Theory
“I could tell you how many steps make up the streets rising like stairways, and the degree of the arcades’ curves, and what of zinc scales cover the roofs; but I already know this would be the same as telling you nothing. The city does not consist of this, but the relationship between the measurements of space and event of its past...”

– [Calvino, 1972: 10]

Urban space

The city of Pretoria was formalized and developed from an agrarian origin [Bell & Lane, 1905: 12]. The natural boundaries surrounding the city contained its growth, which form part of the city’s urban identity [Jordaan, 1989: 26]. Thus this natural morphology has developed the city to what it is today [fig. 2.1]. The rigid *cardo-decumanus* grid forms the oversized blocks which impedes pedestrian movement around the urban environment. Consequently this unique urban environment of Pretoria grew, along with its vibrant mid-block pedestrian arcades [Le Roux, 1991: 32]. This distinctive layer of pedestrian connectivity responds to and defines the spatial identity of the urban environment. As Pretoria expanded, so did the need for open public space within the city. According to Maslow (1943: 373), “cities are typically seen as the engines of modern economic life. Cities are thus principally planned to optimise work and other practical, rational, preconceived objectives, and are designed accordingly, with even leisure
space serving well-defined functions. But people do not only gather together in cities to meet their basic physiological needs; they also come to cities searching for love, esteem and self-actualization, to experience the diversity of the world around them and to learn to understand it”.

Koolhaas [2005: 16] proposes the concept of the 200% city, where the city is both 100% generic and 100% specific. Within the ‘generic city’ (fig. 2.2), exists a series of standardised components. These components provide a “visual language” which determines the form, orientation and setting of public architecture. In comparison, the generic city’s
components form the basis of Pretoria’s planning, ranging from its natural fortification to its *cardo-decumanus* (fig. 2.3) (Jordaan, 1989: 26). However, Pretoria is more than a just generic city. Pretoria is also part ‘100% specific city’, and it is that which is projected through its unique African identity. This is made visible through the variety of everyday performances which occur within the city, and more specifically in Van der Walt Street, where the urban environment becomes the stage for the quotidian context and its praxis (fig. 2.4).
This challenges the conventional typology of public space, investigating the potential of providing a network of public space within the city, bringing together a hierarchy of both public squares and streetscapes.

The quotidian context within public space is distinctively characteristic of the ‘200% city’ of Pretoria. Public space is described by Carr et. al (1992: 3) as a space where, inhabitants can build a community and play out everyday activities. Public space within the generic city is generally found within squares, which form the larger part of the public interface (fig. 2.5). While in comparison, Pretoria’s public interface is found within the streetscape (fig. 2.5). This challenges the conventional typology of public space, investigating the potential of providing a network of public space within the city, bringing together a hierarchy of both public squares and streetscapes (fig. 2.5).
Ntuli (2002: 54) describes the struggle of African cities in reclaiming a valid African urban identity. Therein the notion of the public differs between Western and African views as suggested by Loyd (2003: 105 -107). An African view of the public realm is understood as, “all space is public except when defined by ritual or private space. While in a Western view, “all space is private”, except for specifically designated public areas. This concept of the public realm thus becomes critical in defining an urban threshold, by which the intervention should contain a multi-layered threshold, responding to this notion of the public realm. Currently Pretoria can be labelled an “invaded city” according to leading urbanist Jan Gehl (2003: 14). The “invaded city” has a single use, where traffic has taken precedent, drastically changing public space. This results in an impoverished form of public space, leaving behind only the most necessary of activities, where people walk between spaces “because they have to, not because they want to” [Gehl, 2003: 14].
This therefore begins to define a model of an African city, where the urban environment is practised.

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**Quotidian context**

The conceptions of the everyday and the ordinary as developed in particular by Henri Lefebvre [1991: 167] and Michel de Certeau [1984: 22] are influential in establishing alternative urban methodologies. These concepts present many of the issues of the late capitalist city, which mostly deal with the material, the functional and the acquisional. However, Lefebvre (1991: 117) focuses on contemporary urban environments that are concerned with the experiential and qualitative expectations of its users where, “urban citizens are not simply passive consumers, but are constantly engaged with the city, appropriating and re-appropriating the sites and systems for their own ends” (fig. 2.6) [Clear & Borden, 2009: 242]. This therefore forms the basis for an African city model, where the urban environment is “practised” [Koolhaas, 2005: 694]. More often than not the search for an African city is sought through patterns of planning (in 2 dimensional space). The identity of Pretoria can however be found through the understanding of its use and appropriation of urban space (in 3 dimensions). This illustrates the opportunity to investigate the daily activities of the city (fig. 2.7) [de Certeau, 1984: 124], and its appropriation of space - putting architecture at the heart of the city’s identity.

Margaret Crawford [2008: 18] refers to the idea of ‘everyday urbanism’ which investigates small, temporary, unintentional, inexpressive but nonetheless highly frequented locations as opposed to standardized expensive, permanent and large-scale planning. Everyday urbanism illustrates the need to be specific rather than normative, reacting to existing situations and attempting to reinforce their qualities [Hayden & Temel, 2006: 56]. Therefore everyday urbanism can respond to the Pretoria city model, acting as a critical form of catalytic development, which acknowledges the context, economics and social needs of the public.
Case study 1 – Sit city

An investigation into how people sit within the city was conducted [Alkayyali et. al, March 2011] to see how public space within the city is used (fig. 2.6). The seating classification categories were divided into 5 groups being: ‘seating by appropriation of urban surface’, ‘seating by re-use’, ‘seating by design’, ‘seating by acquisition’ and ‘seating by adaptation’. From the quantitative results gathered, multiple conclusions about the city and its uses can be drawn:

<table>
<thead>
<tr>
<th>Findings:</th>
<th>Deductions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) People bring or appropriate seating</td>
<td>Not enough designed seating</td>
</tr>
<tr>
<td>2) Formal seating used for recreation Informal seating used by traders</td>
<td>Vending takes places along dynamic routes, mapping pedestrian activity</td>
</tr>
<tr>
<td>3) Products sold vary in different urban sectors</td>
<td>Products are an indication of commercial activity</td>
</tr>
<tr>
<td>4) Pedestrian energy mostly found in the streets</td>
<td>Streets can be seen as new form of public space</td>
</tr>
<tr>
<td>5) Mostly horizontal elements and surfaces</td>
<td>The need for better integration with vertical surface</td>
</tr>
<tr>
<td>6) Old buildings are better adapted for everyday uses</td>
<td>Contemporary architecture does not respond to everyday needs of users</td>
</tr>
</tbody>
</table>

It is evident that Public space is the carrier for people’s everyday activities. A multitude of spectacles and praxis can be found within the urban context [Van der Walt street], ranging from street vending, to informal dining rooms, to washing and even sowing (fig. 2.4 -2.14). These performances express the beauty and complexity of this quotidian context, where little attention is given to these everyday activities. Notably, these activities are found mostly within the street interface, where various urban surfaces have been adapted to suit the needs of the user. The urban environment is thus morphed according to these user’s needs rather than a dictated event. Architecture is thus the “matter of interaction between fabric, spaces and people” (Cruz & Gage, 2009: 114). This can be described in two interrelated ways by which interaction might occur: ‘Performance’ and ‘Inhabitable Interfaces’. These are discussed in the following chapters, from which design guidelines can deduced:
fig. 2.6 Sit City study of Pretoria context [Sity]
fig. 2.7 Everyday personal performance
fig. 2.8 Everyday personal performance
fig. 2.9 Everyday urban performance
fig. 2.10 Everyday urban performance
fig. 2.11 Everyday natural performance
fig. 2.12 Everyday natural performance
The built environment thus contains both settings and the props for the performance of the everyday.

Performance

According to Borden & Clear (2009: 243) the city can be understood as something that is performed or practised. The American anthropologist, author and actor William Beeman (Beeman, 1993: 369) describes how performance is both mimetic (in that it imitates action) and affective (in that it transforms action) (Borden & Clear, 2009: 243). Through an anthropological view of performance, it becomes clear that everyday performances within the urban context contains all institutions of public behaviour, including those which control and direct ritual and social interactions (Beeman, 1993: 369; de Certeau, 1984: 104). Accordingly we can conclude that the built environment provides both settings and the props for the performance of the everyday. These everyday performances do not necessarily only imply people (performance of the users); however it also includes the flux in urban conditions (performances of the city), as well as the flux in natural conditions (performances of the seasons). This reveals a temporal element within the city, accentuating various scales of time with these performances (fig. 2.15).

Case study 2 – Can you see the dot?

An experiment was conducted to see our level of perception within the urban environment. On the following page both a dot and an asterisk (fig. 2.26). This experiment is based on Heinz von Foerster test of the blind spot (von Foerster, 2002: 212): Cover your right eye with you right hand, while holding the page with your left hand. Slowly move the sheet backward and forward, along your line of vision, taking note when the dot disappears. This usually occurs between 18 -25cm from the eye; once the dot has disappeared continue staring at the dot, as you will see the dot remains invisible.

Heinz von Foerster explains that it is, “that our field of vision appears whole and consistent everywhere. In other words: we cannot see that we cannot see. We are blind to our blindness” (von Foerster, 2002: 21). Even though we know that the dot exists we cannot see it. The same concept can be understood as a metaphor for the everyday within the urban environment; where architecture holds the potential to celebrate these hidden
fig. 2.13 Case Study 2- levels of perception; invisibility and visibility (von Foerster, 2002: 212)
In a sense architecture becomes the device by which perspective is gained, revealing the spectacle of the quotidian context.

performances of the everyday. Accordingly light can be seen as an architectural tool by which we can perceive the urban environment. Le Corbusier expresses architecture as the, “masterly correct and magnificent arrangement of forms seen in light” (le Corbusier, 1931: 31). In a sense architecture becomes the device by which perspective is gained, revealing the spectacle of the quotidian context.

An everyday activity is explored by Joe Davis (2007) in his concept of “Telescopic Text”, where he describes the ordinary process of making tea (fig. 2.14) (Davis, 2007). Through expanding on the seemingly simple task of making tea; the variability, slips and complexity which occur simultaneously within the activity, are exposed. As Joe’s meta-description for his concept says, this is “…an exploration of scale and levels of detail. How much or how little is contained within the tiniest, most ordinary of moments” (Davis, 2007). The dominating level of detail can also be related to the interaction between people and environments, or even the simple event the everyday praxis of a pedestrian. Telescopic text thus describes the relationship and interactions between people, objects and spaces within the quotidian context.

Inhabitable Interfaces»

The concern of Modern architecture has been with the use and design of ‘empty’ space (Doordan, 2001: 201). As a result, walls (and by large the physical substance of architecture) have been socially, politically and functionally relegated to become mere space organizers and divider (Cruz & Gage, 2009: 114). Koolhaas (2005: 663) identifies the mutations of the use of a dividing wall within an African context stating that, “the property line, originally a conceptual and abstract legal division designed to divide, enclose and exclude, has materialized into a vertical wall, whose surface has become an attractor for use, contamination, and the establishment of new economies. The wall has come to be taken for granted as an infrastructure that supports and serves a host of economies and small-scale industries”. This thus exposes the potential of programmable spaces and infrastructures, where the adaption of architecture can respond to the everyday context of the city.
I made tea.

Yawning, I filled the kettle and switched it on. I got some biscuits. I poured milk into a cup. Then I made myself a cup of tea.

Yawning, I walked into the kitchen and filled the kettle with water, making sure it was cold enough (). I glanced outside for a minute at the mist. I plugged the kettle in and switched it on. I got some biscuits. I poured milk into a cup that I'd left out earlier. The kettle grumbled so I poured water onto a teabag and watched it brew. I put the teabag in the bin. I picked up my mug and left the kitchen with a cup of strong tea.

Yawning, and smearing my eyes with my fingers, I walked bleary eyed into the kitchen and filled the kettle with fresh water from the tap, checking with my hands to make sure it was cold enough (The best tea comes from the coldest water). I glanced outside for a minute at the city mist. I plugged the kettle in and switched it on. As the kettle began to hiss, I looked for biscuits, and found dusty digestives. They're always nicer when they're dry and stale. I took the milk out of the fridge and poured some into a cup that I'd left out earlier. The kettle began grumbling so I poured water onto a teabag and watched swirls rise up through the water. A few minutes passed. I removed and squeezed the teabag, then flicked it into the bin. I picked up my mug and left the kitchen with a nice, hot cup of strong tea.
The wall has come to be taken for granted as an infrastructure that supports and serves a host of economies and small-scale industries.

Cruz & Gage (2009: 114) propose the concept of ‘inhabitable interfaces’—which is seen as an extended meaning of ‘the wall’. This concept is further explained as, “involving both a mental and physical activity, ‘inhabitable’ is a condition that is ever transient, and implies the potential act of becoming inhabited. It suggests an embodied experience, which is the interplay between the body’s presence, its perceptual practice, and the engagement with the environment around it” (Cruz & Gage, 2009: 114).

Case study 3 – Musical stairs

An investigation into how the introduction of a new experience into the urban environment can attempt to activate the quotidian context. Swedish design firm DDB° (2009) designed an installation on a busy Swedish staircase in the subway (fig. 2.15). Their aim was to see how they can activate the staircase rather than the use of the escalator (DDB° Stockholm, 2009). The installation provided musical notes that played when people walked up the stairway. This introduction of musical sound within the context catalysed the use of the stairway, exposing the experience of the change in levels. Thus highlighting the experience, making it something tangible; where the mundane function of the staircase is inhabited, adapted and experienced (fig. 2.15).

From this experiment we can note how the stairway has become both inhabited and activated through the installation. It is understandable that the novelty of such an installation will become old in time; however the underlying concept is still valid. Through looking at a mundane architectural element such as a stairway from another perspective, we can transform it to become something more. Thus by questioning the function of the simple wall as proposed by Koolhaas, Cruz and Gage we can transform the everyday context to something responsive, interactive and inhabitable - highlighted by the experience and performance of the urban environment.
fig. 2.15 Musical stairs in Stockholm, 2009.
The city exists in **mutated** forms of the generic city, where urban fortifications have been adapted to block fortifications, the **public forum internalized**, and trade replaces social necessities.

**Typology of public space**

“Public space is the city’s medium for communication with itself, with the new and unknown, with the history and with the contradictions and conflicts that arise from all those. Public space is urban planning’s moderator in a city of free players” (Christ, 2000: 17). In an increasingly diverse community, the role of public space within the city becomes critical. Currently Pretoria exists in isolated instances encapsulated by impenetrable boundaries. The city exists in mutated forms of the generic city (Koolhaas, 2005: 16), where urban fortifications have been adapted to block fortifications, the public forum internalized, and trade replaces social necessities (Bremner, 2010: 252). Thus there is a need for public spaces to revitalize the urban environment, attempting to achieve a “reconquered city” as expressed by Gehl (2003: 18). Krier (1980: 47) identifies the need for a hierarchy of public space, where in Pretoria, the scale ranges from commemorative historical squares, to open green space and pedestrian arcades (fig. 2.16). This hierarchy of public space is found along Van der Walt street, however a network of public space is needed to link these spaces in a positive manner (fig. 3.10).

The need for a new public typology is thus evident, bringing both the street and square interface in a hierarchy of space, responding to the fragmented relationships of the city. Aymonino & Mosco (2006: 21-23) identify four points that defines positive public space:

1. A strong relationship with its surrounding context
2. Multiple potential and variety of use
3. Evoking a positive sense of participation
4. A space that is open to all.
fig. 2.16 Collage of liminality and public space within the city
fig. 2.17 Everyday personal performance
fig. 2.19 Everyday urban performance
fig. 2.21 Everyday natural performance
fig. 2.22 Everyday natural performance
The crossing of these paths leads to a plethora of inevitable interaction possibilities within urban space. Architecture has the responsibility to create the platforms upon which these interactions occur.

The everyday activities within public space are investigated by Graafland (2008: 23-29). The “gameboard strategy” explores the temporal qualities of the urban environment (fig. 2.23). Within this dimension exists patterns of use, different patterns for different urban users. While care is taken by the urban dwellers for these paths not to cross, a type of ‘cat and mouse game of avoidance’ is formulated (Graafland, 2008: 24). However, these paths do cross resulting in either harmonious or harmful space. This metaphysical ‘gameboard’ forms the structure of the city which forms the “backbone” of the hypothesis (public space) (fig. 2.23).

Time is a function of the layering of different rates of change, the “backbone” introduced in this hypothesis illustrates not a linear quantitative representation of time, but rather a qualitative multi-layered perception of time. Spontaneous daily activity leads to possibilities for interaction similar to the rolling of a dice in a board game (Alkayyali, Gouws & Grobbelaar, 2011). These interactions occur when the different paths cross upon the “backbone”. The crossing of these paths leads to a plethora of inevitable interaction possibilities within urban space (fig. 2.23). Architecture has the responsibility to create the platforms upon which these interactions occur (Alkayyali, Gouws & Grobbelaar, 2011).

Similarly, Franck and Stevens (2006: 42) identify the need for the “looseness of space”. Loose space is defined as, “space that has been appropriated by citizens to pursue activities not set by a predetermined program”. Within this concept the quotidian context is identified as a critical setting which encapsulates loose space, as it does not enforce strict control, making it a successful form of public space (Franck & Stevens, 2006: 42). This looseness of space does not coincide with the 1960’s concept of universal space, where theoretically within a space, anything can happen- but more often than not, nothing happened (Allen, 2008: 107). The looseness of space thus strengthens the concept of a programmable urban surface, which responds to the everyday identity of space, allowing for adaptation, development and growth.
fig. 2.23 Interpretation of Gameboard Strategy.
Through celebrating the everyday performances and with the understanding of the ‘gameboard strategy’ it is possible to gain a perspective on the spatial narratives which exist within the city. The poetics of the everyday exposes the identity of the urban space, through both the context and its activities. The notion of the everyday acknowledges certain silent or invisible dimensions of urban performances: where common practices have become routines (Franck & Stevens, 2006: 42). From the research it is evident that the praxis of the everyday manifests within the inbetween spaces of the city. It is these multi-directional spaces that provide the “looseness of space” for everyday life (fig. 2.24).

Therefore there is a need to define an architecture that responds to this concept of liminal public space. The understanding of liminality has multiple contexts, ranging from the social and cultural to the spatial. The root word “limen is derived from the Latin word for ‘threshold’, meaning ‘being on’ a threshold” (Alexander, 1977: 31). In all contexts, liminal refers to an intermediate state or condition; an in-between condition where the spectacle of the everyday can be perceived.

The success of public space is dependent on the programming of its edge or threshold. The relationship between the spaces and practices of liminality is illustrated in the approaches of Italian architectural group Stalker. Stalker are interested in disused and physically marginal, urban spaces where people appropriate and occupy space beyond architectural practice norms (Stalkerlab, 2010). Within these spaces, Stalker believes that architecture can manifest as events and acts of occupation rather than building form alone (Stalkerlab, 2010). Stalker’s approach to architecture thus illustrates the importance of liminality within the public realm. Here architecture has the opportunity to provide an inhabitable surface as expressed by Cruz and Gage (2009: 114) that supports the quotidian context. A space that allows for all the variations of de Graafland’s gameboard (2008: 24). Here architecture is almost reduced to its minimum so that the maximum gain can be achieved by the urban context. The architecture in a sense becomes a form of an inhabited infrastructure, both celebrating and supporting the everyday praxis - including all 3 performances: personal, urban and natural.
fig. 2.24 Relativity (Escher, 1953).
Case study 4 – Spectacle of the everyday: Spanish Stairs

The Spanish Stairs in Rome is a good example of a positive liminal public space (fig. 2.25). Although the two contexts are different, the Spanish Stairs project provides a good precedent for an in-between space, where a multiplicity of narratives can occur. Jan Ghel (2011: 9) describes the Spanish Stairs in Rome as “a climb that is beautifully combined with interesting experiences.” The progression of the steps provides an experience of movement for the user. De Certau (1984: 104) investigates the spectacle of the everyday within these liminal spaces. He proposes that through the observation of the quotidian, we can gain a greater understanding and perception of our urban environment.

This illustrates how architecture can respond to the quotidian context, where architecture almost recedes and provides the opportunity for activity rather than attempting to force it. Although simple in design, the steps provide an ideal backdrop, setting a stage for the praxis of the everyday, both celebrating and enhancing this spectacle.
fig. 2.25 Spanish Stairs, Rome.
Conclusion

In conclusion, through identifying the value of the urban performances which have become overlooked within the city, architecture can respond to and celebrate these activities. By investigating an urban scale, through the definition of a contextual public space typology, the concept of an inhabitable urban surface is developed. From the research and theoretical argument, an architectural intervention should respond to Crawford’s everyday urbanism (2008: 18), providing a small scale catalytic intervention for urban renewal of liminal spaces.

Through exposing these everyday workings of the city, the project provides the potential for a fragmented intervention along Van der Walt Street, linking and exposing the incoherent urban environment. The spectacle of the everyday is exposed through the inhabitation of the public realm. The focus of the architecture is then placed on the liminal spaces and the spectacle of the quotidian. This theoretical investigation is therefore used as the basis and generator for the project, where the site, design and resolution are seen in a similar theoretical premise (fig. 2.26).
fig. 2.26 Spatial concept drawing of Project [March, 2011].