:1).

Thus funerary architecture should mediate between the boundaries which divide funerary design by finding a balance between the tectonics of construction and nature, the private and public realm, the individual and the community, and as a place for the living and for the dead (Mota 2014:1).

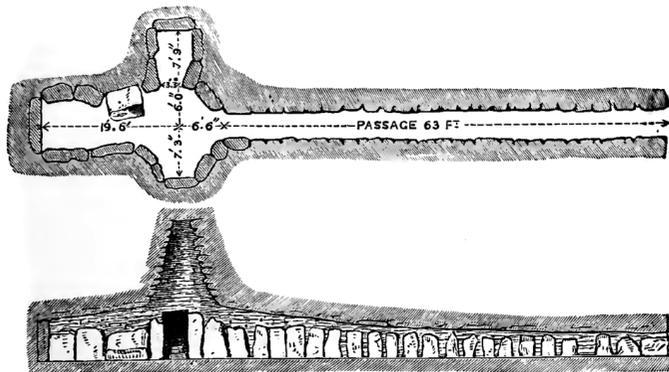


fig 8.5. Plan and section of chamber in Newgrange Tumulus. (edited by Author, 2015)

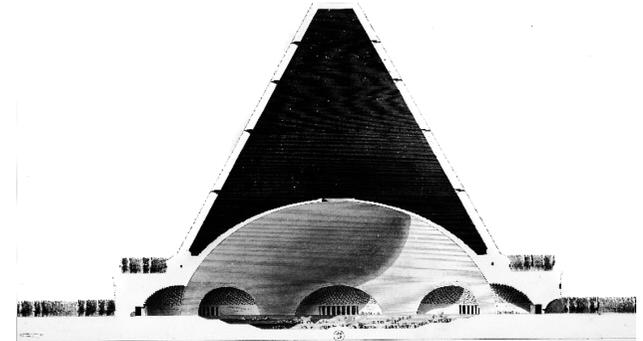


fig 8.3. Etienne Boullée Temple of Death. (edited by Author, 2015)

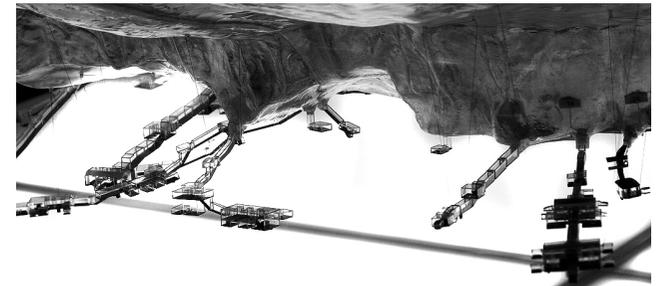


fig 8.2. Model illustrating tunneling at the Valley Of The Kings. (edited by Author, 2015)

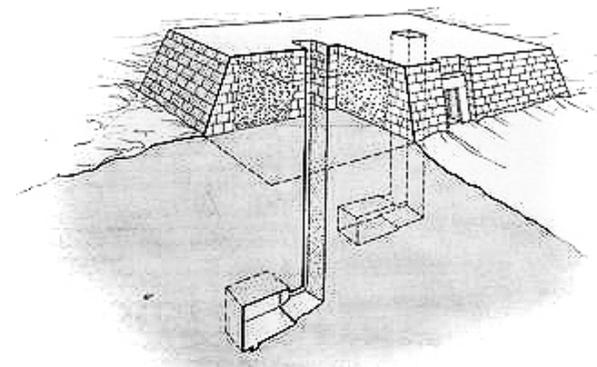


fig 8.4. Ancient Egyptian Mastaba (edited by Author, 2015)

Architecture, Nature and the Constructed Site

In his essay "Towards a new horizon in architecture," Tadao Ando suggests that, in order for architecture to progress into and through the twenty-first century, development is needed that reaches through and beyond modernism. He believes that this can only be done through critical action (Ando 1996:456-461). Architecture in its development ultimately creates a new landscape, and thus needs to extract the particular characteristics of the place and site. He states that:

The purpose of architecture is basically the construction of place.
(Ando 1996:459)

This allows for a tension to be unlocked and for spiritual awareness, similar to Martin Heidegger's thoughts in "Building, Dwelling, Thinking," to be achieved through incorporating both Western and Eastern traditions in designing with the natural landscape (Nesbitt 1996).

Transparent Logic and Abstraction:

Architectural thought is supported by abstract logic. With abstract logic Ando refers to the ability to gain a deeper and clearer understanding of the complexities of the world without reducing it to such an extent that the concreteness and vision is lost, as is the case with modernist ideology (Ando 1996:458).

Postmodernism emerged as a result of modernism, as a type of saviour to re-establish a role as cultural force. By this time modernism had become a mechanical machine denuded of all its formal richness. Postmodernism aimed to re-establish this lost formal richness through history, taste and ideological ornament breathing life back into architecture, but soon lapsed into a movement of banal expressions that became overly formalistic.

Thus Ando states (Ando 1996:458) that the only way in which the decline of modernism and postmodernism can be overcome is through invigorating the initial vitality and abstract logic from which it developed.

In order to understand Ando's approach towards the new horizon one must first become familiar with his concept of abstract logic: by allowing architecture to become a created landscape that does not spoil that which surrounds it, one is able to establish a vital connection between the existing natural landscape and the built form. Thus architecture should not merely become the solving of problems reduced to technical solutions, but must instead form abstract logical thought surrounding the essence of the requirements and issue at hand.



fig 8.6. Image along Joe Slovo Drive of interaction between nature, ridge and Man-man intervention (by Author, 2015)

Through a deeper understanding of the site and the issues surrounding the greater context, one should question the role of the designer, and through this exploration an intrinsic logic will start to develop. This deeply focused process results in a clear understanding of site, structure and program. Thus the logic at hand encapsulates the entire landscape rather than only an isolated pocket, resulting in logic that surpasses surface beauty, geometric composition, and form and function (Ando 1996:458).

Through the means of transparent logic it is essential to instill nature into the built landscape. By allowing natural elements such as water, light, wind and sky to prevail in architecture which is derived from ideological thought, one is able to ground thought in a level of reality and reawaken man-made life from within (Ando 1996:458).

Ando states that, when comparing Western and Eastern traditions relating to architectural design, it is clear that West and East embrace different sensibilities. Human life should not intend to control and oppose nature, but should rather draw it in, in order to find union within it. Thus Eastern architecture aims to find the interrelationship between human and nature, allowing for a blurred distinction between the physical built boundary and the natural environment to create a spiritual threshold. It also allows for an indistinguishable boundary between outside and inside for a merging of the two conditions. Relating back to abstract logic, this approach creates an awareness between the natural and the built, resulting in a physical awareness and real understanding of nature. Architecture through abstraction changes the meaning of nature, allowing for a more accessible landscape. When architecture meets the natural landscape through abstraction, it allows for the possibility of a new constructed landscape to be discovered within nature (Ando 1996:459).

Ando states that when architecture is constructed regardless of this characteristic approach to the landscape, it inevitably creates a new landscape, thus implying the need for discovering the architecture which the site itself is seeking to become. Through a deeper investigation and understanding of the site at hand, the designer should seek to bring the character of the place fully into play (Ando 1996:459).

When looking at the context of Johannesburg and more specifically Yeoville Ridge, it is important to identify the character of the specific site. Relating to the proposed framework of Johannesburg as uitvalgrond, the characteristics of isolation and spirituality were identified. These characteristics positioned within a natural landform in an urbanised area necessitate a sensitive approach to be established when designing a crematorium and cemetery on the ridge itself.

Materiality and time

In his essay "Matter and Time," Juhani Pallasmaa (2005:34-35) suggests that natural materials such as stone, brick and wood have a strong connection with time, and that they enable the user to experience a physical manifestation of time. These materials allow for a deeper penetration of the surface for an enriched experience of the continuum of time (Pallasmaa 2005:34-35).

Contemporary prefabricated materials such as plastics, sheets of glass and enamelled metals, on the other hand, superficialise understanding and rather create a vague surface that detracts from the human experience. This disregard for deterioration and striving for ageless perfection could be linked to our more human fear of death, how we ourselves, just as in our buildings, fear traces of wear and aging.

Both forms of materials render an understanding of time and age at different scales, allowing the user to engage with each respectively. With natural materials, an honest interpretation of time and decay can be shown, whereas with machined materials the aim is to articulate perfection and longevity. Thus the process and result of time become important factors in the standardised model for construction in contemporary architecture (Pallasmaa 2005:34-35).

As experiential beings trapped within the time continuum we often strive for the ability to be made aware of the real. Thus architecture should make the limitless continuum of time accessible through experience (Pallasmaa 2005:34-35).

When referring to the above it can be said that the site itself becomes an important design driver, not only as a basis for the proposed project, but also for the choice of materials and their impact on the journey of death, for the mourner, park-goer and the deceased. These materials, as Ando suggests, should become deeply enshrined within the being of the project itself so that a unique site-specific balance can be reached between natural and man-made. As mentioned by Pallasmaa (2005:34-35), materials also aid not only in making the user aware of time and of the condition of the experienced space, but also of the immortality of human beings. Specifically, with the design of an urban garden burial space as constructed landscape, the role that materials play in order to make users more aware of the abstract logic relating to the site and its characteristics becomes an approach towards design and construction that the designer must instil in every decision to be made.

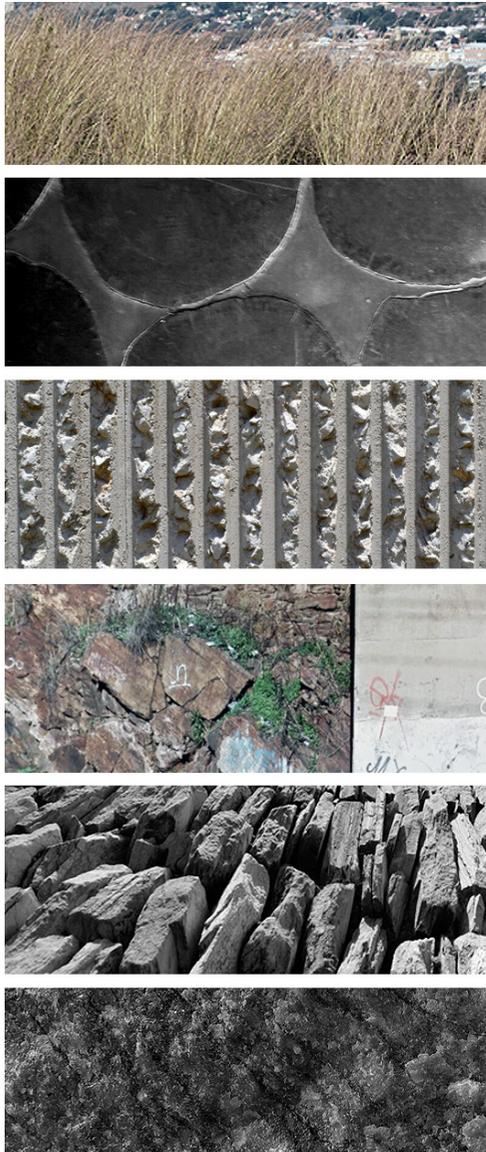


fig 8.7. Series of photographs illustrating natural and man-made materials and how they have started to weather as a result of time. (by Author, 2015)

The Place of Memory

As Donlyn Lyndon states, place refers to a space that can be remembered, that one can imagine and that can be kept in the mind. These are spaces and territories that evoke thoughts of nostalgia and engage with our interests (Lyndon 2009:63-64).

As designers and makers of space and form, we should constantly ask ourselves what needs to be served and felt in order to make a place memorable.

The experience of place is infused with memory; echoes of previous visits, expectations, and recollections invoked by similar places, as well as images and descriptions.
(Lyndon 2009)

The memories we associate with place are formed by personal incidents and cultural lore, and are vested in the forms and interpretations of ornament which the place consists of. Thus the experience of place within architecture, landscape and the urban is constructed from nostalgic memories and how these memories define the architecture they are so intrinsically part of for those who use and experience it. What characteristics of place encourage the attachment of memories? (Lyndon 2009).

– 174

Memory finds itself at work not only in a place for recall, but in the ways that we encounter and experience buildings and spaces of everyday life. Places are spaces that can be remembered, that can be considered and referred to. It is this ability that allows for both intimate and public significance to be gathered; they linger in the thoughts of the individual but through the incorporation of common experience they aid in the development of a shared conception that binds common thoughts together (Lyndon 2009).

Thus spaces become memorable in two ways: through the formal structure with structural coherence or power, and through events that take place on a specific site. Events that take place on a more frequent basis start to lend themselves to a more vivid nostalgic recollection and invokes memories of that place. This understanding of the place of memory can help in reconstructing histories, and in constructing new histories of architecture, society and culture.

Norberg-Schulz (1980:10) further states that memory and nostalgic recollections can be created by understanding the following conditions that create our perception of place identity: what we walk on (what is below us), what shelters us or what is above us, what surrounds us, and what we are aware of in our direct surroundings. These aspects contribute to how we experience place in the present but also how we create a nostalgic link to places of the past for future recollection.

Norberg-Schulz (1980:18) also speaks of the identification of the character of a site or genius loci by relating directly to the human identity and the identity of place. To be able to achieve a greater understanding of this, he states that there are concrete features of place that draw us closer to the place and its memory. This relates to the concept of *Jord, Himmel, and Synstrand*, the earth, sky and the optical array, and means that we are first made aware of the identity of place when we walk in it, experiencing what is above us, and are made aware of what is around us (Norberg-Schulz 1980:32).

The earth reaches towards the heavens; this expresses a more qualitative relationship between the vertical axes rather than just up and down. To be able to describe the character of the place one must be able to understand and consider how earth, sky and the optical array interact with one another and meet to form a union. The optical array of a place defines its boundaries – how it relates to the horizon and to the outermost limits of a place. It becomes the window of the landscape that relates to the sky and connects heaven with earth in different ways (Norberg-Schulz 1980:39).

175 –

Thus in order to dwell in a place, as Heidegger suggests (Sharr 2007:43-45), one must be able to respect it for all its conditions and elements, and take into account qualitative and unmeasurable aspects of the place.

In looking at the model of the garden cemetery as a healing place and the urban cemetery as a spiritual place, a clear metaphorical condition could be determined through the design of an urban garden burial space as constructed landscape. In creating memory through sky touching earth one is able to relate it to the body being housed in a place of rest, while the soul is released through the structure from the earth upwards towards the sky. Thus it is important to understand the geological condition of the site, as it plays a significant role in allowing the building to sink itself into the topography, creating a city for the dead which is accessible to the living.

The Journey: Referential and Experiential Time

Enric Miralles (MaKenzie et al. 2004:1) speaks of two forms, or layers, of time that he uses to evoke thought and meaningful memory when designing commemorative architecture. These layers, experiential time and referential time, together fit into the continuum of time that allows for successful Time Architecture. Thus time is presented in both experiential and referential ways. They work together.

Experiential time, Miralles states (MaKenzie et al. 2004:1), is related to the journey the user experiences while moving through a space. This experience, concerned with the present and the actual event taking place, allows for bodily and mental processes to occur that relate to the immediate instant lived. This instinctive reaction is thus evoked through the architectural promenade, the moments the user experiences through movement, and allows the user to experience the space through a sense of nostalgia and, at the same time, discover a new landscape.

Referential time, Miralles states (MaKenzie et al. 2004:1), is opposed to experiential time and relates to how past and future are made present. It entails the ability to bring forward a continuum of time. He achieves this by making reference to past experiences – instants that allow the user to relive nostalgic memories – through material use and approach to site. According to Miralles it is referential time that allows the user to escape reality and slip into memory.

– 176

The characteristics of the site on Yeoville Ridge can only be fully understood through exploration and time. The geological conditions, the intensity of the topography, and the various natural phenomena play a vital role in determining the character of the site. Accessing the ridge itself can be viewed in both experiential and referential time. Experiential time on the ridge comprises a series of conditions that incorporate different modes of movement through spaces in order to reach the highest point of the ridge. This experiential promenade, as Miralles calls it, allows the user to experience the space as a series of nostalgic memories while discovering a new landscape through movement.

According to Miralles, referential time brings together both the past and the future into the present through allowing the user to relive nostalgic memories through views, materials, past experiences and so forth. While moving along the journey it becomes evident that the site holds a strong connection with the past. It relates to the past in two main ways: through human memory of historic events, and through geological events that occurred throughout the development of the Witwatersrand. Fragments of past events can be experienced on site, along with the exposed granite rock face that speaks of geological developments. These conditions allow for a nostalgic slip into memory, and a disconnection from the reality of the present.



fig 8.8. Diagram illustrating route to get to site along with images show change in conditions and materials. (by Author, 2015)

Buildings are Geological Agents

In her article “Buildings are geological agents,” Lindsay Bremner (2014:1) discusses the relationship between architecture, urbanism and geology. She sets out by stating that architecture, urbanism and geology, three prevalent urban conditions, are deeply interconnected, more than we perceive them to be (Bremner 2014:1).

Having said this, it is clear to some more than to others that, in our human need to develop and evolve, we have interfered with earthly materials to such an extent that we have started to create new geological and topographical conditions, conditions that have been shifted in order to create a more habitable landscape for our species. These direct and indirect changes that we have set in motion have great cosmological consequences that alter the geomorphology, climate, surface conditions and atmosphere we inhabit to such an extent that some call it a new geological era – the Anthropocene. These changes can be envisioned when looking at tales of war or dystopian futures, where buildings crumble into the landscape from which they grew.

Buildings can be seen as massive geological landforms that shift geology, past and future (Bremner 2014). These buildings rearrange the landscape in such a manner that they create a new geomorphological condition that alters the future of the site. They re-channel various geological and topographical conditions to form around these shifts, resulting in a different set of conditions. These buildings act as structures of change that displace geological site material in such a manner that the geomorphological pattern is disrupted, altering the initial geological forces.

The city of Johannesburg lies spread over the ridges – the Witwatersrand – to which it owes its existence. Due to the area’s geological history, the city developed in the manner it did, resulting in a split occurring between urban conditions on either side of the Witwatersrand. The Witwatersrand itself acts as a watershed (the Yeoville-Hillbrow-Berea ridge which forms the highest part of the Witwatersrand range) between north- and east-flowing rivers that end up in the Indian Ocean, and south- and west-flowing rivers which end up in the Atlantic Ocean (Bremner 2014:1).

To conclude, it can be stated that buildings are agents of geology, and should therefore become agents for positive geological change rather than for conditions that distort the geomorphological future of the site. The structures should be approached in such a manner that they become coded with the geological history of the site itself, resulting in structures that act as displacements of site specific materials which are able to dissolve into and form part of the newly established geomorphology of the site (Bremner 2014:1). This approach not only allows us to reflect on the past conditions of the site, but also on its future development, strengthening the inevitable connection between architecture, urbanism and geology, and resulting in a structure that becomes an extension of the geomorphology and geological time of the environment.

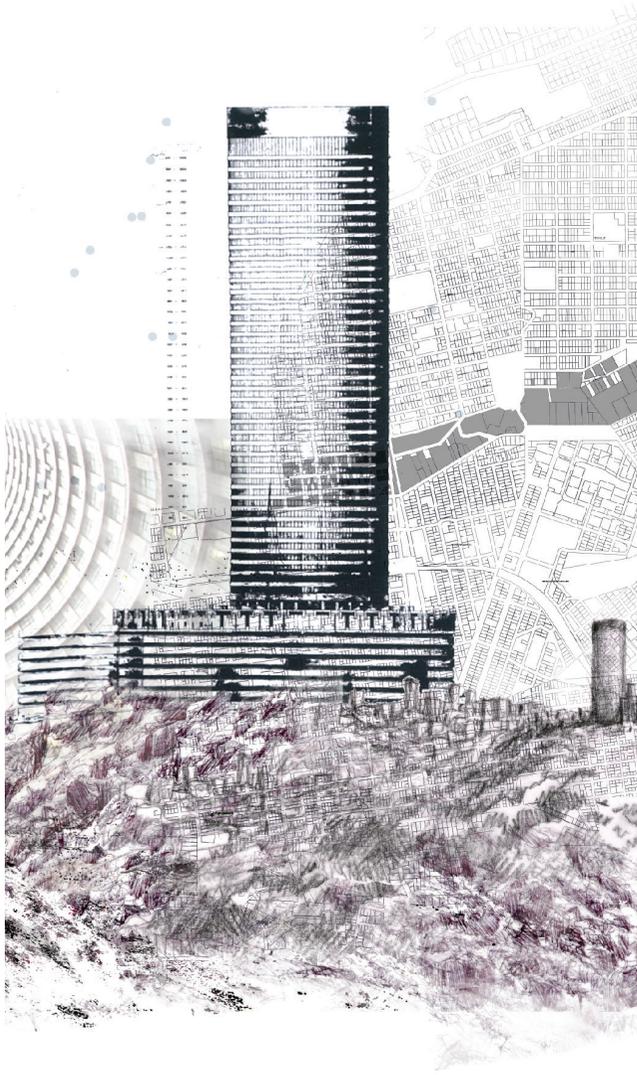


fig 8.9. Diagram showing character of site and Ponte as Geological Agent on the Witwatersrand.
(by Author, 2015)

Conclusion

The theoretical texts discussed above together provide a holistic approach towards creating architecture that cuts into the landscape. The various essays comment on aspects of how to go about designing on the ridge as site; the use of material in order to strengthen cultural significance as well as programmatic relevance; and the future development of the site as a constructed landscape that incorporates both urban space and landscape garden.

The theory discussed covers the entire scale of the design process, from the initial approach to the site, to how the site should be viewed as a living geological organism, and how the “imposing” structure could form part of the geomorphology that inevitably becomes the site geology, relationship to society and culture as a collective memory, the journey within the landscape

