

Figure 3.1: Theoretical Approach (Author 2015)





THEORETICAL APPROACH



3.1 INTRODUCTION

The purpose of this chapter is to interrogate relevant architectural theory and general scientific philosophy that may lead to and strengthen the architectural concept and program, as well as to uncover possible and relevant informants that will determine the specific site location for the architecture. As the dissertation stems from the normative position that the city represents a living medium, which exists to channel energy in the form of information, scientific philosophy and architectural theory which deals with fluctuating systems will be investigated.

3.2 Entropy: the Workings of the Medium

"Entropy is a useful concept that has been used to describe the structure and behaviour of different systems. ... With regard to its implications for urban sprawl... and urban monitoring and management."

(Araya et al., 2013: 5223).

Saridis (2001) states that, in modelling process of a complex system, the principle of entropy may be applied as it represents the measure of the irreversible amount of energy which accumulates when work is performed within complex and continuous systems. It measures the waste produced when work is being done for the improvement of the quality of human life (Sardis, 2001:2). Chaos, which is representational of moving away from equilibrium, represents change (Fig 3.2). Therefore it (chaos) is a device against equilibrium and (thermal) death, and gives us hope for survival.

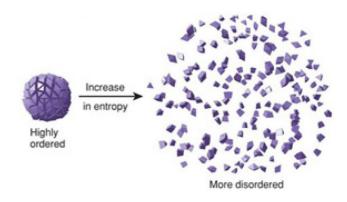
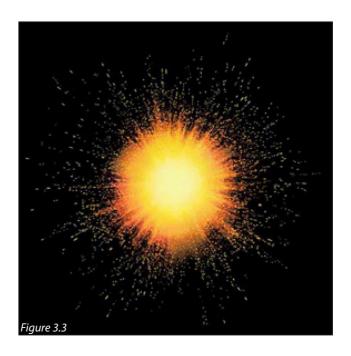


Figure 3.2: Entropy



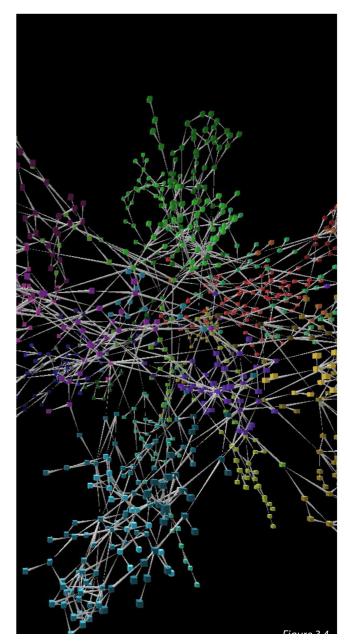


The second law of thermodynamics states that any spontaneous and natural process will increase the disorder of the universe, and that the level of disorder found within an isolated or ideal system will only increase to the stage that it will remain the same over time, being a state of equilibrium. It further implies that processes that do not increase in disorder, or is to remain constant while being geared towards the ideal, require work to be done in opposition to the disorder or eminent chaos, and are in fact impossible to achieve. "Real life" processes represent the availability of a lot more high entropy states than low entropy states (Crash Course, 2013).

In global terms, all processes require high amounts of energy to lower and to maintain entropy levels aimed at an ideal or constant stage, as this goes against the natural trend towards increased entropy or chaos.

In the case of a heated system, it contains a higher amount of entropy than a cooler system, due to the activation of molecules as a reaction to the amount of energy exposed to it. A heated system will therefore cool over time, lowering its level of entropy, but due to the fact that it is not an isolated or ideal system, it will inevitably increase the entropy of its surrounding environment by the same amount (Fig 3.4).

This natural process can only be countered if a large amount of external energy is applied to that system so as to maintain a constant state of entropy. The phenomenon known as "The Big Bang" represents at its conception a process of extremely low entropy levels, and prior to its sudden expansion, entropy has continued to increase throughout the universe (Fig 3.3), affecting all, without any evidence that it will regress back to its original state (Crash Course, 2013).



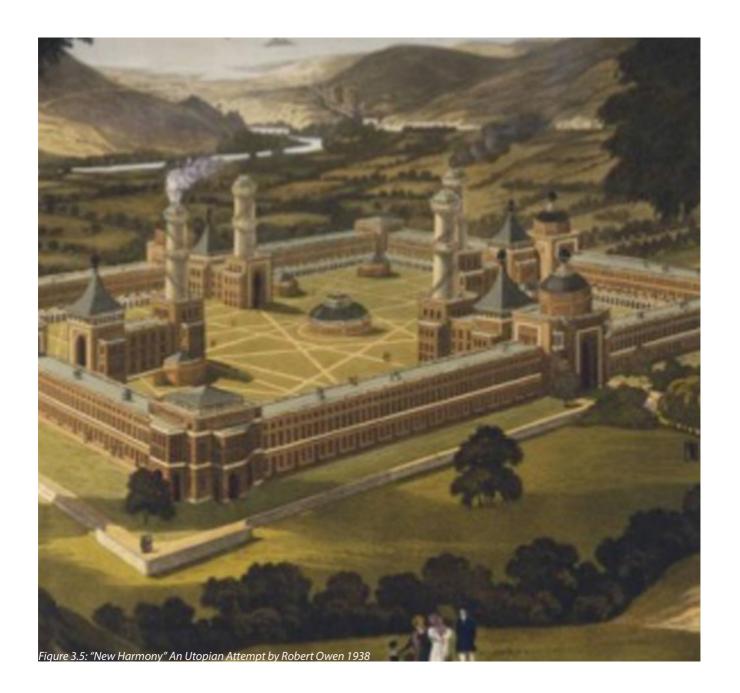


The same law of thermodynamics further implies that, by inflicting control or order on one system, it requires that other systems are thrown into a state of disorder. This trend towards increased entropy - defined as the number of specific ways in which a thermodynamic system may be arranged - is vital in allowing the reactions and interactions which sustains life (Crash Course, 2013). With regards to cities, Araya (et al., 2013) proposes that an urban system should be flexible and resilient enough to absorb and adapt to any possible internal or external changes or shocks. This is made possible by retaining a certain degree of redundancy and diversity (higher amounts of entropy) so as to empower a city to resist long-term events, be it natural or man-made (Araya et al., 2013:5231).

If the urban environment represents a medium to record, transmit and process information (Griffin & Kittler, 1996:720), it should be concluded that, without informational flow – the energy which sustains urban environments – cities will ultimately represent a system of extremely low entropy that will consequently result in the informational equivalent of thermal death and will cease to be. Information is produced when the urban molecules, the users, are allowed to interconnect or collide. The more information energy available to the user, the more influx the state of the system becomes, resulting in higher levels of complexity and diversity, expanding and producing new hybrids through spheres and networks. Lowering the entropy of such a system requires external work and energy to be applied to this system. Not allowing users to intercollide, or by controlling the manner in which they do so, generates a system of low entropy, slowing down the mechanism and limiting the rate at which any natural change may occur. This method of inflicting control onto a socio-economic environment through the vessel of art and architecture is historically linked to modern-age thinking. Marxist belief in the scientific method as a tool in producing new forms of society manifested in art and architecture known as "construction" The Russian interpretation of this principle ranges from the physical to the social and linguistic, with the aim of placing the designer's and user's subjectivity secondary to agendas concerned with new social orders (Jones, 2014:368).

Araya et al., (2013) proposes that rapidly-expanding urban systems naturally develop independently and organically and that attempts to control urban processes (Fig 3.5), or to lower urban entropy levels, may have detrimental consequences (Araya et al., 2013:5232).

One of the main antagonistic side-effects of lowered urban entropy is the increased risk of social and economic segregation, which compromises the cohesion of the urban system (Araya et al, 2013:5232). It is therefore proposed that the amount of work to be done in decreasing a city's entropy, with regards to Pretoria's past development, resembles the amount of ideology as applied to its complex systems, with the aim of ultimately representing an unattainable and utopian outcome. Ideology attempts at controlling the manner and rate at which information flows between users and infrastructure, and is seen as both the cause and prolonging agent with regards to Pretoria's fractured social-cultural structure.





It is further postulated that the methods applied to the original urban structure of Pretoria - which today remains unchanged to a large extent - with regards to its physical and metaphysical isolation from foreign and domestic influence, reinforces the notion that it once aimed at representing a system striving towards a state of utopian equilibrium.

As isolated systems are representational of fantasy, it can be argued that the Pretoria model inevitably would express its true nature; a non-isolated system exposed to socio, political and economic flux. According to the philosophical principles of entropy, the ideal city structure should systematically indicate the symptoms of an environment increasing in levels of disorder, due to the fact that, where a state of order is implemented, a state of disorder will occur at another as to sustain life. Culturally speaking, this phenomenon is perpetually made apparent in terms of cultural revolutions, especially through the medium of the visual arts, narrative and music. The same amount of ideological control was applied to the Afrikaans language as medium, this time focusing on the arts, as to ensure the ideal state of equilibrium to eliminate foreign influence and to deter critique of its values. During the mid 1980s the relentless censorship and banning gave birth to a cultural revolution within the language.

"Of course I was interested in the struggle... But I'm not a movement type of guy and never joined a political party or organisation. What fascinated me was the culture coming out of it. That's what I wanted to capture." (Fig 3.6)

Lloyd Ross as documented by Hopkins (2006:87)

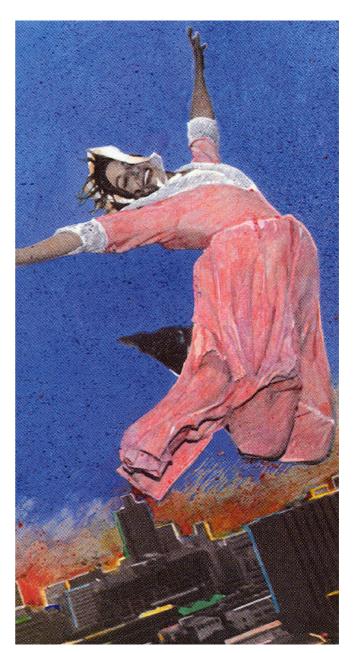


Figure 3.6



Of significance here is the eventual subversive trend that formulates and, in most cases, accumulates in a revolutionary climax. Equally important is the method in which an effective subversive movement usually employs the very tool that was used to oppress it, such as the post-modern and satire-like approach implemented by alternative Afrikaans music groups during the 1980s (Fig 3.6). This is made apparent through the informal adaptation of the formal language of Afrikaans, as it resisted ideological control when it was made subject to the same ideology as applied to South African cities.

By migrating away from conditions where high levels of control were applied to it, the language – through contemporary music – began to subversively spawn anew and escaped from underneath the shadow of Afrikaner ideology. By breaking down high levels of control, the Afrikaans language became accessible to the layman and, of more importance, resembled a medium that could be grasped by the user. Through this accessibility it enabled and encouraged the listener to, through this vessel, critique previously unquestioned traditions.

"Kom ons probeer anargie Ons is moeg vir apatie Ons probeer anargie Ons kry nuwe energie"

"Come let's try anarchy We're tired of apathy

We'll try anarchy
Search for new Energy"

Energie, Johannes Kerkorrel

The above extract by Rabie during the height of the 1980s apartheid era encapsulates the renewing spirit that is borne out of a system subject to high amounts of control, as well as the need for agenda-free and accessible information. It is through the natural trend towards increased levels of chaos that change occurs, and out of a need for increased levels of entropy that new possibilities are made apparent. It is postulated that this change, as made apparent in language and art, occurs at greater fluctuations than that of more permanent urban environments, where both are viewed as mechanisms for communicating information It is suggested that an urban environment manipulated towards low levels of entropy will eventually follow suit.

3.2.1 Rebel 1: Insurgent Activity: A Response to Low urban Entropy

The systematic symptoms of previously isolated structures moving towards increased levels of entropy may not only be likened to the deterioration of built fabric and infrastructure, but may also include the formation of informal or insurgent activity that takes shape in the peripheries of the static structure of city fabric.

As a response to the urban stubbornness of Pretoria, the natural tendency towards an increased information flow is being met through other non-prescribed means. In the form of subversive incorporation of marginalised space to suit the purposes of sustained city life, alternative methods to suit social, economic and political needs are being explored through the reinterpretation of existing urban fabric (Fig 3.8). This phenomenon of "informal" insurgency within the city is seen as a socio-cultural barometer, a move towards a new urban identity, indifferent to the weight of ideological heritage.





Such activity, as it takes shape in "restricted space", is where the symptoms of a disproportional urban model such as unemployment, disregard for disability, crime and pollution usually play out (Da Costa & van Rensburg, 2008:37). This leads to the notion that insurgent practices not only reflect a method in reading city identity, but also reflect its resilient characteristics in terms of its adaptability to urban conditions despite the degree of exclusivity the urban environment offers.

As space always represents an incomplete project, constantly being generated and altered through human activity (Massey, 2005:29), it implies that these insurgent practices contribute to and test the flexibility of Pretoria's spatial configuration.

Insurgent practices blur boundaries, externalise introverted space and eliminate the distinctions between that which is prohibited and permitted.

A distinction is then drawn between prescribed public space, and improvised public space (Fig 3.8), where the latter provides clues as to where social information is concentrated and reveals possible areas where effective architectural intervention may be directed. Church Square, as one example, may be defined as "square" in its physical idiom, although being measured against the amount of insurgent activity taking place within its boundaries, it becomes the antithesis of good public space. Similar conditions are apparent regarding how buildings relate to street interfaces on ground level (Fig 2.24).

Figure 3.7





Due to the bureaucratic nature of programs assigned to the majority of buildings in Pretoria, ground floors are usually orientated towards foyers, or fenced off from public access as security measures.

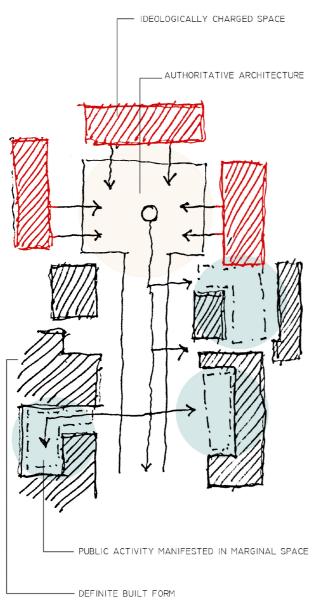
It is found that insurgent social activity occurs within the more hidden places of the city, such as back streets, alleyways and street recesses in order to avoid the harsh stationess of the city's various faces.

It is therefore not surprising to find that these activities manifest within marginalised space, space that has been left undefined or unprogrammed by city planning, as if to reject the intended programmatic identity of the city. The orientation of public space towards a political or class bias may prevent a city from expressing its real and everyday characteristics. As is the case in many Asian cities, public space being controlled by and for the purposes of state causes vibrant city life to occur in back streets, away from authority's spatial influence (Hou, 2010:5).

Such activity, and where it takes shape, is harnessed as a social barometer, an alternative method in reading and translating the urban scope. Space suited for public use within the city is now being defined as that which can be occupied by insurgency with the least amount of resistance (Fig 3.9 & 3.10). So to concur with Massey, the aim is then to depart from the limited way of understanding the urban condition, towards an alternative understanding that human behaviour and social practices are by nature spatial, and that the organisation of space is a product of interrelations continuously under construction (Massey, 2005:194).







These 'informal urban villages' grew out of view and out of range from the voice of Plato's city propagating its laws and norms (Griffin and Kittler, 1996:717). The 'informal' did not possess the master's tools, its architects, drawing boards, models, software, building lines, SG diagrams and the master's notion of a city flattened onto a graph. It came from another place, from deep inside the city and developed to such an extent that the master cannot comprehend its workings, for the master gains knowledge by means of these tools (Springs,2009:420).

This exposes the city's colonial instinct of not being able to recognise that which cannot be married to its initial ideology. It is now proposed that the "informal "gives voice and expression to the zeit-geist - ironically propelled into momentum by rejecting the master's tools - exceedingly more effective than his own archaic methods (Fig 3.11).

Figure 3.10: Insurgent Activity: Manifests in Marginal Space (Author 2015)



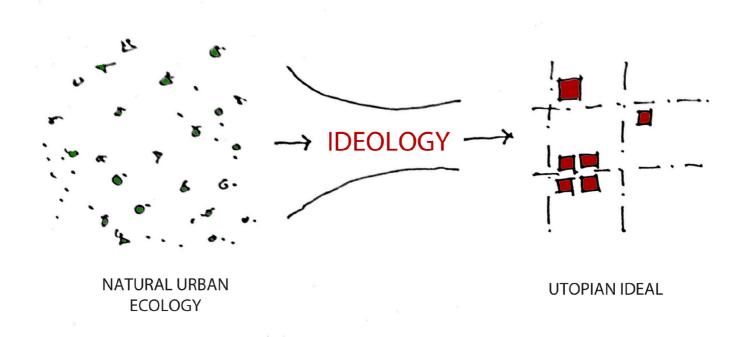


Figure 3.11: Entropy and the Utopian Ideal (Author 2015)



3.2.2 Rebel 2: Marginal Space – A Spatial Manifestation of Low Urban Entropy

Suspended within the urban fabric are spaces trapped in time. Left to be shaped by "back-of-house" requirements of predominantly privately- and government-owned buildings. The formal identity of Pretoria as administrative capital, with residual tones of ideology, manifests from program to form and space, which results in a lack of public inclusivity and, in turn, generates incoherent architectural narratives and finally results in marginal (in-between) space. These spaces are seen as remnants of an ideology that was imposed on a city that otherwise would have strived towards increased levels of entropy, evidence of an unnatural or forced state of equilibrium. Trancik (1986), describes these ideologically borne forms as Urban Solids, and in particular, monuments or institutions.

These buildings are often free-standing, predominantly placed within open space, as if to proclaim their presence, where the open space it occupies, gets saturated with similar monumental meaning. Universal ideological symptoms responsible for the existence of such space include property relationships, limited public access, the deliberate disclosure of sites, urban aspects that become so familiar that that they are overlooked, forgotten or fail to be recognised anymore (Pile, 2000:264), all by-products of a city starved of unrestricted information flow.

Administrative and monumental characteristics, which describe the majority of architecture located in Pretoria's inner core, may also contribute to the formation of marginal space, based on the principle that these buildings effectively internalise urban information through the introverted nature of their programs. Practical environmental issues may also promote the formation of marginal space as permanent built forms such as clusters of high-rise buildings, generate uncomfortable urban environments by limiting natural light and producing zones of undesirable air quality. These spaces of ''dying ecologies'' carry with them a sense of resilience in how they allow themselves to be shaped as the city develops, whilst keeping their identity that can be described as being secret or lethargic.

The very practical and basic problem, and simultaneous opportunity which presents itself regarding marginal space, is the issue of urban densification. If future development strategies for the Pretoria model aim at upgrading its liveability and sustainability of its function, it should be considered that these marginal spaces - with their unique qualities of being unknown - should be incorporated into a strategy to contribute towards densification, as opposed to merely reinforcing the structure responsible for urban fracturing and furthering the process of urban sprawl.

Here marginal urban space is seen as a move towards providing more "inside space," as opposed to the mythical "outside space" that has been brought into existence by the mythical separation of society and nature (Latour, 2009:141) (Fig 3.12 & 3.13).



Figure 3.12: Marginal Space and Insurgent Activity (Author 2015)





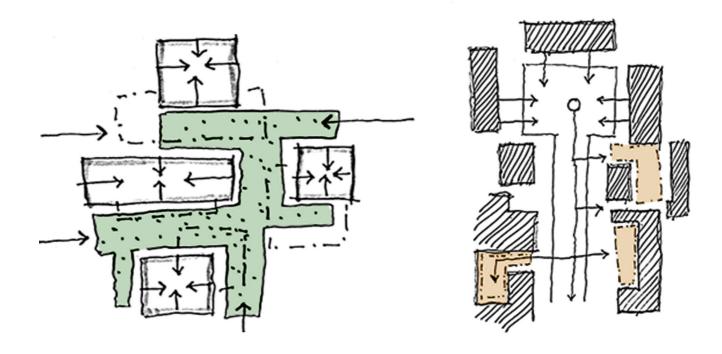


Figure 3.13: Marginal Space and Insurgent Activity Diagrams (Author 2015)



3.3 FLEXIBLE INFRASTRUCTURE AND ETHICAL ARCHITECTURE

Reconsidering the role of architecture in Pretoria's urban environment becomes a priority. It brings into reconsideration architecture's formalistic approach in the production and organisation of space.

This introduces the concept of a consumerist-orientated architecture, where architecture is freed from its formal concerns and empowered to serve a social and ethical function on a spatial domain to facilitate the development of urban-cultural identity.

The environmental feasibility of such a temporary architecture in the context of depleting resources and ecological impact is questionable, but it is proposed here that technological advances in the discipline should come to the fore in challenging how we think about architecture and extending the limits of what is possible in order to bring it into existence. The ethical and social responsibility of architecture is to highlight a society's values and to extract and reinterpret that society's existence (Harries, 2000:178). Melvin (2005), as cited by Da Costa and van Rensburg (2008), clarifies the societal role of architecture by stating that it has limited capacity in its resolution. However, Da Costa and van Rensburg implements the view of Da Carlo (2005), in saying that architecture may be implemented to provoke situations and create atmospheres where it may be useful in the production of societal expression (Da Costa and van Rensburg, 2008:50).

Harries (2000:287) further states that, the ethical orientation of architecture inevitably plays out in the public domain, where it should generate mediation for community.

Cuff (1998), as implemented by Da Costa and van Rensburg (2008), incorporates certain criteria as to measure the social impact of architecture in urban environments:

What function does this architectural object have in the establishment of an urban community?

Does the building type assume any role or serve a common ethos?

Does it reflect and renew any social order?

Does it insert any meaning into the urban environment?

(Fig 3.15)

Here it is implied that the meaning — to be inserted through architecture — is determined by the collective. Architecture is then only made relevant by the group of people to utilise its functions. (De Carlo, 2005:22 as sited by Da Costa and van Rensburg,2008:50) For city space to truly facilitate the organic, the constant influx ecology of human endeavour should shape the organisation of urban space rather than the fixed built form providing the constraints for life to flourish within its boundaries (Fig 3.14).



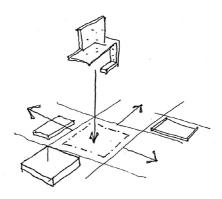


3.4 ARCHITECTURAL THEORY: METABOLISM AND ARCHIGRAM

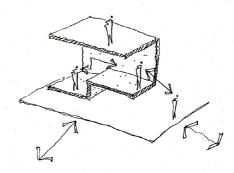
This architectural approach of flexibility and socio-economic absorption holds a lot in common with the principles applied in the metabolist movement of the nineteen sixties. During the years following Japan's devastation at the end of World War Two, the country experienced a massive and equally rapid rebuilding of its city structures, which resulted in urban environments resembling desperation rather than thoughtful space-making (Fig 3.16). Kiyonori Kikutake, one of the four founding members of the movement during the publication of their manifesto in 1960, described the life of their society as being suffocated by the urban graveyards it represents (Jones, 2014:455), consisting of outdated and unfriendly buildings only serving as a backdrop for traffic congestion. Of significance here is the vocabulary the metabolists embraced in dealing with urban environment that neglected human tradition and well-being, by indicating a social shift from collective communities to isolated individuals to regain a sense of identity in urban environments (Jones, 2014:455).

The movement quietly rejected the existing city, through proposals such as their vision for the Tokyo Bay (Fig 3.18), and orientated itself towards artificial ground of untouched platforms, floating structures over land and sea, lightweight residential proposals and tectonic skeletons that incorporated services and structural support into one blended language. Although the manifesto is said to only be infused with a passion for scientific pioneering, quite ideologically, it holds value in its views regarding how buildings and cities could embrace a culture's true traditions.

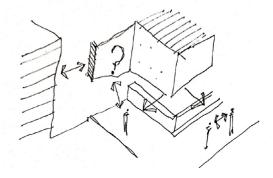
Figure 3.15: Social Impact Criteria (After Cuff 1998 Author 2015)



WHAT ROLE TO PLAY?



WHAT SOCIAL ORDER?



WHAT DOES IT MEAN TO THE URBAN ENVIRONMENT



Regarding human society as a living process, Metabolists believed that architecture should not only represent an acceptance of this process and all the processes that influence it, but in addition should encourage the active metabolic development of society through their proposals (Evers and Thoenes: 2006:776). This architectural theory introduced a condition where man gains and maintains control over his built environment and the technology it holds, empowering him to influence it rather than be limited to the inverse relationship.

The Metabolists argued that there should be an established relationship between new technology and a system of regeneration and that the architecture should be akin to this synergy. In their view, this would result in logical solutions to urban problems, as well as the control of automated technology and a culture of accelerated transformation (Evers and Thoenes: 2006:776). This theory had much to share with traditional Japanese culture, where architecture was viewed as more of a renewable variation of a prototype than a lasting monument (Evers and Thoenes: 2006:776).

This is quite reminiscent of the way in which current urban traditions in Pretoria readapt buildings and the spaces in-between to suit their everyday needs. Metabolist architecture then was to serve society by becoming alterable, whilst the available technology deals in making this consumerist architecture feasible. This approach reinforces the principles of sustainability beyond the ad hoc understanding of green architecture and relocates sustainability to where it may have complete synergy with principles of construction. Today this holds a lot of potential, considering that technology suited and made available for the built environment progressed quite a distance from the 1960s context of Metabolism, and consequently may provide architecture with an even more consumerist orientation.







3.5 Architectural Precedent: Nakagin Capsule Tower 1972 – Kisho Kurokawa 1934-2007 (Fig 3.19)

Built as a prototype to reflect the ambitions of the Metabolist movement, Kurokawa architecturally expressed the notion that a building should be designed and organised in such a manner that it could adapt over time with an adaptable programme that could be replaced to suit changing user needs over time. Translating the notion of artificial ground, architecturally the building was positioned onto a raised platform above street level, which emphasised the building as occupying in-between space in the city (Jones, 2014:455).

The building proposes that the structural and service infrastructure should represent a more permanent aspect of the design, whilst the architectural facilitation of the program could be altered and readapted over time, as needed. At the centre of the building two cores act as main structural support, as well as a framework for services, such as vertical circulation and utility mains (Jones, 2014:455).

The temporary aspect of the building was accomplished through the introduction of four models or types of capsules, much like shipping containers, that could be arranged and rearranged to suit the flexible program (Jones, 2014:455). As the more permanent structures, such as the structural service cores and the plinth, were constructed insitu, off-site prefabrication of the capsule units made the speedy construction of attaching the temporary units to the permanent core possible. This common thread of the in-between, the permanent and the temporary within the Metabolist approach is not confined to individual architectural prototypes alone, but also permeates the group's understanding of urban environments.



Figure 3.17: DNA Double Helix





Often described as utopian, Metabolist urban planning strived to navigate the relationship between natural geography, primary mega (permanent) structures and periodically replaceable and individual components, much like the DNA double helix structure (Evers and Thoenes: 2006:776) and quite literally explored through the capsule and structural relationship found in the Nakagin Tower. Similar in their approach in dealing with the existing, and utilising architecture to make cities truthful and relevant for the times, Archigram intended for everyday life to inject relevance into the late modern architectural tendencies of their time.

"Only those imbued with respect and enthusiasm for today's wishdreams can adequately implement them in the built environment (Chalk.C,1964-1966)."

(Evers and Thoenes: 2006:770)

Through establishing an urban philosophy where pop-art would enjoy synthesis with the aesthetics of science fiction, Archigram established a subversive and fresh approach in navigating existing and static built environments.

Much like the Metabolist movement, the Archigram movement favoured visions of free-floating, flexible, adaptable spatial structures, loosely based on Buckminster Fuller's "Dymaxicon" and the magnanimous lightweight roofs of Frei Otto, and blended these with the contemporary "everyday" Evers and Thoenes: 2006:770).

Their exhibitions and visions such as "The Living City", "Walking City" and "Plug-in City," inspired by science fiction and futuristic robotic utopias, expressed the drastic and revolutionary methods incorporated to alter urban perceptions and experiences (Fig 3.20).





The movement's choice of media – later to become their title – was an underground newspaper contrasting the conventional methods of communicating architectural ideas, and secured their subversive attitude with regards to making cities relevant and accessible to the contemporary city dweller Evers and Thoenes: 2006:770).

From a contemporary investigation into the work of Lebbues Woods, Pit, Streng and Steller (2007) translates this approach to architecture as parasitic in nature, where urban systems are distinguished into physical- and mental systems. The physical systems consist of the built infrastructure and static form, which compromise the urban fabric. Mental systems make up the expectations which exist in a society in constant-flux. Parasitic architecture can be appropriated as a mediator between the changes of society, and the staticness of urban systems, as the parasite is able to provoke, explore and to break down both physical and mental boundaries, which developed through juridical and policy notes, and to achieve new possibilities and propositions (Pit et al., 2007:8). This type of architecture, according to Pit, is orientated towards the experimental, as the parasite resembles a negotiator between different groups, and investigates and tests the amount of support available for proposed changes (Fig 3.21 - 3.22).

The main aim of such architecture is to overcome indifference, and provokes both resistance and acceptance of the proposed change it resembles, and, as in nature, parasitic organisms resemble rapid, passing and dynamic systems (Pit et al.,2007:8). The analogy of a parasite attaching itself to a host, in order to survive, offers an alternative perspective of the static city and the fluctuating human ecology it facilitates.

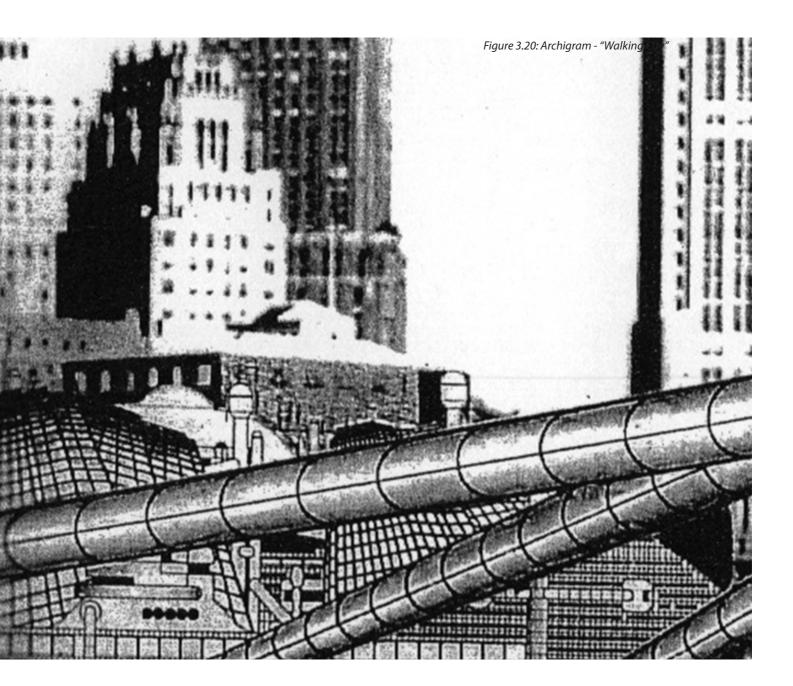
When parasite architecture attaches itself to its host-city, the urban immune system is set into action, activating a discussion between those who support the collaboration, and those who oppose it. Pit proposes that there are different strategies to be employed with regards to dealing with specific types of urban-immune-systems.

The Random Immune System:

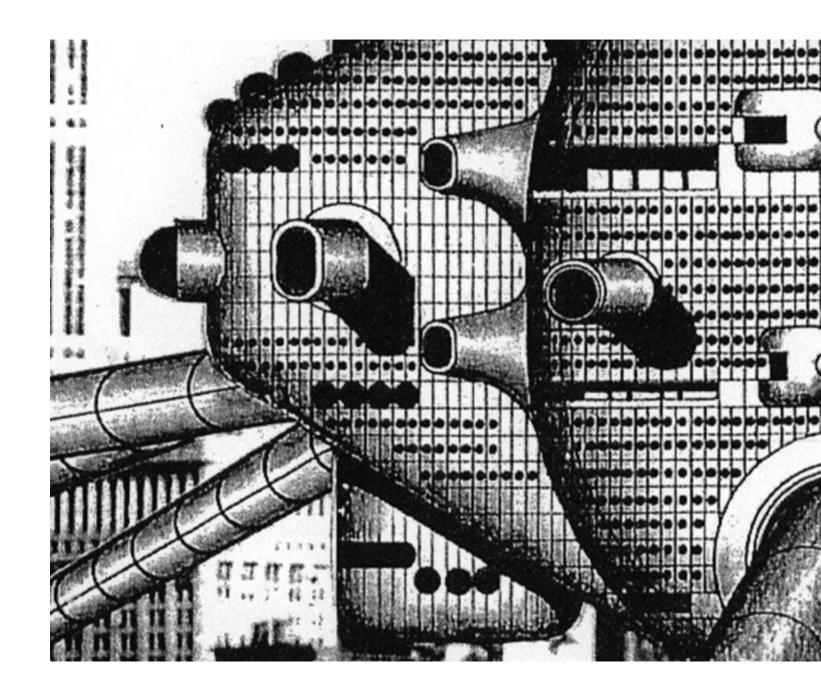
This type of urban context resembles a city that deters any changes or fluctuations in the fabric that appears to be out of the ordinary. According to Pit, the default setting of the architecture found in this city is to reassure its users that things are under control; that they are stable and static, whilst obstructing the continually developing society housed within its fabric.

The monumental architecture, usually encountered in these environments, refers to an ideal universe in equilibrium (Pit et al.,2007:8), as opposed to the real-life phenomenon of rising entropy. This type of environment, according to Pit, provides parasitic architecture with the potential to achieve maximum immune- provocation (Pit et al.,2007:8).

Through the investigation into architectural theory and precedent it becomes clear that, by utilising existing urban infrastructure, as well as establishing a relationship between permanence and temporariness of building elements, a valid method can be established in reclaiming the identity of urban space for the everyday user.









3.6 CONCLUSIONS

The dissertation does not aim to establish a dialogue between marginal space and insurgent activity, but rather recognises the already-existing relationship between these two indigenous phenomena. As such the strategy is based on an existing and everyday response to Pretoria's urban condition – already in effect within the city – and proposes an extension or amplification of these trends as the main approach towards developing the aims of urban identity and renewal. It therefore avoids the pitfalls of introducing a new utopian ideology into the existing urban framework.

The role of architecture in this context then becomes one of furthering the expansion of insurgent activity through readaptation and increasing the accessibility of marginal space. Through the theoretical investigation it is apparent that architecture of a more temporary and flexible nature can aid in the activation of marginal space by providing the user with higher levels of inclusivity as an alternative to the static permanence that formalistic and mono-functional architecture provides.

Various technological strategies come to the fore as the main driving agent to make such an intervention feasible. Site selection will be determined to meet the criteria of where marginal space and insurgent activity overlap or find synergy, where a conceptual approach will be developed to provide an extended catalyst for this synergy to flourish in Pretoria.



Figure 3.21: "ZAGREB FREE ZONE" Lebbeus Woods, 1991

