This chapter focuses on the conceptual and practical problem statement of the dissertation in terms of the South African context. The proposed site, background and methodology is briefly presented to contextualise the research questions and dissertation aims.
Figure 1.4: Painting depicting the collaboration of time and architecture (He, 2009: 5)

Figure 1.5: Contemporary injections in historical ruins – juxtaposed thoughts? (He, 2009: 6)
1.1 Introduction

Time and place can be positioned as two interdependent realities that coexist, bearing universal evidence of each other's existence. On the one hand, time engravels the scars of age in all available materials offered by an object, and is responsible for the accumulation of history (both natural and cultural) on a specific surface. On the other hand, place forms the evidential platform that bears witness to all events that accompanied a time frame passed, therefore time and place forms interrelated functions of each other.

Although these two universal entities, time and place, do not stand in direct opposition to each other, the realm of architecture (place) has occasionally opposed the continuum of time and change. This statement is supported by numerous examples throughout history: Ancient Mesopotamian and Greek construction theory relates to the monumental, to create a permanent, static object that transcends time without adaptation. These monuments portray man’s ideal to have control over nature, change and ultimately time. By analysing Le Corbusier’s 1920’s modern photography, architecture is always photographed to capture a specific moment, creating scenes frozen in time – a still life. In the photography of Villa Stein–de Monzie, Garches (1926-1928) by Le Corbusier, only space is photographed, no action or individual utilising space is portrayed. It could be argued that the Modern Movement’s obsession with still photography represents a desire to capture the moment of architectural completion, rather than portraying architecture’s transformation through use, that ultimately re-establishes architecture’s connection to the continuum of time. (Leatherbarrow & Mostafavi, 1993: 83)

As architecture enters the realm of aging, the process of ruination accompanies a building’s transformation. Gary He argues that ruins are the physical documentation of a transformative process that has a strong reference to time and past time, which serve as evidence of origin and lineage – an inheritance of knowledge uncovered and preserved (He, 2009: 03). The process of weathering and ruination places emphasis on architecture’s inherent mortality: the fact that all built form, regardless of size and permanence, will eventually become ruins. This reality reinforces architecture’s inability to resist change and, ultimately, time.

This dissertation investigates architecture’s persistence in time, focusing on the preservation and commemoration of heritage significant ruins through the process of adaptation and addition. It further explores architecture’s ability to change according to the passage of time, where the processes of weathering and ruination shapes architecture’s creation and establish an interaction with the continuum of time.
1.2 Proposed context – Magazine Hill as a weathered continuum

The proposed site is identified on an isolated, historical site in Pretoria – Magazine Hill (Magasynheuwel) located in the military precinct, south of the Pretoria Correctional Services. The site was utilised for the production and storage of military ammunition from the 1890’s up to 1960. This was also the first site in South Africa where military-industrialism was formalised for ammunition production, which provided 45% of ammunition used by the Allied Forces in the Second World War (DENEL, 2011). The variety in historical events and nationalities of the different site developers, led to an immense diversity of building typologies and construction methods on site. Not only is the site the accumulation point of Boer, British and Black, but also the geological meeting place where dolomite and quartzite share the geological construct of the site (Swart, 2011: 4). All opposites are present – natural, social and architectural.

A mysterious explosion of the Central Magazine (Sentraalmagazynhadjad) in 1945, led to massive destruction in Pretoria where damages were reported as far as Church Street (Panagos, 2006: 5). This intense explosion left a physical scar in the hill, which is the only remaining witness of the tragic event. Currently, parts of Magazine Hill are still strewn with live ammunition and unexploded ordnance that reappears with each rain season (personal communication with Du Plessis, 14 November 2010). There is an inherent tension locked within the site, hidden in mystery and untold stories. In the author’s opinion, the isolation of the site forms part of a negative mental construct relating to the site’s history – a sense to forget the tragic past. It is as if the site doesn’t want to be found, remaining imprisoned in its own misery.

Figure 1.6: Interior view of submerged bunker space on Magazine Hill (Author, 2010)
Figure 1.7: Locality plan of Magazine Hill in relation to prominent sites (Author, 2011)
1.3 Problem Statement – Background and Context

The progressive timeline through architecture in South Africa, with all pervasive influences and negative historical events, has led to the birth of mutated South African heritage spaces (De la Porte, 2010). One of these mutations of space can be defined as weathered space, which, according to Penelope Haralambidou and Michael Tate (2009:8), is space where the patina of time creates effects of erasure and mysterious spaces, where diverse interpretations are produced by missing links. Weathered space is usually accompanied by a severe state of decay and ruination because of long-term dereliction. Military architecture in Gauteng forms good examples of weathered space, for their intended purpose and remote character contribute to their irrelevance in contemporary society. The first universal problem that this dissertation thus addresses, is the activation of memory that is isolated from everyday use.

Architecture and objects of historical value in the inner city are maintained and appropriated because of their frequent interaction with the public realm, therefore their heritage are protected and kept alive. The proposed site, Magazine Hill, forms part of the peripheral exclusion of military architecture in Pretoria. Not only is the site segregated from the active realm of the city, but also from the military precinct on which Magazine Hill is located. It finds itself in isolation, further reducing the interaction between the military and public realms. The secure character of the precinct has led to the dereliction of more than half of the buildings on Magazine Hill, for it is argued that its secretive and haunting history should be forgotten by the citizens of Pretoria (Personal communication with Du Plessis, 2010).
The second universal problem places commemorative architecture under the limelight, criticising the exploitation of emotional content to theme museums and monuments in contemporary South African heritage design. Contemporary commemorative architecture often transforms history into static pieces of design in the form of museums and memorials, creating a static sense of commemoration. These interpretations of heritage form frozen objects in time, objects which realises only to the past or specific events, and form no interactive dialogue with the present. In this sense, commemorative architecture does not address contextual change, for it is trapped in the time frame it memorialises. Good examples are Red Location, Constitution Court and the Craddock Four Memorial. The Apartheid museum, Johannesburg (2003-2005) by Gapp Architects, Mashabane Rose Architects, forms another example of this criterion of commemorative architecture, where emotional content is exploited to enrich spatial experience through the imbalances and impurities of Apartheid.

All mentioned heritage sites or contemporary architecture produced from the heritage context, are placed on the pedestal of time, with ownership not belonging to civil society, unable to interact or formulate a dialogue with time. This approach to contemporary heritage design has encapsulated our historical sites and transformed them into isolated monuments in time, further extending the privatisation of heritage space. The resolution of this argument has the potential to question the current typology of commemorative architecture that can re-establish the connection between memory and civil society.

The last main problem that this dissertation addresses is the perception of architectural ageing. The process of weathering and decay in architecture are being considered as a negative impact of time on built form, connecting architecture to its finality or death (Pallasmaa, 2000: 34). Throughout historical architectural thought, the process of ageing has always been fought against, in an attempt to transcend structure and surface through time. The author states that this inevitable process of weathering reveals the intrinsic layers of time, by acknowledging its passage. Secondly, the incorporation of weathering into design (to design for the anticipation of material change and deterioration through time) has the potential to extend South African building life spans, not only physically but also conceptually. In the context of Pretoria, weathered space is under utilised, nevertheless locked down and concealed behind privatised fences, unable to tell the stories of the past.

Figure 1.11: The Apartheid museum, Johannesburg, South Africa [Kemp, 2009]

Figure 1.12: Augmented South African heritage space, Constitution Court [Hill, 2009]
1.4 Research questions

The research questions that arise from the problem statement and background of the dissertation are listed as follows:

- How can contemporary commemorative architecture be challenged to form a new typology that acknowledges contextual change?
- How can isolated, locked and separated memory be brought to the fore without physically connecting?
- How can the inevitable process of weathering be utilised in design, to prolong building life spans and re-connect architecture to the continuum of time?
- How can architecture mediate between opposites (present, past and future, military and public, past and new ways of thought)?

1.5 Architectural Problem

The architectural problem in terms of spatial understanding and experience focuses on the shortcomings of the museum typology. The main architectural intervention will focus on the exhibition and commemoration of history without exhibiting memory in glass boxes, but rather commemorate through everyday use, discovery and interpretation. The second architectural problem that this dissertation addresses lies in the exhibition of a historical object /space through adaptation and active everyday use.

Figure 1.13: Interior view of submerged bunker space on Magazine Hill (Author, 2010)
16 Dissertation Visions

1.6.1 Practical aims:

Memory:
This first aim concentrates on the establishment of a connection between the lost memory/history of Magazine Hill and the public realm. This connection will not necessarily be physical, for the isolated, secretive and mysterious character of Magazine Hill should fully be respected and preserved.

Mediation:
The second aim focuses on forming a platform for mediation between the military and the public realm, for the role of the military has changed considerably after The Second World War and the Apartheid regime. This will also mediate between old and new thought patterns. Magazine Hill also lies on the threshold between the military precinct and natural edge of Pretoria’s southern border. This statement does not propose that security boundaries between the inner city and the military precinct should be compromised, but rather that a supportive interaction between the opposite entities should be established. This interaction should focus on public military arms exhibitions, South African National Defence Force (SANDF) displays, auctions, and military music events.

Support:
This aim is focused on the future projections of the SANDF for the military precinct. The Department of Defence has recently assigned the Military Integrated Environmental Management or “Operation Green Soldier” programme to the SANDF, which involves new sustainable management strategies for military activities and recycling in South Africa (Godschalk & Ferreira, 2010: 2). The proposed programme could support and be closely connected to this strategy.

1.6.2 Theoretical aims:

Challenge:
The fourth objective aims at challenging the current typology of commemorative architecture. This aim will address the static memorialisation of heritage and aspire to re-establish the connection between architecture and the dimension of time. The presentation and experience of heritage through a museum typology and commemorative architecture will be challenged.

Anticipate:
The final aim of this dissertation challenges the design methodology regarding weathering and aging in architecture. The process of decay, which has throughout the ages been considered as a negative impact on architecture, will be investigated in order to implement the anticipation of weathering into the initial design phase, in order to reintroduce architecture into the continuum of change.
Figure 1.15: The derelict sub station of Magazine Hill (Author, 2011)