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[RE] PLAY

A Sports and Recreation Centre FOR THE Hillbrow Community

Dale Swanepoel

[RE] PLAY

A Sport and Knowledge Centre
FOR THE Hillbrow Community

Dale Swanepoel



Play is an integral part of childhood development and the wellbeing of the community as a whole. eKhaya Park in Hillbrow is one of many small punctual interventions that successfully integrates and establishes an accessible node within the community.

To my parents. Thanks for everything...

DECLARATION

I, Dale Swanepoel am a student registered for the course Master of Architecture [Professional] in the year 2011. I hereby declare the following:

I am aware that plagiarism [the use of someone else's work without permission and/or without acknowledging the original sources] is wrong. I confirm that the work submitted for assessment for the above course is my own unaided work except where I have stated explicitly otherwise. I have followed the required conventions in referencing thoughts, ideas, and visual materials of others. For this purpose, I have referred to the Graduate School of Engineering and the Built Environment style guide. I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my unaided work or that I have failed to acknowledge the source of the ideas or words in my own work.

Dale Swanepoel
31 October 2011

This document is submitted in partial fulfilment for the degree:Master of Architecture [Professional] at the University of the Witwatersrand, Johannesburg, South Africa, in the year 2011

I would like to thank my loving parents, Colin and Patricia for their endless guidance. Your love, patience and enduring support has got me to this point, thank you. To Ludwig Hansen, thank you for your mentorship, direction and input throughout the past year. To Nicolette, your unwavering support has meant the world to me. Thank you for your love and patience, you have been an infinite source of inspiration to me. Finally, to all my friends and family who have shared this journey with me, thank you.

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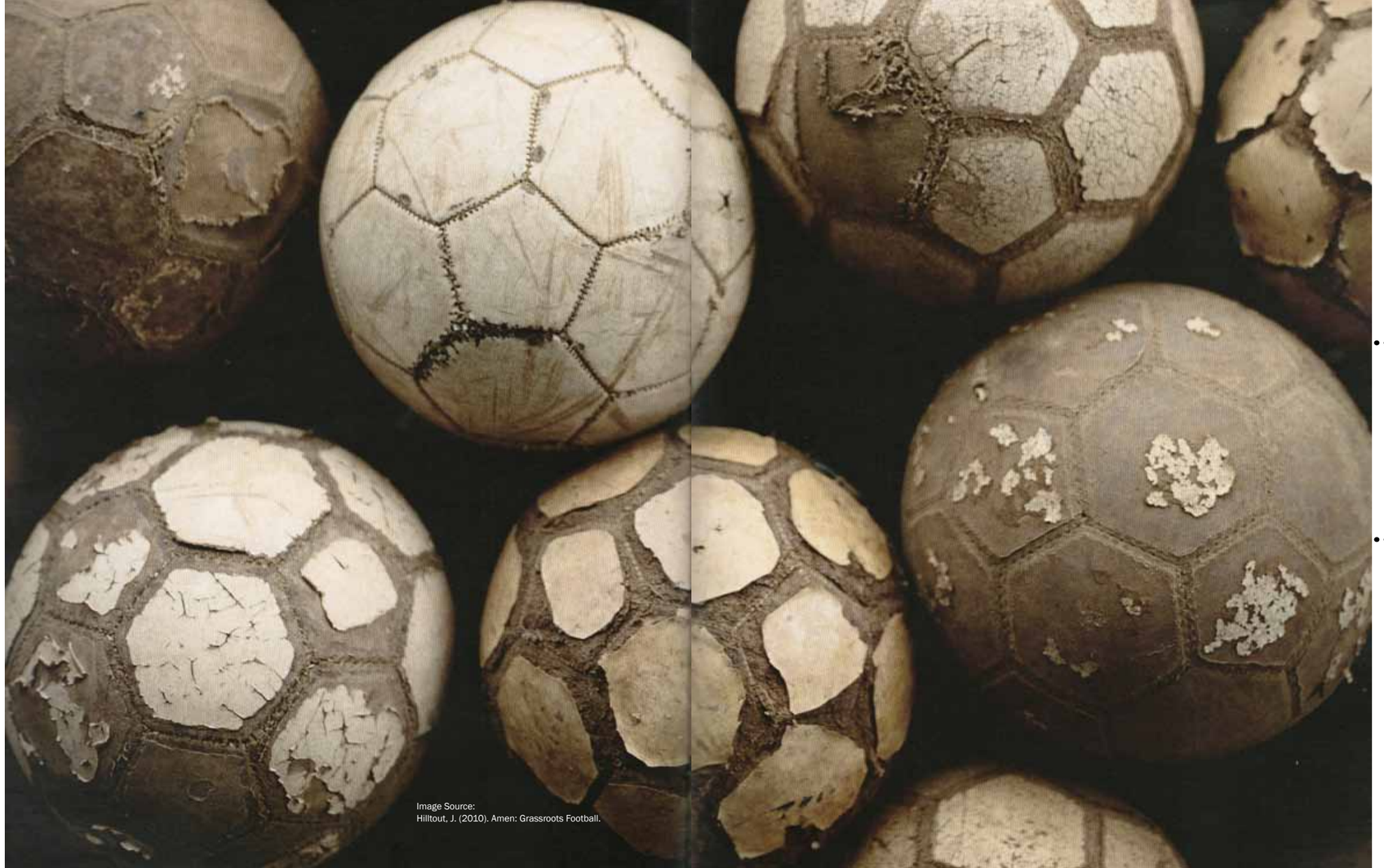


Image Source:
Hilltout, J. (2010). Amen: Grassroots Football.

DOCUMENT STRUCTURE

.01 ESSAY
Appropriating the In-between

.02 DESIGN
Hillbrow Sport and Knowledge Centre

.01 ESSAY

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The migration of people into cities around the world, coupled with soaring population figures is resulting in an increasingly dynamic social and political landscape. The face of the city is becoming increasingly fragmented as groups isolate themselves into familiar territories. Public or in-between spaces and facilities are forced to adapt and evolve in an ever changing climate. There is a need for an approach which allows for the fast changing and growing network that is the city, to reconnect to its individual fragments and dissolve the many boundaries of separation. It calls for an approach that allows for integration and a sense of place at both community and city scale.

An approach to the design of new buildings that integrates functions and allows for chance encounters and new spontaneous programmatic relationships to be formed is explored through this thesis. In opposition to buildings as isolated objects, hybrid building programmes require a thickening of the public and social functions in order to attract a diverse range of users. Typically, hybrid buildings thrive off densely populated environments where the public and private realms are juxtaposed in order to generate maximum encounters between the users of the shared in-between spaces. More important is an integral approach to urbanism. Design tools that define an approach which allows for connections, porosity and translucency within the urban environment. This approach is necessary for hybrid environments to thrive and establish new relationships within communities and the city.

The possibilities of sport as a tool for social inclusion and integration is explored, where the design of a sport and knowledge centre looks at redefining and incorporating the facilities of a typical park or sports ground. A dense environment of competitive and social play is envisaged, where the activities resonate and the spaces are on permanent display within the community. In hybridising the sport programme, an information landscape with a library at its core is introduced. It is the intentional overlapping of the sport programme with the information landscape that aims to generate a true hybrid environment. Here, sport meets knowledge in a hybrid environment that provides a public platform which feeds off the density of the private spaces typical of the Hillbrow context and more generally the city. A hybrid programme can thus be defined as an enabler for integration and chance social encounters where in-between social space becomes the binding agent for a diverse programme.

ABSTRACT





The boundary, sometimes as simple as a chalk line in the ground, yet strongly significant in defining the threshold of a sport pitch.

Image Source:
Hilltout, J. (2010). Amen: Grassroots Football.

INTRODUCTION

"Johannesburg brings together with particular intensity all the problems inherited from apartheid. Territorial and urban fragmentation, ageing infrastructure, a slowing industrial economy based on mining, economic and social polarising..." (Bremner 2007: 14)

We think of cities as vibrant spaces that are full of life, a myriad network of diverse interdependent spaces. In the case of Johannesburg's city centre this can often be contrasted by empty, neglected and negative zones, characterising a city that is dislocated and whose parts function independently of the whole. The city's history of fragmentation and the defining of borders, boundaries and barriers, both physically and socially, has had a long lasting effect on the various spaces in the city and how the urban landscape has evolved and developed over time. Lindsay Bremner speaks of a dual city and a dual nation where "diverse urban worlds exist side by side in the same territory." (Bremner 2007: 19) In Johannesburg, the fragmented city, the boundary and the border are seen as a clear line etched into the surface of the earth, defining here from there, spatial territory, and often something from which to retreat. "A border - the perimeter of a single massive or stretched-out use of territory - forms the edge of an area of 'ordinary' city. Often borders are thought of as passive objects, or matter-of-factly just as edges. However, a border exerts an active influence." (Jacobs 1993: 336)

The Johannesburg urban context is defined by a growing sense of fear and uncertainty amongst an urban population with a declining sense of community. This has resulted in the border and boundary being perceived as an edge and an end in itself, an edge to a system of restricted and fortified spaces. In contrast to this, the boundary, border and edge can be described as something that occupies physical space, defining a threshold with the capacity to adapt, change and make connections. A threshold, in the form of a boundary, forms the spaces of the in-between. It is the shared in-between spaces of the city that possess the potential to manifest themselves as an integral part of society and provide a common public venue where identities can be forged and expressed. These in-between spaces could allow for integration and flow between various parts of the whole.

In an urban context, how can architecture define an environment that is inclusive, encourages participation and inspires a culture of use?



People are the catalyst of the in-between spaces connecting the urban fabric. The activities of people animate and punctuate spaces, rendering them either as exiting and inviting, or as dislocated and isolated.

THEORETICAL CONTEXT

01.

The isolated objects that make up the urban fabric of the city, tall monuments of concrete and glass, generate a vast network of urban space. In the Johannesburg context, many of the in-between spaces that connect the dots within the network are defined as sterile zones without a snese of place. These in-between spaces, therefore, have immense potential in defining public spaces that generate flow, connect the dots and integrate the urban network.

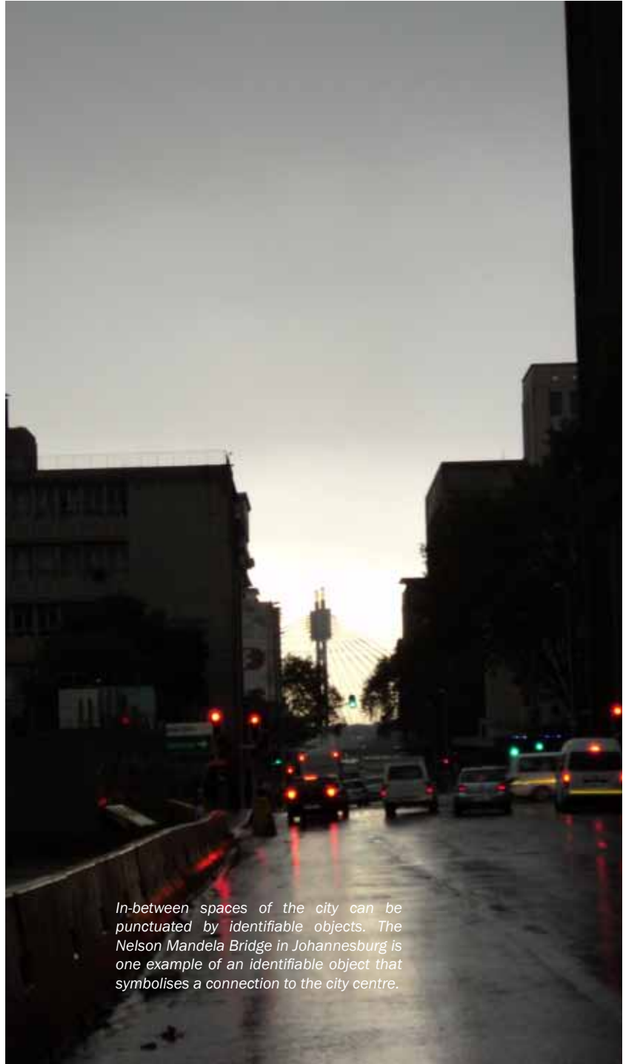
IN-BETWEEN

"...there is a fascination with the border, edge, and in-between, as concepts as well as actual places... On the threshold, where two ecosystems meet, there is competition and conflict but also synergy and harmony. There is fear but also adventure and excitement. It is not about good or bad, safety or danger, pleasure or pain, winners or losers. All of these occur on the threshold if it is thriving." (Ellin 2006: 2)

There is always an In-between. All life on earth is co-dependent on one another as part of an endless feedback loop comprising of networks bound by a series of connections. Where these connections are made, whether positively or negatively, in-between spaces can be found. Steven Holl (2009: 26) argues that our perceptions of the spaces we occupy are made up from a "series of overlapping urban perceptions" and not just a static view or image. He argues that our environment unfolds according to the "angle and speed of movement." Thus, nothing exists in isolation. Our environment consists of a series of connected enmeshed experiences made up by a series of overlapping perceptions. For these enmeshed experiences to be integrated and from a part of a unified urban experience, they rely on successful connections. These connections are made at all levels of life and amongst all systems including the city and the urban fabric. In-between space is the space that makes up the realm between people, places, buildings and the cities they occupy, at intersections and where borders, boundaries and barriers meet. They are the bonding agents that make connections and knit together our multi faceted urban environment. Jacobs argues that borders or boundaries divide cities up into pieces. "They behave in a fashion opposite to small parks. Small parks if they are popular, knit together their neighbourhoods from different sides, and mingle the people from them." (Jacobs 1993: 345) We are at the mercy of successful connections in order for urban networks to function.

In the context of Johannesburg, the fractured and segregated nature of the city and its diverse conglomeration of communities, defines the in-between as a vacuum of sterile non spaces. They are frequently crossed, travelled along, seen but not heard, walked but not lived. The success and location of the numerous connections, the in-between spaces that glue our communities together, lies in the realisation that the in-between and connections occupy usable space all around the city.

In-between spaces are the threshold spaces of the urban landscape and are often the sites of intense activity and communication. It is where the boundary is defined, and where two worlds are differentiated but also potentially meet. It is where the worlds of different cultures, ethnicities and individuals meet. A threshold is the site of integration, where relationships are formed and developed. Small parks in this context can be likened to small punctual interventions that energise a space and which then have a catalytic effect on the surrounding areas.



In-between spaces of the city can be punctuated by identifiable objects. The Nelson Mandela Bridge in Johannesburg is one example of an identifiable object that symbolises a connection to the city centre.

We have retreated and fortified ourselves from the uncertainty of the in-between, often as a result of fear and unfamiliarity within these spaces. We have dislocated ourselves from these once shared and public spaces due to a lack of vital connections needed to energise them with our activities. Overlooked are the hollow spaces between residential high rises, under and beside highways, the back alleys between buildings and the vast tracts of sterile spaces surrounding industrial zones. These all make up a network of urban and city voids. These are the sites where the urban energy of our activities stitching together the city dissolves into nothingness.

The effect of fear and the way in which it has manifested itself in the urban realm has had a choke-hold effect in shaping and defining the 'cityscape'. The city has become associated with danger, creating a city that fragments, isolates, alienates and retreats. It has become a stranger to itself and to its inhabitants, and thus its inhabitants, strangers with each other, diminishing social interaction and integration. Ellin (2006: 9) speaks of forming more symbolic relationships between people and nature, and between buildings and landscape. She proposes activating places that prioritise borders, an 'Integral Urbanism' that "proposes more punctual interventions that contribute to activating places by making connections and caring for neglected or abandoned space, 'in-between' spaces or 'no-man's lands'."

The realisation of in-between spaces as accessible public space, that energises and punctuates the boundary, lies in bringing things together and creating a connective threshold. The threshold can be realised as a hybrid environment that defines quality public spaces and forms part of a polycentric urban fabric.

What is necessary to activate the in-between spaces of the city and broaden them as threshold spaces that are porous and accessible?



The street is the quintessential public space. Striking workers in Hillbrow is one example of how the street, as shared public space, is used as a forum to communicate with authorities.

PUNCTUATING THE THRESHOLD

APPROPRIATING IN-BETWEEN SPACE

The diverse urban landscape of the city, cut up and divided by streams of access and lost space, is often ignored. When moving through it for the first time, weaving and negotiating a path through the city can be quite an intriguing, although nerve wrecking experience. Over time though, the city's network of spaces and activities, struggle to attract any attention, as the in-between lost spaces dominate your experience of getting in, out and across. The vibrant and activity filled strips strewn all over the city seem to bear no relationship to one another. This is partly due to the boundaries, where the different zones of fortified space meet, being unexplored 'no-man's lands'. As a result gaping holes are left in the narrative of the city. The urban narrative of the city is meshed together by a collection of stories told by their respective sites and places. Each place and its associated story, in turn is linked to numerous other places and stories, creating the complex web that makes up the city of today. It is the linking of these stories and different places that make up the collective narrative of the city, in turn nurturing community with a shared identity. These links can be identified as the in-between spaces across the city. These spaces require activation in order to create urban connections and flow amongst the city's parts.



The city is a natural hybrid made up of numerous cultural and ethnic groups. The in-between spaces of the city is where different parts of the urban fabric and their users meet, interact and integrate.

Image Source: http://designingsouthafrica.com/proto/category/urban-south-africa/
Access date: 18/08/2011

If we are to activate the in-between spaces and 'no man's lands,' punctual interventions that bring activity and diversity to spaces must be achieved. These interventions encourage flow and cross pollination, ease movement and facilitate connections. This process can be described as a form of "urban acupuncture," freeing up bottlenecks along paths of connectivity and access, catalysing activity and spatial use. (Ellin 2006: 9) This in turn effects integration and connectivity amongst the surrounding spaces. Urban acupuncture as described by Urban-Think Tank is a process of concentrating and consolidating urban infrastructure, creating hotspots for urban activity. (Reference Urban Think Tank)

Punctual interventions that appropriate the in-between spaces and facilitate connections should provide services that facilitate, draw and attract activity from both sides of the in-between boundary space. Ellin (2006: 82) argues that thresholds are naturally diverse, dynamic, and self-adjusting. The challenge though, is to make connections through integration without losing the integrity of the whole or obliterating difference, but to rather preserve and celebrate the threshold.

For a space to be truly connected, it needs to be in flow. Flow can be thought of as striking a balance between boredom and overstimulation. (Ellin 2006: 6) The concept of flow as defined by Smith and Ballantyne "creates a 'zone of indiscernibility' between and around things. Instead of looking for the boundaries that define a form, one gives priority to the line that connects and relates systems such as cities, architecture and users. It is the flows that make things work, the connections across boundaries into the world beyond..." (Ballantyne 2010: 21)

Flow is achieved by providing choice, an ease of movement within space. At the same time though, places in flow must also have interesting and surprising configurations that layer the experience of moving through space. This allows for varying experiences and stimulation from one person to the next. (Ellin 2006: 6) Flow exists in the in-between and is the source of energy or life between two points. It is this energy that is required to catalyse connections and establish relationships, allowing for interactions and a diverse flowing network. Jacobs argued "that by bringing people onto the street it created the idea of animation and vitality." (Jacobs 1993: 378)This animation and vitality can be characterised as flow.

The success of a place can be measured by the extent of its connectedness to its parts. Steven Holl argues that the fusion of architecture, urbanism and landscape is only possible if the fragments that make up our reality are holistically connected and integrated. "A fantastic spatial energy resides not in the building itself, but in its relationships to the urban environment." (Holl 2009: 26) A range of connections that offer variety can allow for a diverse programme that facilitates essential interactions. This is essential in creating a diverse architecture that supports quality public spaces that are balanced and that flow. In contemporary architecture the term hybrid is used to define buildings and spaces with diverse programmatic functions and a range of connections. Hybrid buildings juxtapose often contrasting functions in order to generate chance encounters in order to forge new and unpredicted relationships between spaces and between their users.

The 'cityscape' can be understood as a natural hybrid in that it is made up by diverse functions, spaces and people with a distinct character and culture. It can be argued that hybridisation occurs in the in-between spaces where buildings, people, spaces and different landscapes meet. Homi K. Bhabha is quoted saying that, "the hybrid is neither one nor the other, instead, it is always in-between, where it continuously transforms itself according to the dynamic of cultural interaction." (Hernandez 2010: 89)

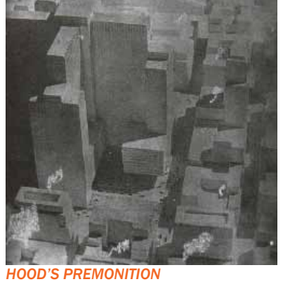
In the 21st century, what is the potential of a hybrid building programme in creating a public environment that is inclusive and can potentially integrate its different users?

HYBRIDS
A SHORT HISTORY

In the 21st century cities such as Beijing are experiencing some of the greatest migrations of people from rural communities into urban environments. However, this is not limited to the mega cities around the globe but is common in most metropolitan areas where population densities are soaring as people look to better their economic circumstances. What does this mean for the urban landscape and how can architecture respond to socio-cultural challenges brought about by this reality? In most instances, migration of people into urban centres has resulted in urban sprawl, characterised by cities that are "dissolving into concatenations" that are spread out over the urban landscape. Sprawl arranges itself around attractions, "monuments of our new age" that are connected by highways and arterial roads which consume valuable space and disrupt our sense of place with a maze of movement. (Adigard 2000: 8)Contemporary architects, such as Steven Holl, have put an emphasis on large scale hybrid buildings as a solution to deal with the many challenges facing urban centres in the 21st century.

The history of hybrid buildings can be traced back to the end of the 19th century, when dense metropolitan centres had to acknowledge the overlapping of different functions. The hybrid first originated in North America as a building that could house any number of functions that could be profitable. "The hybrid building thus enjoys dense and fruitful atmospheres, which favour the natural appearance of unexpected activities." (Apra 2011: 13) The refinement of the hybrid building came in the evolution of the multi-use vertical tower synonymous with large metropolitan areas. Buildings had to become more flexible in their programme in order to take on more possibilities and become more appealing to the public. This approach, as Rem Koolhaas called it, was defined by "Hood's premonition" where Raymond Hood conceived of The Unit Building in 1931, a multi-functional building, offering variety and diversity that envisioned a building with the same activity and embodied energy of a city. "A city under a single roof," that housed work, leisure and recreational spaces spanning over three city blocks. It was hoped that this approach, which internalised all movement and activities, would ease up congestion and allow for a more peaceful and serene city. (Koolhaas: 1978: 147)

By 1960 technology had advanced and more mobile cities emerged that were dominated by the automobile and circulation. The overwhelming presence of circulation thoroughfares cutting through the city, dictated a rigid grid that connected different areas. It was at this stage that Yona Friedman started talking about an indeterminate urban planning. (Apra 2011: 22) Thus, the indeterminate hybrid emerged to counter the mundane connections dominated by movement, in favour of schemes such as the spatial city which separated the mundane functions, such as work and services from living, recreation and entertainment functions.



HOOD'S PREMONITION
The Unit Building by Raymond Hood.



INDETERMINATE HYBRID
The Spatial City by Yona Friedman.



THE MAT HYBRID
Free University of Berlin
by Woods and Sheidhelm.



THE TOPOGRAPHIC HYBRID
The Alster Centre by Neue Heimat.

Image Source:
Apra, Mozas and Per. (2011). This is Hybrid: Analysis of Mixed-use Buildings by a+t.

At around the same time, the mat hybrid appeared in response to the notion that if a building were to completely integrate diverse programmes, it was essential to incorporate the street and infrastructure into their schemes. "Proposals that left out the street, roads and pavements lost that character of a single organism that was desired for a city." (Apra 2011: 22) The mat buildings that arose from this took the form of campuses that functioned as small organisms. As the name suggests, the programmes of these buildings were applied to the landscape like blankets, whose structure was based on circulation networks. Ideas of the mat hybrid went on to influence and extended into proposals for hybrids that revolved around the idea of an artificial landscape. These proposals envisaged an architecture that was continuous over the urban landscape, integrating all the necessary services, private and public functions into their programmes. Examples of this include the Alster Centre in Hamburg, a proposal for a new city contained in a single building. (Apra 2011: 37)

Today we are seeing the re-emergence of hybrid buildings, after being suppressed by the master-planned city, which functionally zoned spaces, resulting in a city that isolates and prevents urban flow and connections. In large scale projects, in some of the most densely populated regions in the world, the hybrid is being used as a solution to combat sprawl and integrate society through positive connections, communication and a celebrated public realm. On unprecedented scales, hybrid buildings are being conceived as urban interventions that bring the private and public spheres together, both shaping them and defining them at the same time.

PRECEDENT STUDY

LINKED HYBRID

BEJING, CHINA
STEVEN HOLL ARCHITECTS

The Linked Hybrid is a multi-functional hybrid that creates a porous urban environment, open on all sides and invites the public in. The building is conceived as a 220 000 sq m development and consists of a program that integrates commercial, residential, educational and recreational functions. In so doing, creating a 21st century shared space.

At street level, the building opens itself up to residents and the public in the form of a number of accessible passages, which hold small scale shops, restaurants, hotel, movie house and school. Collectively, the programmed spaces on ground level form an integrated loop from which eight residential towers rise. Further up, the towers are connected between the 13th and 18th floors, by yet another loop, in the form of bridges programmed with collective social and recreational spaces. The bridge rises and falls as it carves its way between and through the towers. As it rises and falls it connects spaces and functions in a seemingly accidental way. Steven Holl (2009: 137), architect of the project is quoted as saying, “we hope the public sky-loop and the base-loop will constantly generate random relationships, functioning as social condensers in a special experience of city life to both residents and visitors.”

In addition, the Linked Hybrid includes a park, landscaped from the earth excavated during the project. The park supports recreational functions for residents of various age groups, from childhood upwards. The park landscape is made up of several mounds, one for each age group. These include a mound for childhood with an integrated nursery school and a mound of adolescence which holds a basketball court and skateboard park. The mound for middle age has a coffee house and tennis courts, while the mound for old age is occupied by a wine tasting bar.

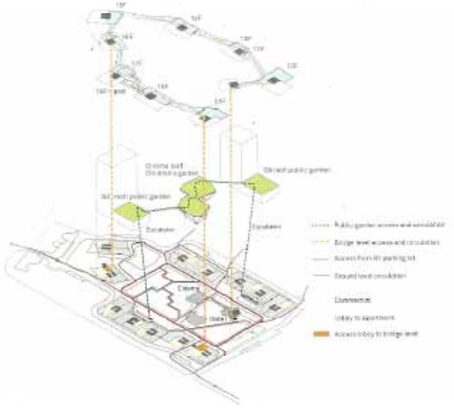
The Linked Hybrid opposes isolated objects in favour of integrated spaces. This is achieved where the loop bridge integrates public and private space. The project goes further in rejecting former models that programmed civic functions exclusively at street level. Instead, “it is an urban space that has something in common with a movie, as it has been designed in the basis of a study of the sequence of movements made by people through the spaces, along the bridge and up and down in the elevators. A space that changes constantly as the point of view changes, and with it the refractions of the light.” (Molinari 2008: 96)



Image Source: http://www.stevenholl.com/project-detail.php?type=mixeduse&id=58&page=0
Access date: 21/08/2011



Image Source: http://www.stevenholl.com/project-detail.php?type=mixeduse&id=58&page=0
Access date: 21/08/2011



The diagram above illustrates the structure of the public programme for the Linked Hybrid.

Image Source: Moe, K. (2010). Thermally active Surfaces in Architecture.

THE COSMOPOLITAN

HYBRIDS AS PUNCTUAL INTERVENTIONS

The term triangulation, coined by William Whyte, is used to describe the combining of different uses that may seem mismatched, but in fact form ideal relationships and connections. (Ellin 2006: 20) A diverse programme and the connections between its parts allows for the convergence or triangulation of space, time, people, activities and business, thus creating a hybrid of spatial use. "...we need all kinds of diversity, intricately mingled into mutual support." (Jacobs 1993: 336) The term hybrid is a commonly used term for an approach to contemporary architecture, but in the21st century, what is the potential of hybrid buildings?

The scale of activity and engaging presence of hybrid buildings locates them as central nodes of urban life within the surrounding fabric. This enables a hybrid to establish strong connections and a dialogue with other urban landmarks, resulting in interpersonal relationships with surrounding public spaces. Hybrid building programmes offer diversity and choice, encouraging new connections which in turn give rise to new relationships, an essential building block in activating and energising a space. This energy, if realised as punctual architectural interventions can resonate through its environment and play an important role in creating a place that is identifiable and socially significant within its community. In architecture, the disconnectedness of our urban landscape can be stitched together by the introduction of many small interventions of a hybrid nature, creating urban nodes that stimulate its users, thus catalysing the investment of social capital. In the built form these interventions encourage movement and are simply spaces that provide access to what people want, whether it is information, goods, services or just space for social interaction.

"A cosmopolitan is someone who moves comfortably in diversity, who is at home with situations which are not connected or parallel to what is familiar to him." (Apra 2011: 43)Like a cosmopolitan, hybrid buildings have a diverse makeup that is seemingly mismatched yet comes together in newly formed relationships with an integrated personality. The following paragraphs define the qualities of hybrid buildings and outline their potential within society.

PERSONALITY AND SOCIABILITY

The personality of a hybrid is captured in its variety of functions where different activities are intertwined and mixed to create a new type of 'socialness'. "Each hybrid is a unique creation, without previous models. The very building comes from an innovative idea, which is resolved against the established combination of usual programmes and bases its reason for existence on the novelty of the approach and unexpected mixing of functions." (Apra 2011: 43) A hybrid building is an extrovert amongst its peers, a multi faceted integration of functions that allows it to stand out and become the centre of attraction. It is a space that gives its users choice and different options, therefore making it attractive to a broad variety of users. Thus, a hybrid combines and integrates both different functions and users. The appropriate level of porosity allows for a hybrid building to engage with its surroundings, allowing its users to filter into its spaces and the energy of its spaces to filter out into the city. This ensures that the hybrid building's sociability extends deep into its spaces and leaves the user guessing what it will reveal next.

FORM AND TYPOLOGY

The common acceptance that form follows function disintegrates in hybrid buildings where the form of spaces can be expressed or where the form dissolves into its programme as different functions integrate and are defined by new relationships. Having said this, a hybrid building therefore has no typology as "in the very essence of a hybrid building exists the escape from categories." (Apra 2011: 45)

PROGRAMME

The programme of a hybrid creates a support system between its functions, in that the various mixing of functions allows activities to resonate throughout so that all parts of the programme benefit. Even the weaker activities are stimulated and feed off the energy of other activities. The hybrid building is all about generating unexpected encounters between its users and between its functions where new programmatic relationships are made and are often unexpected.

DENSITY AND SCALE

Hybridisation of space results in an infinite number of differences to be supported, allowing people and activities to interact and co-exist in a way that the separation and isolation of functions does not. Hybridisation conceives new patterns of spatial use for in-between spaces and thresholds. Thus, by bringing together different functions that add flexibility and convenience, a space is intensified by the mingling and integration of different people. This allows for the density of activities without necessarily increasing building density.

The density of activity created by mixed building programmes allows for social density, which is defined by Urban-Think Tank as "a result of an integrated network of cultural diversity. A connected and dense social infrastructure spans scales and diverse actors to create opportunities, conversations, and investment in mutual wellbeing. Social density can be fostered as a spatial phenomenon through identification, analysis, and activation of sites with catalytic potential for community building. In this way it is a form of social infill that closes gaps in isolated, destitute, or atomized communities." (wwww.u-tt.com)

In the book 'This is Hybrid' it is argued that "hybrids are associated with a certain form of grandeur, splendour and gigantism, because mixing implies size and superposition demands height." (Apra 2011: 45) Although this may be the case for many hybrid examples whose programmes include private social functions, it can be argued that this doesn't have to be the case in existing areas with dense residential programmes.

Where this applies, the hybrid can be conceived as a smaller punctual intervention that feeds off the diversity and density of its already established environment.



Punctual intervention can come in many forms. An art project called Women are Heroes (August 2008), depicted above, in Favela Morro Da Providencia, Rio de Janeiro, Brazil by an artist called JR, is an example of how art can become an intervention and punctuate the public environment.

Image Source: http://www.boston.com/bigpicture/2008/08/scenes_from_rio_de_janeiro.html Access date: 26/10/2011

HYBRID VERSUS SOCIAL CONDENSER

At the time that hybrid buildings came about, around the first quarter of the 20th century, the constructivist movement brought about the social condenser. Although the term social condenser is often used in the description of hybrid buildings and spaces, the book, 'This is Hybrid', uses the term to describe "another avant-garde model" that is often mistaken for a hybrid. The following section outlines the difference between a social condenser and a hybrid. (Apra 2011: 48)

"The social condenser was born of the state, while the hybrid is the offspring of the capitalist system." (Apra 2011: 58)Both the hybrid and the social condenser arise from functional thinking as an attempt to solve the problems faced by architects, but in the case of the hybrid, user flux was just as important as social flux. "While the condenser concentrated all of its transformation capacity on a closed community... the hybrid opened up the city and encouraged contact amongst strangers, intensified land use, densifying relationships and left room for in determination, as opposed to the control that the condenser imposed." (Apra 2011: 52) The hybrid is an opportunist building that thrives off chance encounters and the mixing of functions, establishing relationships outside of the private realm. On the other hand, the closed community of the condenser segregates a series of private functions and converts them into public functions. Here the public realm encroaches on domestic areas, therefore making it hard to define thresholds and boundaries between the two.

The condenser can be thought of as an attempt to achieve a self-sufficient environment for its users, a building that can isolate itself from the rest of its environment. In contrast a hybrid building encourages and seeks to attract flux from outside users. A mixed use programme does not necessarily imply that a building is of a hybrid nature, "hybridisation is not only in the programme but in initiative, investment and management." (Apra 2011: 55)

To better understand the role of a hybrid building and the definition of a social condenser, Johannesburg can serve as an example. The city, as mentioned before, is defined by many territorial lines and isolated communities that are seldom crossed or engaged with by people from a different community or culture. Although lively social environments may appear in various communities, these communities are often of a closed nature and counter-productive to efforts for an integrated society. Steven Holl argues that "we want to avoid isolated objects in favour of urban spaces shaped by urban connections." (2009: 37) Hybrid buildings have the potential to play an integral role in shaping the in-between spaces that divide our communities. They establish urban connections that perforate the boundaries and bridge the social divide by encouraging integration and new relationships.



http://www.archdaily.com/85971/ad-classics-unite-d-habitation-le-corbusier/unite_wojtek-gurak/
Access date: 23/10/2011

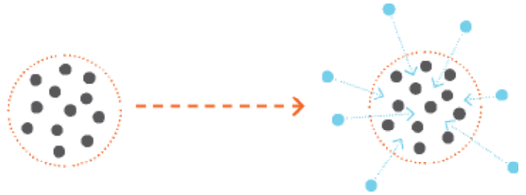


http://www.archdaily.com/85971/ad-classics-unite-d-habitation-le-corbusier/unite_pictfactory/
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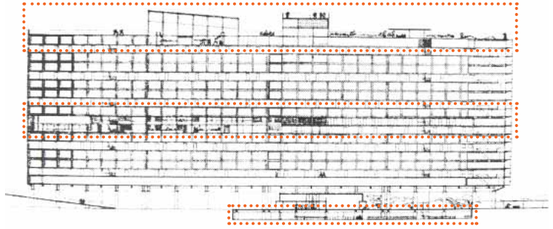
Unite d'habitation

The Unite d'habitation in Marseilles, France by Le Corbusier is an example of a social condenser. The building is a residential high rise, including a small hotel, that incorporates an ambitious communal programme exclusively for the residents of the building. The communal programme is located on three levels as indicated on the cross section below. Le Corbusier's vision was to generate a communal environment for the residents to shop, play, live, and come together in a vertical garden city. (www.archdaily.com)

Below, a diagram illustrates the social condenser as an isolated object with a communal programme dedicated to the sole use of a closed community. The hybrid on the other hand encourages social inclusion and integrates itself into the public programme of the city.



SOCIAL CONDENSER **HYBRID**



UNITE d'HABITATION CROSS SECTION

SPATIALISING HYBRIDISATION

South Africa is in a state of transition. Urban nodes all around the city are being transformed in order to encourage integration and economic growth. Yet many spaces are still fortified and exist in isolation. The spatial quality of a hybrid is required to dissolve fortification and establish new nodes. Punctual interventions are needed that allow porosity and urban flow, so as to establish connections and new forms of spatial use within the network of public in-between spaces.

02.



The Hybrid exists as a node integrated into the public 'in-between' network, where it relies on urban connections and flow for its success.

Image Source: http://iwan.com/photo_Caracas_Metro_Cable_Urban_Think_Tank.php?plaat=12Metro-Cable-CCS-UTT-2317.jpg
Access date: 09/03/2011

URBAN PERMEABLE

DISSOLVING FORTIFICATION

Something that is transparent implies that you are able to see from one space into the other. In contrast to this, translucent urbanism reveals some of what lies beyond, choosing what to expose or hide. “Translucency always promises a real, fixed reality, but never delivers it to us. We remain in a state of anticipation, wandering and wondering through layer after layer of possible perspectives and realities. Translucency delights in complexity presented in a vague, simple way.” (Adigard 2000: 42) This enhances our experience of the city by allowing us to engage in a dialogue with its spaces. It does this through urban porosity, an urban environment that is permeable, allowing movement through spaces but not free flow. (Ellin 2006: 62) Too much porosity prevents translucency while too little porosity results in the fortified city.

Urban porosity is a key intention of hybrid buildings as they are defined as urban landscapes that are pedestrian orientated. These buildings allow people to interact and filter through the various thresholds created by the overlapping of programmes. Steven Holl argues that, “rather than a preoccupation with solid, independent object-like forms, it is the experiential phenomena of spatial sequences with, around, and between, that emotions are triggered.” (Holl 2009: 22) For a hybrid to become socially appealing and hence a condensed environment of social interactions, it needs to allow a certain amount of porosity both visually and in movement.

Johannesburg is synonymous with fear and fortified space. The fortification of the urban fabric from the in-between spaces that bind the city obstructs porosity, thus preventing vital connections needed between the two in establishing vibrant social spaces. In architecture, how do we achieve the right amount of urban porosity? Ellin (2006: 62-79) argues that we need to bring together many different kinds of porosity depending on the desired amount of ‘seepage.’ These include visual porosity, which allows us varying degrees of connections with a space, without being able to move through or into it. In contrast to this is functional porosity, which is achieved by allowing movement access or through a space whilst controlling the degree of permeability. In architecture, porosity can be achieved by juxtaposing spaces and activities. It can be impermanent and figurative, literal or phenomenal, but altogether, allowing for an enhanced experience of a place while dissolving barriers that bind and exclude social integration.



The built form of the urban fabric is often symbolic of fortified space. The typical apartment block typology that exists in Hillbrow, depicted here, creates a hard edge to the street and in-between public spaces. Punctual interventions can minimise this effect by introducing a porous environment which feeds off the private spaces above.

DILUTING THE BOUNDARY

The boundary can often be seen as a sterile zone that separates two worlds and quite often it does. In-between spaces and hybrid solutions for public spaces need to be permeable in order to thrive as an inviting and useable public space. Boundaries on the other hand, whether physical or implied, are essential in distinguishing one space from another. The boundaries of a place need to encourage flow and movement which in turn brings different people and spaces together, but at the same time preserves individuality. The boundary, whether between people and buildings or the urban fabric and nature, has become a place. This is where identities can be fashioned as places that allow for the interactions as well as the interruptions of other people.

Rigid boundaries in the form of cultural and ethnical differences, fear and racial exclusion can only be dissolved if the shared threshold spaces that divide us allow for porosity and flow. The first picture that comes to mind is the 'fan park', a typology employed during the 2010 Soccer World Cup. These spaces provided a common interest across a diverse group of users to share and engage in the excitement of the event. Hybrid environments that bring diverse groups together can be referred to as, "the site of cultural productivity that emerges on the margins of culture, between cultures. (Hernandez 2010: 58) In nature, the most thriving environments are where two ecosystems meet, the essence is found at the boundary, the in-between. This 'essence' can be defined as the character of the spaces where two worlds meet and integrate. This 'essence' is what draws different people together, it allows for a shared interest or need, it is the flow required to successfully re-imagine a place, re-imagine the in-between. Again, these qualities of public spaces are essential in successful hybrid spaces.

NETWORK

Presently, the global community is one that is defined by networks. Networks are inextricably meshed together and organic, they continuously evolve as they are flexible and able to adapt to changing environments. Networks, "are never static but always changing in search of a dynamic equilibrium." (Ellin 2006: 50) We talk about an information age that is immersed in an endless web of digital networks. We have become a network society that is increasingly reliant on a high level of social connectedness, on streams of information that keeps virtual space buzzing with activity. We build social structures bound by countless networks and connections to which we reference and facilitate every part of our lives. We are rapidly moving into a generation that is cognisant of using networks in order to stay connected to facilitate the integration of people with society.

Like a piece of fabric, held together by the tight weave of its threads, so is the city by its in-between spaces. If the fabric were to pick up some static electricity, causing the threads to attract one another, it could be likened to in-between spaces being energised with activity. This activity denotes flow, the transferring of information and movement along the threads, which is the base of any network's existence. All exists as an interdependent part of an energetic series of networks. Like virtual networks, where our thoughts and ideas on current affairs are wired from one inbox to the next, we carry out our physical lives in the myriad of public and private spaces that constitutes the urban network.

Paths, nodes, zones, points of reference and boundaries, are all spaces in our physical network, that are connected and that support our activities.

HYBRIDS AS POINTS OF INTENSITY

All networks contain nodes. Ellen states that some are small and less significant with fewer connections, while other nodes are hubs of intense activity with a great many connections. If the connections to the smaller nodes are broken, "the larger network is not interrupted, but if the hub is eliminated, the whole system can break down." (Ellin 2006: 49)

Networks are characterised by points of intensity, these are the chat rooms of the internet or the lively public spaces in a city, defined by density. For these nodes to exist, they have to be in connection or constant flow with one another. Connections open nodes up to receiving or rejecting information, movement and activity. In architecture, a series of punctual interventions, especially hybrid buildings which are characterised by a diversity of connections, can be seen as nodes that intensify activity in a polycentric network. Nodes like hybrid spaces become catalysers of activity in the spaces surrounding them, therefore creating links and connections to other nodes. The pathways between points of interest and activity become activated through people, goods and information all in flow between various nodes.

PRECEDENT STUDY

MUSEUM PLAZA

LOUISVILLE, KENTUCKY, USA

REX

Museum Plaza began with the initiative to implement a contemporary arts institute into the urban fabric of Louisville. In order for the project to become economically viable and sustainable, Museum Plaza evolved into a business “pro forma” that supports this initiative. The cultural component is placed at the heart of the project. To support the cultural centre the project incorporates a 141 000 sq m commercial programme that includes a hotel, luxury condominiums, offices, loft apartments, and retail. To free up space and due to site constraints, Museum Plaza went against convention, where typically, the public programme is positioned at street level. Instead, the public programme is elevated 24 stories above street level. The luxury condos and offices take the form of towers above the public platform while the hotel and loft apartments are located below. (www.rex-ny.com)

The cultural heart of the design is described as the ‘Island’ and houses all the public functions for both the cultural and commercial programmes. The ‘Island’ includes galleries, a pool, auditorium, bar, education spaces, gym, restaurant, etc. REX argues that, “the collision of cultural and commercial uses within the Island provides fruitful opportunity to question the typology of a contemporary art institute. Museum Plaza advances several issues facing art institutions, including gallery flexibility, synergy between culture and commerce, and procession.” (www.rex-ny.com)

The cultural island comprises of gallery spaces, which combine the elements of both the ‘white box’ and ‘articulated box’ into their design. The ‘white box’ can be understood as a blank backdrop to exhibitions, while the ‘articulated box’ is one where the architecture defines and draws attention to exhibitions. In Museum Plaza the galleries combine the flexibility of the ‘white box’, with the uniqueness of the ‘articulated box’. This is achieved by special façade treatment, that allows art to permeate into the everyday activities of the surrounding public functions, while at the same time the interior is kept pristine like the ‘white box’ for exhibitions. “The galleries’ translucency allows art to perform in a whole new way, to both ‘see’ and be seen, generating a new kind of energy and interaction between the art and the viewer.” (www.rex-ny.com)

The design of the galleries challenges the conventional linear exhibition experience of the museum procession. It does this where the design incorporates a loop of non ticketed spaces that filter into flexible gallery spaces. The loop which includes the commercial amenities that make up the entire ‘Island’ also provides circulation and encourages dynamic exchanges between cultural and commercial functions. (www.rex-ny.com)

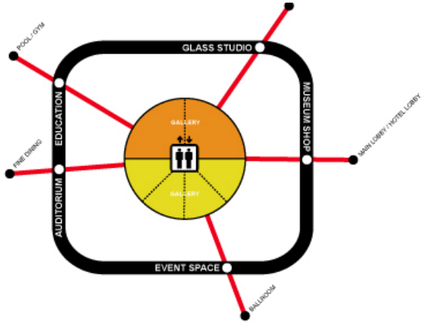












The first diagram above show the organisation of the programme. The second is a diagram of the Island, a raised social platform consisting of various public functions. The circulation within the Island is illustrated as a loop of public spaces.

Image Source (all on this page): http://www.rex-ny.com/work/museum-plaza/ Access date: 08/09/2011

DESIGN APPROACH

03.

In-between and hybrid spaces are the punctual interventions that enmesh architecture, landscape and urbanism. It is essential for public spaces to inspire a culture of use whereby the lived experiences within space can be expressed through architecture. It is these lived experiences and activities of people that punctuate urban public spaces. Establishing a culture of use is, thus, vital in place making and attaching meaning and identity to the public realm.



The design of in-between spaces looks at punctuating the boundary. Depicted above is an example of how the boundary created by a railway line is punctuated by a mobile expression of the train.

Image source: http://abcnews.go.com/Technology/slideshow/revealing-humanity-street-time-14080788
Access date: 26/10/2011

GROUND-UP

Place making is a multi-faceted approach to urban design, architecture and the management of in-between spaces. It involves close observation, looking, listening and an inquiry into the needs and aspirations of the people who occupy threshold spaces in the urban landscape. Put simply it is a 'bottom up' approach that involves the people who live, work and play in a specific area. Liane Lefaivre, in her book, uses the term the "ground up city" to illustrate two contrasting and opposing ideas of the contemporary urban landscape. "In the first, it means broken, fragmented, in a state of disintegration. In the other, it is a synonym for a bottom-up, community-driven and informal as opposed to top-down and formal." (Doll 2007: 36) A bottom up approach allows for a common vision for the shared in-between spaces that promote people's health, happiness and well-being.

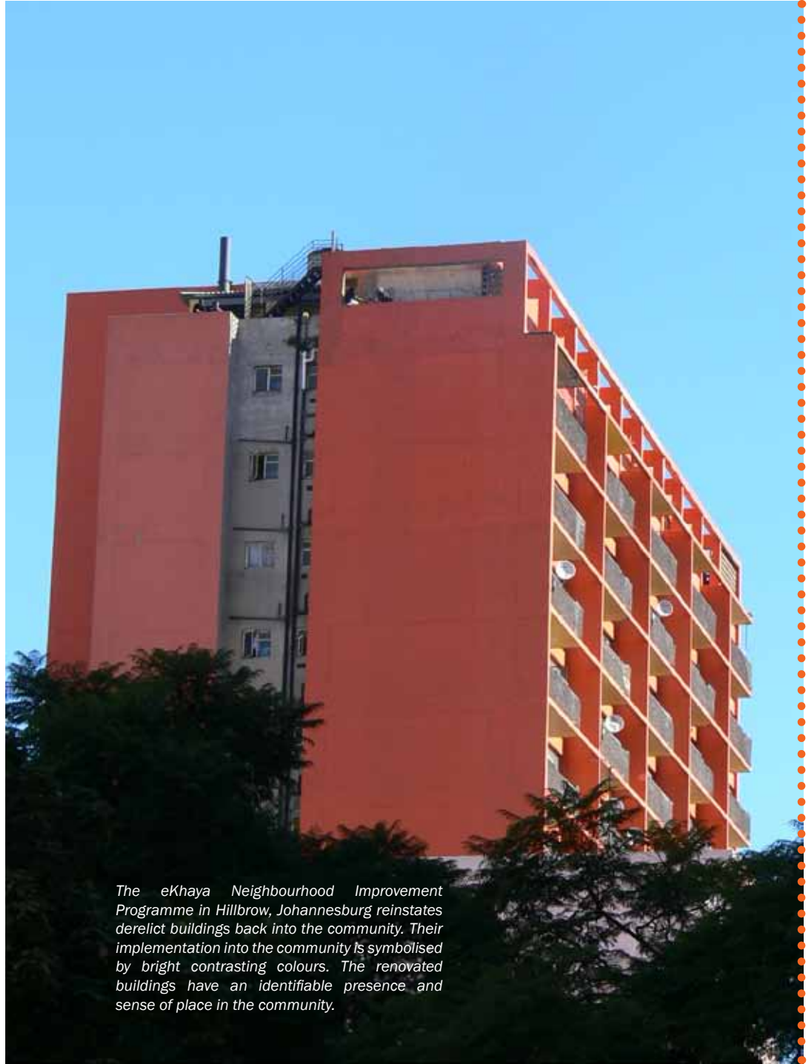
Cities all over the globe are becoming more and more cosmopolitan, giving rise to "the person who feels equally at home everywhere and nowhere." (Ellin: 2006: 98) The integration of people from different cultures, backgrounds and ethnicities is becoming increasingly significant in making palpable connections across social, symbolic and physical boundaries. People for Public Spaces, a non-profit organisation, argues that place making requires a view of 'a place in its entirety, rather than zeroing in on isolated fragments of the whole.' (www.pps.org) This would require looking at places and identifying where they could be open to and facilitate connections amongst different activities. In turn, this approach would encourage diversity and integration through variety, choice and chance encounters.

Our experiences of spaces, framed by the built form, allow for the fusion of space with place. The lived experiences within these framed spaces layer them with meaning and memories, making them familiar and significant to us. Therefore, allowing the fusion of space and place, transforms space into a place of significance.

FROM COMMUNITY TO PUBLIC TO CIVIC

Community implies a group of people occupying a common space, whether physically, socially or culturally. Belonging to a particular group or community allows for an individual to create and attach meaning in their context and provide a platform for expressing their identity in public spaces. "Public space is essential to urban public life. It is where political identities can be formed and expressed, and where different urban identities can regard and potentially interact with one another. Public spaces of the city are social spaces, where social encounters can and do take place." (Dirsuweit 2009: 51)

Public spaces are a common ground for social interaction and mingling amongst different communities, "they must offer what people want, in a safe and attractive environment." (Carmona 2003: 99) Public space and its potential for social interactions within the urban fabric play an essential part in maintaining an individual's sense of connectedness to their community. In-between threshold spaces can provide the much needed shared public spaces that bridge the gap or boundaries between different communities. The enormous amount of diversity in the city and their increasing densities leads to the question, how can architecture cater for integration and a sense of community at city scale?



The eKhaya Neighbourhood Improvement Programme in Hillbrow, Johannesburg reinstates derelict buildings back into the community. Their implementation into the community is symbolised by bright contrasting colours. The renovated buildings have an identifiable presence and sense of place in the community.

The need for large nodes that connect and integrate people and activities at a city scale can be fulfilled in the form of vibrant and diverse civic spaces. Civic spaces are the 'front porches' of our public institutions which includes libraries, post offices and court houses to name a few. They are the spaces that connect people and allow for social interactions to take place between each other and with government. Civic spaces are the spaces that possess the potential to integrate different communities with one another in a diverse and integrative way that bridges both social and political boundaries. Thus creating a civic community symbolic of spaces that incorporate diversity, allow for identities and cultures to mix and be expressed, resulting in a strong sense of community at a city scale.

FORGING IDENTITY

Cultural meaning and identity are social constructs. They allow societies to express themselves in a way that can be understood and that is significant. In an increasingly global world, where everywhere is here, whatever their status class or ethnicity, people have become aware of the need to defend, and at times fashion their own local culture and identity. In many instances identity has been constructed in the built form. However, there are many questions in relation to the connections between identity, meaning and architecture. One question would be how is identity represented in the shared spaces of the in-between?

THE NEED FOR IDENTITY

The search for a national identity is not a new notion in the context of a post-apartheid nation that is in the process of stitching together a fragmented urban society. In a landscape of uncertainty, there is a need for a strategy to bring South Africans together under one banner. Examples of this would be the branding of sport and sporting events as shared national pride across all boundaries and cultures.

The concept of a new shared identity is one which we, as a nation, are still grappling with, whether socially, politically or symbolically. It is natural for people to reduce their uncertainty by way of defining a familiar environment. Within communities, systems of differentiation are formed, which establish spatial differences along cultural, ethical and economical lines. This provides a means for identities to be preserved and protected from the ever changing and evolving urban fabric of the city. (Madanipour 2003: 238) Brown and Capozza describe this as self categorisation, which “provides us with an identity that regulates our interactions with others... it tells us what to expect of ourselves and others, and thus renders the social world and our place within it relatively predictable. Uncertainty is reduced.” (Capozza 2006: 36) Belonging to a group with a shared identity allows for individuals to attach meaning to their context and in-between public spaces. It brings together people with the same struggles and uncertainties to form a sense of uniqueness and provide a support base.

IDENTITY IN ARCHITECTURE

Interactions occur constantly, whether in a social capacity, politically, forced or by chance. Thus, meanings and social constructs are formed constantly as identities change and adapt to new environments and social contexts. In Johannesburg, constant interactions occur between people from diversely different backgrounds. It could be a street vendor with a student at a busy intersection or amongst colleagues at work. This is largely due to people from various backgrounds, cultures and ethnicities occupying the same space. If integration is essential to a sense of community and place at both a neighbourhood and city scale, how then can architecture provide spaces that facilitate the integration of identities? How does this allow them to flourish, but at the same time preserve their uniqueness?

In many cases, architecture becomes the stage where the social constructs of identity and culture are expressed. In architecture, the material object of the building becomes a physical concentration in which the concept of identity is created, meaning is attached and culture is maintained. In the context of Johannesburg a number of new buildings, such as Constitution Hill and The Apartheid Museum, add to the already vibrant and diverse urban fabric in attempting to represent a South African identity. These spaces are are both symbolic of a past and a new integrated identity and intended



Representing a South African identity in the built form is visible in the design of The Constitutional Court and The Apartheid Museum in Johannesburg. The buildings reflect both the past and present South African context.





to provide a venue for the diversity and hybridisation of culture, ethnicity and traditions to be celebrated and shared. South Africa, however, on the one hand, is comprised of a slow integration of identities, on the other, a society that is still trying to adapt to uncertainties in a fragmented social structure. It is in a constant state of flux with many hybrid identities between many different cultures.

It would be impossible to represent all identities in one place. Could this then validate a hybrid programme for in-between spaces that incorporates diversity, in form and function, and that is both inviting and accepting of change and new connections? If in-between spaces are the hybrid interventions that punctuate urban space, it can be argued that “architecture is an ‘in-between’, an adaptation of nature, its completion, in and through which man can develop and experience his individuality, his humanity.” (Bekaert 1988: 29) Thus, it would be the people who animate these spaces that then give identity and meaning. In so doing, architecture can be defined as that which provides the venue for our lived experiences and interactions. The site of identity creation which then attaches meaning to spaces.

Image Source:

Constitutional Court, images 1-3. Law-Viljoen, B. (2006) Light on a Hill : Building The Constitutional Court of South Africa.

Apartheid Museum images by Author.

POSSIBLE HYBRID

In establishing an urban intervention that encourages a culture of use and integration among users, sport has proven to be a successful platform that bridges social divides. Spaces for learning, business, social interaction and leisure can be used along with sport in achieving a hybrid of public spaces. These spaces, thus, offer diversity in use in order to attract a broad range of users.

04.



Image Source:
Hilltout, J. (2010). Amen: Grassroots Football.

SPORT AS HYBRID

Sport is a vital social medium with the potential of bridging social and cultural devides. in the urban context of our country though, many have forgotten, or in many cases have never been taught to play. This is often due to lack of access to sporting facilities. The contribution of sports and recreational facilities is instrumental in social integration and sustaining physical and social health within diverse communities. These are the places of play, competition, friendship and camaraderie, the places of shared experiences that create strong communities. The role of architecture in this context is to create spaces that inspire action.

In the building of a new South Africa, sport has often been overlooked as a means of bridging the social, political and cultural divide between its people. Events such as the 1995 Rugby World Cup have proven to be successful in reconciling a once divided nation, even if it was to effect small changes that generate hope amongst its citizens. More recently, the 2010 Soccer World Cup united a nation as we joined efforts in hosting the event. Considering our rich sporting history and immense raw talent available, throughout the country, it is unfortunate, that people's relationship to sport has been reduced to being a mere spectator. This is a reality that, in most cases, is brought about by a lack of accessibility and infrastructure for sports and recreation facilities.

In her book, Nation Building at Play, Marion Kaim (2003: 180) argues that, "organised multicultural sports projects can be regarded as highly successful in bringing members of different cultures and population groups closer to one another." In this case, sport as a tool for social integration can have highly positive effects on communities. Sport is capable of becoming an incubator for integration and shared experiences that build relationships within communities. Sport provides a platform for social boundaries to become permeable allowing for camaraderie and chance encounters, both on and off the field. This is possible, as sport, "speaks a simple language, it brings people together and they forget about their backgrounds." (Keim 2003: 184)

Social inclusion amongst members of diverse communities is vital in the success of any community, where a culture of participation is encouraged and made appealing. Sport harnesses the capabilities to overcome linguistic and cultural barriers much more easily than in other social environments. "Sport is marked by a simple and easily comprehensible form of symbolism, which makes it possible to eliminate linguistic barriers and other obstacles to interaction... sport, with its primary non verbal and immediately comprehensible interactions, is therefore particularly suited as a medium for overcoming feelings of socio-cultural unfamiliarity and 'otherness'." (Keim 2003: 201)

Because of the very nature of sport, particularly team sports, people enter into direct contact which is argued to provoke, "intense interpersonal relationships". (2003: 202) Thus, producing collective experiences and the possibility for integration amongst its participants and even spectators, who engage through a shared interest in sport. As a mutual platform, like many successful public spaces, engaging in sporting events and activities transcends class boundaries. The rules are simple and in most popular sports are understood by all, thus, prejudice on the sports field can often be overcome by allowing ones talent to shine through. Sport is also inherent of a particular culture that is shared amongst participants and spectators. This culture, in some sports, is expressed over a global community as it transcends many boarders and is understood by people from vastly different backgrounds. Sport and more generally play is something expressed, understood and shared collectively at a global scale. It bears the same language to all and is thus capable of successfully integrating diverse communities and even nations.

Image Source:
Hilltout, J. (2010). Amen: Grassroots Football.

PRECEDENT STUDY

BELLO CAMPO VERTICAL GYMNASIUM

CARACAS, VENEZUELA
URBAN THINK TANK

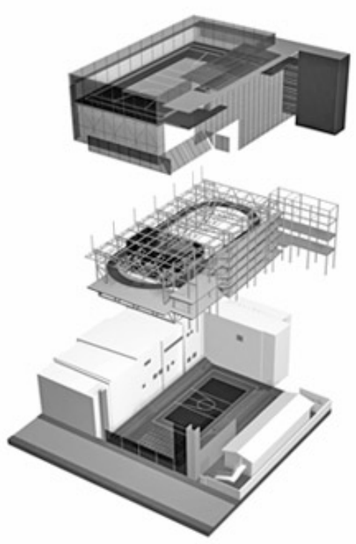
The Vertical Gymnasium in Bario La Cruz, rearticulates a former makeshift soccer field into a vertical intervention that houses basketball courts, a dance studio, weights, a running track, a rock climbing wall and an open-air soccer field. The project acts as a punctual sport and leisure intervention for a densely populated urban environment. (www.u-tt.com) Physical constraints of the dense urban context restricted the existing soccer field from sprawling outwards, which informed the vertical intervention that now occupies the site.

It is the intention of Urban Think Tank for the Vertical Gymnasium to serve as a prototype that can be replicated in other densely populated informal areas. The dense context of the informal settlements is defined by a myriad of small alleyways. It is the network of alleyways that support the robust street life of the informal settlements and of which the Vertical Gymnasium has become an integral part of.

Interventions such as the Vertical Gymnasium punctuates the in between spaces of the informal settlement, where it makes use of unused public space. Urban Think Tank argues that one must analyse all possible connections and passageways to discover new spatial opportunities. “The task of imbuing these lineal spaces with activity, life and purpose usually requires a new stimulus - linking spaces, introducing amenities or simply rehabilitating surfaces.” (www.u-tt.com)

The Sports intervention establishes itself as an identifiable node within the community. In so doing, it provides spaces for the shared lived experiences of its users. By establishing a dense social centre, the activities of the Vertical Gymnasium’s users animates the spaces. Thus the gymnasium becomes a part of the dense social network of the informal settlement. The stacking of accessible sport and recreation amenities allows users to be drawn vertically into the spaces from ground level. Here, the intervention generates flow an provides connections within the network. it does this through the use of porosity, where users are able to move freely into and through the spaces of the gymnasium. Strong visual connections are also maintained throughout the spaces, rendering an environment that is defined by activity and a culture of use.

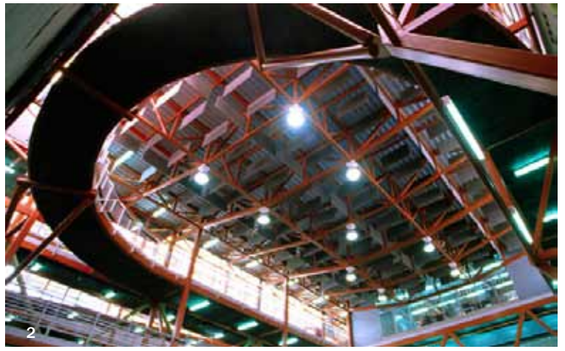
Existing public spaces in many informal areas are seldom adequate for learning, skill building and play. In many cases these spaces contain many health threats to its users, making them inappropriate play spaces. The Vertical gymnasium appropriates the outdoor programming of these spaces, channelling the energy of the youth towards health community development. Since its inauguration, the Vertical Gymnasium has played a pivotal role in reducing crime in the surrounding area by more than 30 percent. The facility is a bustling success and attracts an average of 15 000 visitors per month. (www.u-tt.com)



1. *The exterior of the gym engages the public by providing views into the indoor court.*
2. *The indoor running track emphasises the function of activities of the building.*
3. *The roof is appropriated with an artificial outdoor soccer pitch.*
4. *The Vertical Gymnasium is an identifiable node in the community, where it is in juxtaposition with its surrounding context.*

Image Source (all on this page): http://mp-into.com/index.php?/architecture/vertical-gym/
Access date: 05/03/2011









Bello Campo Vertical Gymnasium







Image Source (all on this page): http://mp-into.com/index.php?/architecture/vertical-gym/
Access date: 05/03/2011

THE LIBRARY AS HYBRID

An important characteristic of any democratic society is its ability to provide access to knowledge for its citizens, not only to those who are articulate and wish to be well informed, but also to those at risk of being socially and economically marginalised because of their lack of access to knowledge. Access to sources of knowledge allows an individual to develop and grow, but more importantly it allows people to encounter others with similar interests. This in turn, aids in greater social inclusion and integration amongst community members.

The public library was only realised as an accessible and integral part of the city from the late 19th century onwards. Since then, the institution of the library has evolved considerably, “from being neo-classicist houses of power to industrially built equalitarian houses of knowledge, to the present day open houses of cultural diversity.” (van der Werf 2010: 12) In contemporary society, the library is at a point where it has to reinvent itself as a part of public life in order to attract the diversity and numbers for its successful existence within the community. What then is necessary for this to be realised?

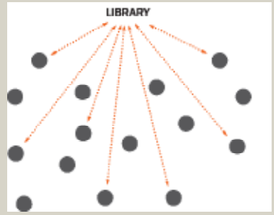
Because of the changing ways in which society produce and consume knowledge and information, libraries have had to reconsider their programmes, as their role in the public realm changes. The public library is no longer dedicated to storing and cataloguing books and has evolved as a place of social significance. It has become a platform and a resource that provides access to a range of multi-media technologies which demands the integration of different functions such as exhibition spaces, cafes, restaurants, educational programmes, recreational facilities and child care. “In many ways the library has become an appendage of the public space. An institute that houses multi-faceted and varied programmes under the same roof.” (van der Werf 2010: 16) As a result, it can be argued that the contemporary library still has a significant place within the community as a place that provides the opportunity for encounters allowing people to come together integrate and forge an identity.

The internet has made it possible to acquire knowledge and information from just about anywhere. With the evolution of technology and the speed at which people demand information, the amenities that are associated with the public library have found a common place outside the walls of the library. Take for example the internet café, which in many instances has evolved into a coffee bar and space of social interaction. The mixing of functions that is needed to attract audiences is now a common theme in the library of the 21st century. The library has become a concentrated environment of these amenities, providing a diverse environment where people can engage in public life as well as in the consumption and production of knowledge. Daniel van der Velden argues that ‘publicness’ is defined by the probability of encounters that are unexpected and unmanaged. He suggests that the success of the public library lies in exploring the “conditions that allow for these types of encounters” and not necessarily in their construction. (van der Velden 2010: 26)

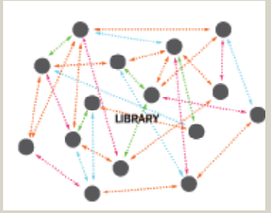
Contemporary environments have become more based on a network society, where information is everywhere. What does this mean for the public library? What would the library of the future be? As discussed earlier, networks are defined by a series of nodes and connections. The understanding that information is everywhere, the fact that the amenities of the library are commonly reinvented as small social hot spots in many main stream areas, locates the library as an important node within a network of information and ‘socialness’. Thus, “the library of the future may no longer occupy a single building. Its architecture is network architecture.” (van der Velden 2010: 35)

Due to the broadening of social and information networks, the necessity for a physical public location for the library has decreased and as a result “network architecture” has become more prevalent. It can be argued though that libraries provide an alternative to users of social networks and the internet at home, work or on the run. This is made possible through hybrid interventions that provide diversity and choice. The library thus becomes a destination for social engagement and inclusion. In this case, libraries of the 21st century need to adapt by integrating their programmes with other urban functions, a common theme in other facilities such as museums and theatres. A common characteristic of these spaces is that the public programmes have been thickened, which allows them to integrate more easily into the urban fabric and become an attractive environment to a large number of people.

In the book Architecture of Knowledge it is argued that, “Conditional public spaces, their specific characterization and rules of play, guarantee, in our opinion that vulnerable public spaces can become possible and social activities really can succeed, provided that they are receptive to diversity.” (Bey 2010: 12)The library of the future will not just be an archive of books but a place for engagement in unpredictable and random encounters. Unlike past examples of the library, where the spaces define their function, the library of the future is more importantly, an environment where the spaces allow for and are defined by its activities. More specifically, activities of reading, learning, communicating and socialness.



01. THE TRADITIONAL LIBRARY
The role of the traditional library can be described as one institution providing to many.



02. CURRENT CONTEXT
The statement, information is everywhere, defines the current information context, where the library is no longer the only source of information, but is located as part of an information network.

PRECEDENT STUDY

SEATTLE CENTRAL LIBRARY

SEATTLE, WASHINGTON, USA
OMA + LMN

In an era where the role of the public library is under threat due to an increasingly private public sphere and increased access to information, the Seattle Central Library defines an accessible civic space for the accumulation and distribution of knowledge across all media types. The library can be described as an urban event space that houses a defined sequence of different experiences throughout various spaces, but at the same time offers users diversity in choice.(www.oma.eu)

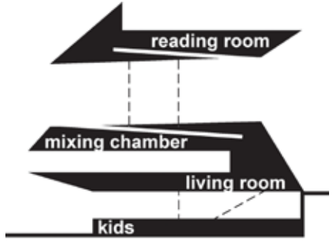
OMA's vision is to redefine the library as a space that is not exclusively dedicated to the book, but rather where all forms of information are kept and is accessible equally and legibly. "In an age in which information can be accessed anywhere, it is the simultaneity of media and more importantly the curatorship of its contents that will make the library vital." (www.oma.eu)

The building is divided into five formal programmatic clusters that are arranged on overlapping platforms. Four informal clusters including spaces for work, interaction and play occupy the spaces in-between the platforms. "The in-between spaces are like trading floors where the interface between the platforms is organised." (van der Werf 2010: 63) Together these spaces inform the buildings unique shape, "offering the city an inspiring building that is robust in both its elegance and logic". (www.oma.eu)) At the centre of the library is a mixing chamber for librarian/patron interaction. From here, librarians can assist readers up into the book spiral, a continuous ramp of book stacks with an innovative organising system. The Seattle central Library allows visitors the opportunity to browse through the collection as well as the possibility for social encounters.

1.



2.





The first diagram above illustrates the five formal programme platforms of the library. The second illustrates the in-between and informal social programme clusters.

Image Source (diagrams): http://www.rex-ny.com/work/seattle-library/

Image Source (top): http://oma.eu/index.php?option=com_projects&view=portal&id=202&Itemid=10

Image Source (bottom) :http://www.rex-ny.com/work/seattle-library/# Access date: 11/05/2011



Image Source:
http://designingsouthafrica.com/proto/category/urban-south-africa/
Access date: 18/08/2011

CONCLUSION

Today's urban society is one characterised by diversity, a cosmopolitan community that is at home everywhere and nowhere. The city belongs to the stranger. On any given day in the public realm, an individual will cross paths with more strangers than friends. Due to the sheer density of people occupying global cities in the modern era, we have alienated ourselves from our neighbours and the people who cross our paths. Jane Jacobs argued that a safe city is one where strangers feel safe amongst strangers. (Jacobs 1993: 38) In contrast to this, many of the fragmented parts that make up Johannesburg's urban realm are characterised by fear. Fear of the stranger and the unknown.

The realm of the in-between has enormous potential in providing a diverse environment that is safe and that facilitates activities and interactions amongst individuals from all backgrounds. Public spaces, the numerous nodes which make up the in-between, provide a common environment in which to familiarise and integrate with 'strangers' from different backgrounds, cultures and ethnicities. Along boundaries and thresholds that occupy the dead unused spaces between buildings and between communities, punctual interventions can facilitate connections and integration. This can be done by identifying appropriate hybrid programmes that cater for a range of needs and activities amongst a diverse user group. In turn, these spaces then become the shared spaces of our communities. They are the spaces where identities can be expressed but also preserved and where an authentic environment can be nurtured.

These authentic environments can come in the form of hybrid interventions which combine unusual functions, with the intention of bringing different users of public spaces together through chance encounters in social spaces, where different programmatic functions meet. Combining the highly social platform of sport with a library of the 21st century is one example of a hybrid that combines sport, information and leisure, a hybrid space that is defined by a variety of activity.

In a developing society, there isn't one architectural and urban solution that can effect change and integration at a city scale. Rather, a series of hybrid punctual interventions that are site specific, diverse, integrative and authentic. The boundary, the threshold and in-between in this approach, is never an end to a space, but rather, always the beginning of another.

.02 DESIGN

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HILLBROW SPORT AND KNOWLEDGE CENTRE

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REFERENCES



Children can be extremely industrious when generating games out of the bare essentials within their environment. Pictured here, a group of children animates the sidewalk as they race their tyres down the street.

DESIGN BRIEF

The urban landscape of the Johannesburg CBD is defined by many segregated and divided communities along racial, cultural and economic lines. The in-between spaces that define the boundaries between communities and between the public and private realms are in many cases reduced to sterile zones, dedicated to movement and circulation. Fear plays a major role in these spaces being undefined and characteristically inward, turning their back on the street, in-between space and the shared public spaces of the city. The need for accessible and safe public spaces within the city is essential in dissolving the fortified city and allowing the sterile boundaries of separation to become porous. The design should be a true hybrid of spaces that offer diversity and integrates the core functions of the design with the community. With sport and information at the heart of the design, this can be achieved by thickening the ‘social belt’ where the public element of the street and the surrounding context become an integral part of the design and its informal public functions.

The idea of an information playground housed in the building should be of a diverse and hybrid nature where sport, information and social life overlap and meet. The diverse programme is to combine in creating a vibrant environment that resonates into the community, so as to appeal to everyone, young and old. The spatial environment should be designed to stimulate chance encounters, as the various programmes mix and define in-between spaces that are dedicated to circulation and social encounters throughout the building.

The design of the Hillbrow Community Sport and Knowledge Centre, like the traditional square, should be a space of random encounters and ‘connectedness’ to the whole. The design should be civic in its identity and relate to both its context and the community. Those engaging in the facility must feel a sense of ownership, comfort and pride. With competitive sports, recreation and education at the heart of the design, the programme should also accommodate business, leisure and a form of escapism from the daily grind. The design is to be realised as an iconic space that integrates its functions within a dense environment in order to generate public participation.

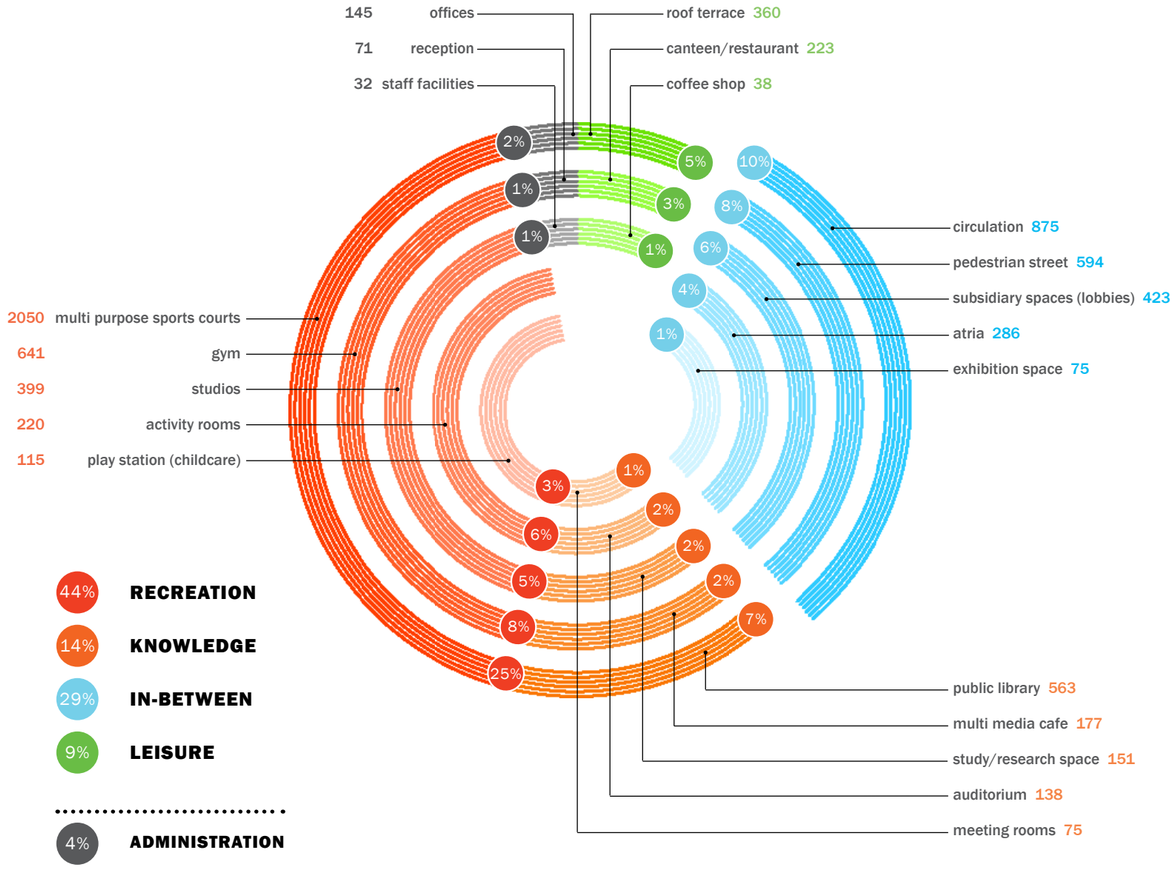
PROGRAMME

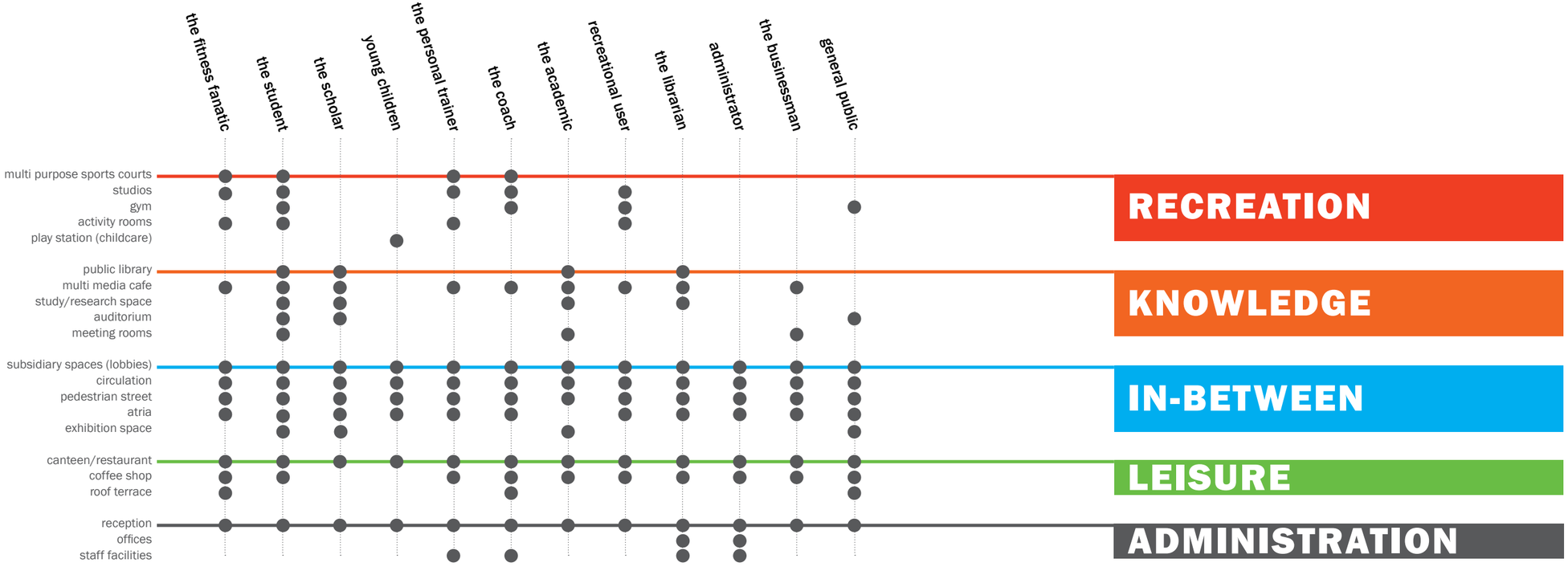
01.

The design of the intervention makes use of a diverse programme to bring people together. Developing a culture of use within the Hillbrow community begins with identifying the various needs of the community. These needs, when translated into the different functions that make up the intervention, are further explored in establishing relationships and connections between different functions and their users. A building programme dedicated entirely to sport could result in many of the shared public spaces being underutilised. Therefore, by inroducing a diverse programme the building is able to attract and draw users into its spaces.

The Hillbrow Sports and Knowledge Centre is realised through the overlapping of different functions. These functions include sport, recreation and learning spaces at its core with other functions that are intended to thicken the public programme. These include business, leisure, childcare, a pedestrianised street and general 'in-between' social spaces. The arrangement of the spaces is influenced largely by contextual urban factors. and city viewing opportunities. The two atria link the lower and higher levels vertically and define the circulation and movement into which the various spaces of the building bleed into.

The programme for the intervention is defined by four primary groups as illustrated on the next page.



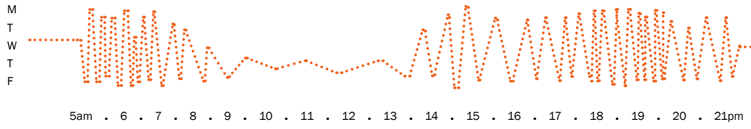


IN BETWEEN USERS

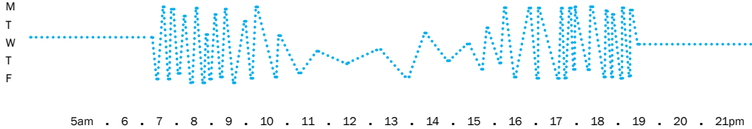
Generating highly charged, energetic in-between spaces is a key point within this thesis. The diagram to the left shows the different users of the building and overlaps them with the potential spaces they may encounter each other. The more dots along the linear programme band, the more likeley chance encounters between users may occur.

The most used and energetig of the spaces will be the in-between social spaces. therefore, highlighting the role of these spaces in connecting the various programme functions and generating chance encounters

USER PATTERN



SPORT PROGRAMME



KNOWLEDGE PROGRAMME

The weekly user pattern is illustrated to the left. The users of the intervention are defined by two groups, those being sport and knowledge users. The sport programme extends from about 5am to 9pm while the knowledge programme runs a bit over the duration of a normal 8-9 hour working day.

The sport programme peaks at in the early morning with users coming to the gym. It peaks again after school hours wher cjildren from the surrounding schools and neighbourhood take part in sport and skills development programmes. the evening is the busiest time in the sport programme where a competitive sport league is envisioned along with other activities in the studios and gym.

The knowledge programme peaks in both the morning and afternoon, with users comming to use predominantly the multi-media cafe and meeting rooms while schollars, students and accademics making use of the the libray. Both programmes experience a midday laze.



COMBINED USAGE PETTERNS

SITE

The site for the Sport and Knowledge Centre is in South Africa's most densely populated residential area, Hillbrow, Johannesburg Inner City. Hillbrow is situated on a ridge just above Johannesburg's city centre. It is characterised by a low employment rate, crime and grime. Despite this, there is still a vibrant public domain where the urban landscape consists of mainly dense residential high rise buildings, serviced by a commercial high street with shops and nightclubs.

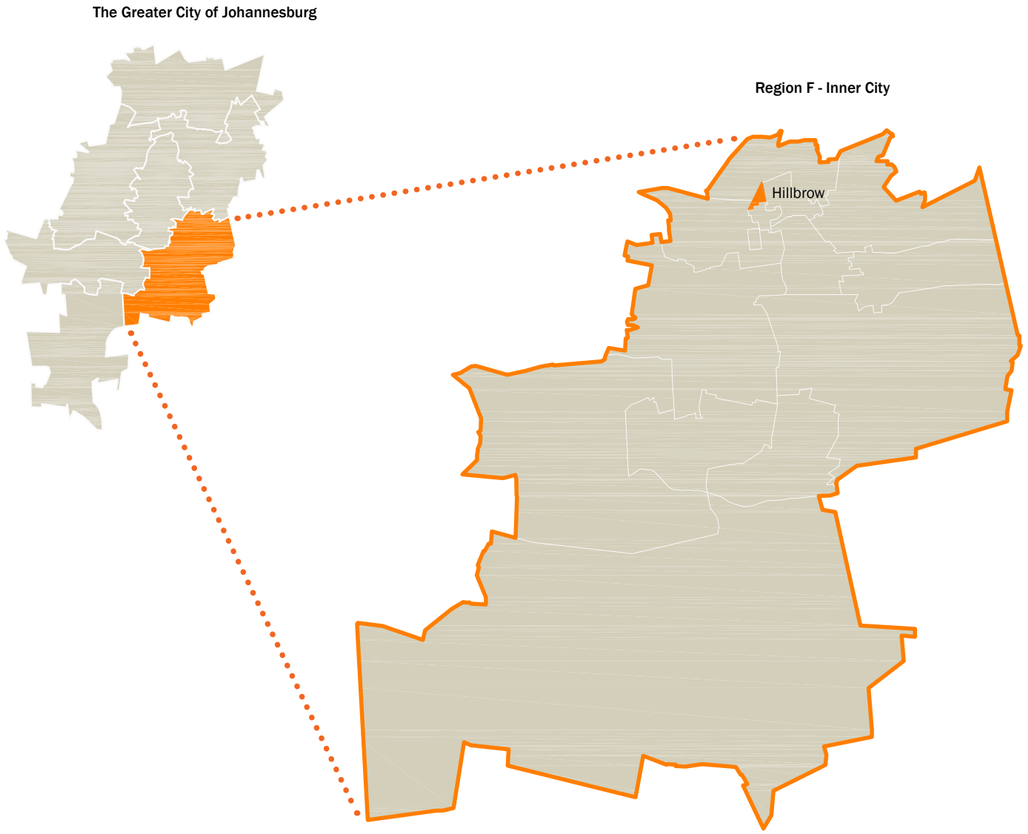
02.



SITE SELECTION

When considering a site for the Sports and Recreation Centre, Hillbrow, a dense melting pot of various cultures, seemed most appropriate. Hillbrow's current context is characterised by diversity where different cultures, mostly migrant worker from rural areas and other parts of Africa, make up a broad scale of urban living environments. The site occupies the southern edge of a typical Hillbrow block and has street frontage on three sides. The most visible and highly trafficked edge boarders Claim Street, a highly trafficked main access route into the city centre. The site was selected for its central location, accessibility and visual presence within the community. The central location provides an opportunity for the intervention to become an important node within the community. An open and accessible public space that is engrained into the urban fabric. Being part of the rich urban fabric will allow the intervention to attract and feed off the energy, hustle and bustle of day to day life in Hillbrow.





HILLBROW THEN...

In 1895 the sale by auction of stands established Hillbrow as a new residential estate. It was then marketed as, “the healthiest and most fashionable suburb of Johannesburg...” (Morris 1996: 8) The neighbourhood was to be almost purely residential, with detached houses. From the 1920’s, new building technology made it possible for multi-story buildings to be erected, but it wasn’t until 1946 that the urban fabric was completely transformed. The Johannesburg City Council revised the town planning scheme which removed building heights. This opened the way for a development surge in Hillbrow during the 1950’s, where high rise residential blocks were built and would come to define the Hillbrow skyline as we know it today. “A large proportion of flats built in Johannesburg during this period were built in Hillbrow.” (Morris 1996: 8)

Hillbow experienced further growth as an economic boom in the late 1960’s brought about a considerable increase in building activity. By 1971, building activity had slowed down and by 1973 the supply of flats had outstripped demand. By this stage residential houses had virtually disappeared from the Hillbrow’s urban fabric. Today a few small residential buildings still exist, but are largely found on the periphery.

“Historically, all of the tenants in blocks of flats in Hillbrow were white, but the neighbourhood always had African residents who invariably resided in dingy domestic quarters, located on rooftops of blocks of flats.” (Morris 1996: 9) Hillbrow in spite of the group areas act enforced by the National Party, became characterised as a mixed-race community. By 1977, the increase of black South Africans in Johannesburg resulted in them and other races becoming tenants in blocks of flats and no longer just residents on rooftops. From the mid 1970’s, a decrease in demand for Hillbrow flats by white South Africans and the huge demand for accommodation by black South Africans “set the stage for the dramatic transition in racial composition of Hillbrow...” (Morris 1996: 10)



High Point Shopping Centre, Pretoria Street, Hillbrow.Image Source: http://www.dutch-east-indies.com/story/page60.php Accessed on: 20/10/2011

...AND NOW

Today, Hillbrow is tarnished by an image of unlawfulness and chaos, a no-go area of the city. This is often depicted by the presence of strong underground crime syndicates which operate on the streets of Hillbrow. Although this is a reality within the community, a closer glance, reveals that there is a whole other world made up by the ‘regular person’, trying to make a living and contribute to the community. Even though it is fraught by criminal activity, the Hillbrow experience today is characterised by a unique urban energy, most likely due to the walkability of its streets and the constant activity taking place within the public realm. Children run freely up and down creating makeshift play areas out of the in-between spaces. Vendors occupy street corners, capitalising on the hundreds of commuters scurrying through the crevice like streets, lined by tall dominating blocks of flats. It is unfortunate though, that Hillbrow’s vibrant public realm is watered down when moving away from central nodes and often dissolves into nothing. Here, the shadows of row upon row of residential flats dominate the in-between spaces as they conceal and shut out any visible forms of activity. Mainly due to fear, many of these flats are inaccessible and form a strong boundary to the street.

The urban development of Hillbrow has seen several rejuvenation projects which aim to integrate the community as well as the public and private realms. Such projects include the eKhaya Neighbourhood Improvement Programme by the Johannesburg Housing Company (JHC). The project is aimed at recycling and repurposing so-called ‘bad’ buildings within Hillbrow. Another project involves the upgrading and establishment of the Hillbrow’s Health Precinct, which occupies a zone between Hillbrow and Braamfontein. The objectives of the precinct are to make connections within the grid of public space, thus, creating a public open space network. The precinct proposes a mixture of land uses with landmark elements that enhance the image and legibility of the precinct. Lastly, the precinct aims at establishing a series of catalytic projects intended to kick start investment into the precinct. (www.gapp.net)



eKhaya Park on Claim Street, Hillbrow: An initiative by the e'Khaya Neighbourhood Development programme.



eKHAYA

The eKhaya Neighbourhood Improvement Programme was the first of its kind to envisage implementing a residential community rejuvenation project in a neglected, low income, high density, no-go area within the city. At the time it was initiated, the JHC owned three buildings within the community, all three along Pietersen Street. In a lecture by Heather Dodd of Savage and Dodd Architects (24 February 2011), it was discussed that The eKhaya Neighbourhood Improvement Programme set out to form communication structures and new relationships between property owners, managers, caretakers and residents, so as to develop a network between themselves to nurture and maintain safe, clean, healthy and well managed environments for the residents who lived and worked in the area.

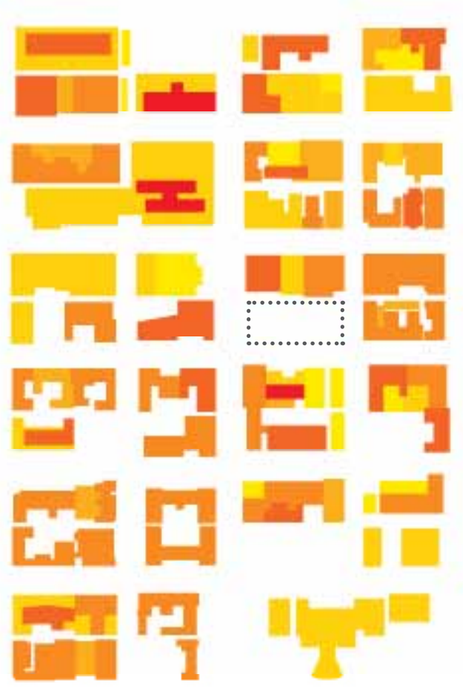
One of the first tasks was the clean-up of the existing sanitary lanes which were neglected and abandoned spaces, left unmanaged and filthy, posing safety and health risks to the residents. Slowly, the initiatives of property owners and residents has been realised and helped define public spaces and play areas. The programme has also seen the reclamation of open spaces, an example of this is the eKhaya Park. This collaborative project has opened up channels for communication between property owners, residents and other local community organisations. By doing so, it has built relationships with city councillors, departments, agencies and law enforcement authorities.

Claim Street, Hillbrow. A main route into the Johannesburg CBD

A view down Pretoria Street: A highly energetic commercial and retail strip in Hillbrow.

Image Source: http://chrissaunderssa.blogspot.com/2009/07/love-jozi-hillbrow.htm
Access date: 06/10/2011





HILLBROW BUILT FORM

The built form of Hillbrow consists largely of residential high rise apartment blocks, with retail spaces at ground floor along most main routes. The dense urban form of Hillbrow, illustrated in the photographs and map to the left, creates a solid edge to the street and in many instances defines an impenetrable private realm.

I feel that Hillbrow is missing the type of urban porosity that encourages flow and maintains connections between spaces. The apartments and businesses above street level seem to exist as isolated objects that bear no relationship to the public environment below them. An urban environment in flow punctuated by public interventions can assist in generating urban connections and flow. The in-between spaces thus become a network of spaces where private and public spaces meet.

Opposite page: Images of Hillbrow's built form.

- 1-2 storey
- 3-4 storey
- 5-6 storey
- 7-9 storey
- 10-15 storey
- 16+ storey

HEIGHT ANALYSIS

SHADOW STUDY

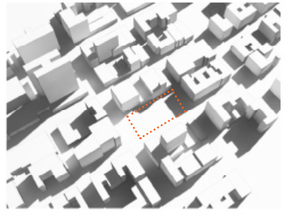
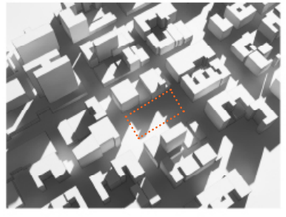
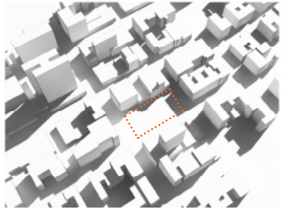
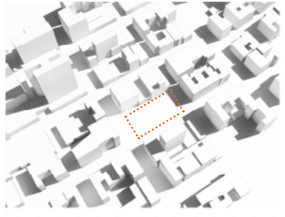
It is important to understand the effect of shadows in a dense urban environment. The shadow study to the left demonstrates the building heights and density of Hillbrow. Where the shadows extend to, when they dissapear and are dominant is important to the design process. Areas lacking light are often associated with greater urban decay when compared to lighter more open areas.

MARCH

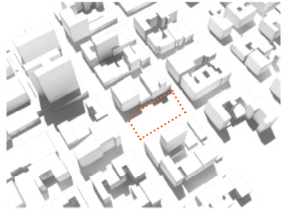
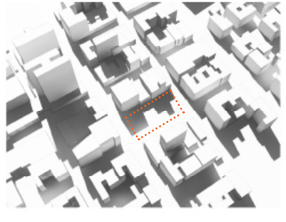
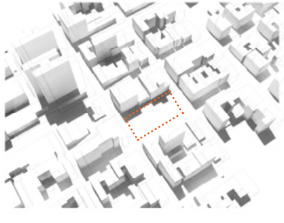
JUNE

SEPETEMBER

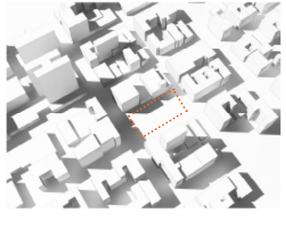
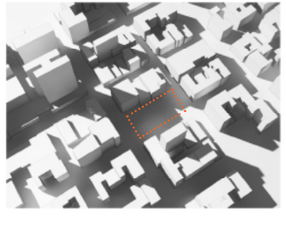
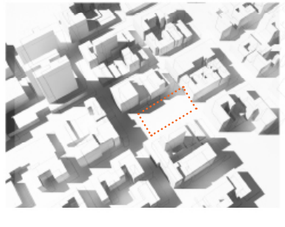
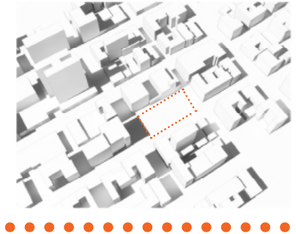
DECEMBER

9am


12pm

3pm

Image series: e'Khaya Park, Hillbrow, an integral space within the community that fosters fair play and community participation.











SPORT CONTEXT

Hillbrow is in desperate need of open and accessible recreational spaces. Although a few small parks exist and are well utilised, they are still inadequate for the number of people using these spaces. The dense urban environment in many instances forces the youth to appropriate their own recreational spaces on roof tops, in alleyways and on the street. The Following pages provide an insight into the sport and recreation spaces in Hillbrow.



A group of young boys make their way down Claim Street towards eKhaya Park. The dense environment of Hillbrow and the close proximity of amenities render the urban landscape as easily walkable.



A group of children play a game with tyres along the walkway in front of the site. Children are commonly spotted appropriating the street curb as a playground in Hillbrow.











The Hillbrow Boxing Club: Although the facilities are poor, the owner and users of the club take great pride in its use. The space of the boxing ring is open at its sides and bears a direct relationship to the street.

THE SITE

The chosen site for the Hillbrow Sport and Knowledge Centre is overlooked by several tall residential and office buildings. The dimensions of the site are 78.65m X 31.46m. Wide pavements along three sides of the site connect it to the street. Occupying the other half of the block, large office and residential buildings define a solid edge to the North of the site.

1. *View looking W of the site.*
2. & 3. *The large office and residential buildings to the N of the site.*
4. *View looking E of the site.*
5. *View from the S-W corner of the site looking N up Claim Street.*
6. *View from the S-W corner of the site looking W down Esselen Street*
7. *View from the S-W corner of the site looking E down Esselen Street.*
8. *View from the site looking S-E.*
9. *Panoramic view from the site looking S-W.*

















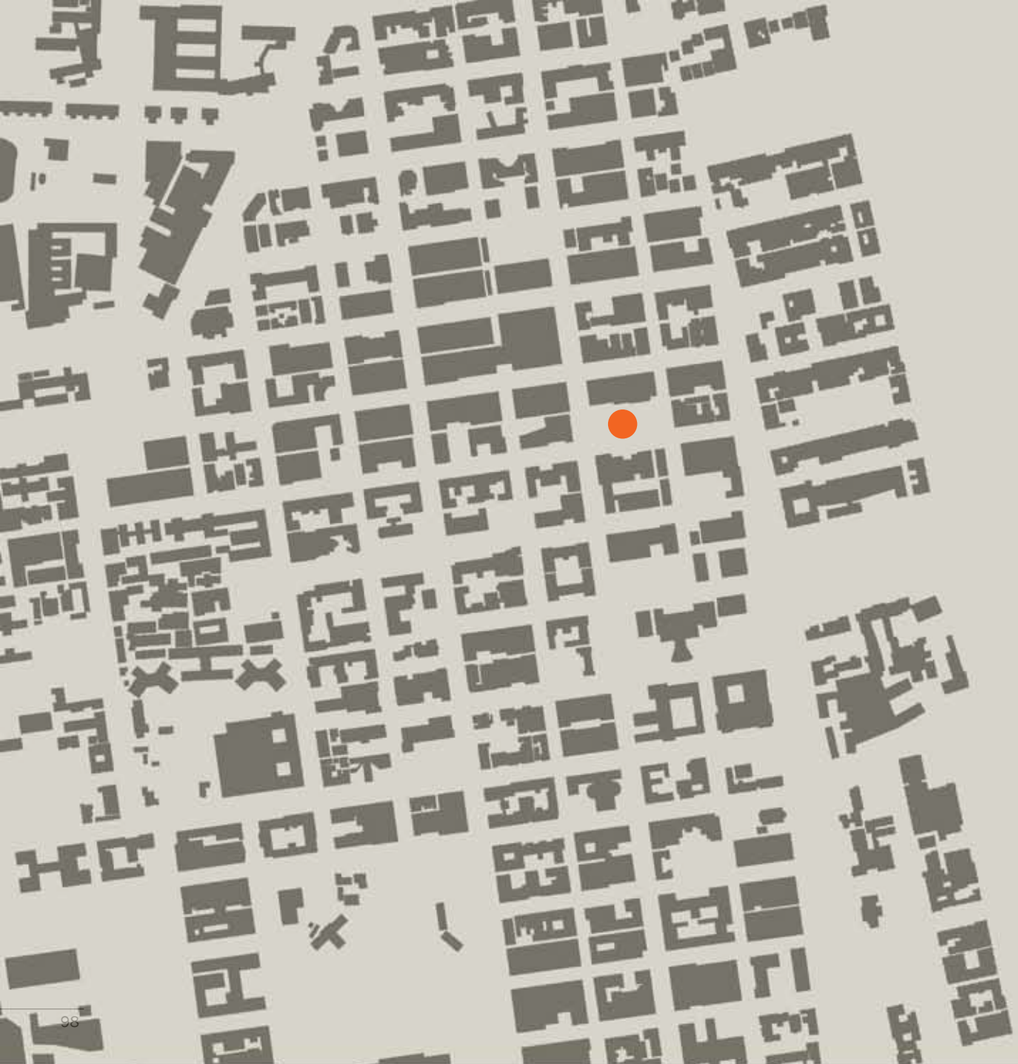




A panoramic view of the busy South-West corner of the site bordered by Claim and Esselen Street.



A panoramic view of the quieter Southern edge taken from the South-East of the site.



URBAN MAPPING

A series of site visits and conversations with local residents was used to inform the mapping process. Here, particular attention was paid to the urban intensities and flows, which define the Hillbrow urban environment. A network of in-between spaces was also identified, so as to assist in design decisions that respond to as well as integrate the various urban intensities, flows and in-between spaces.

03.



GREATER AREA MAPPING

A. Hillbrow
B. Pieter Roos Park
C. Constitution Hill
D.Hillbrow Health Precinct
E. Joubert Park
F. Ellis Park

Site

Urban Mapping Region

A. Hillbrow
B. University of the Witwatersrand
C. Parktown School for Boys
D. Helpmekaar Afrikaans High School
E. Johannesburg College of Education

Site

Urban Mapping Region



SPORT AND RECREATION



MAINTAINE GREEN SPACE



PRE-SCHOOLS



SCHOOLS AND LEARNING



COMPOSITE MAP



URBAN CONTEXT

The urban mapping of Hillbrow, to the left, indicates a lack of urban public amenities. The maintained green spaces are often overcrowded during peak times (mostly weekends). It can be noted that the larger green spaces act as buffers between Hillbrow and its neighbours. Although in theory, this should benefit both communities, the reality is that their size and often isolated location defines them as unsafe and unused in the late afternoon and evenings. Smaller parks such as the eKhaya Park and their central location within the urban context seem to bear a much stronger relationship to the urban environment. Another notable fact is the integration of artificial sport pitches into many of the parks around Hillbrow and the greater area. This small gesture has proved to be a successful tool in attracting activity and users to the open green spaces.

URBAN MOVEMENT

The majority of residents in Hillbrow rely on public transport to get to their places of work and daily destinations. Therefore the urban movement network is defined by a high level of movement, both by people walking between drop-off/pick-up zones and places with public amenities and vehicular movement. The intervention looks at capitalising off the strong urban movement around the site. The porous spaces can punctuate the urban movement network, where a threshold is created that engages the public while passing or moving through the spaces of the building along their path.



VEHICULAR CIRCULATION



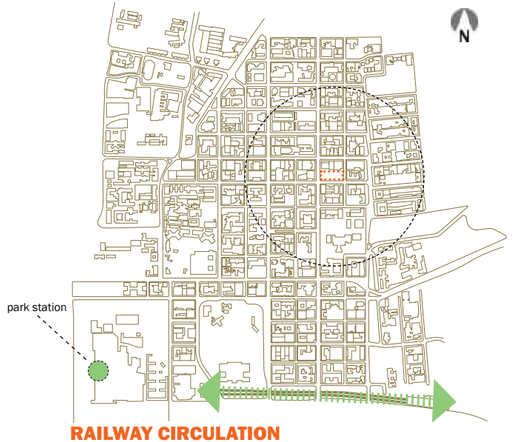
BUS ROUTES



COMPOSITE MAP



BRT STOPS

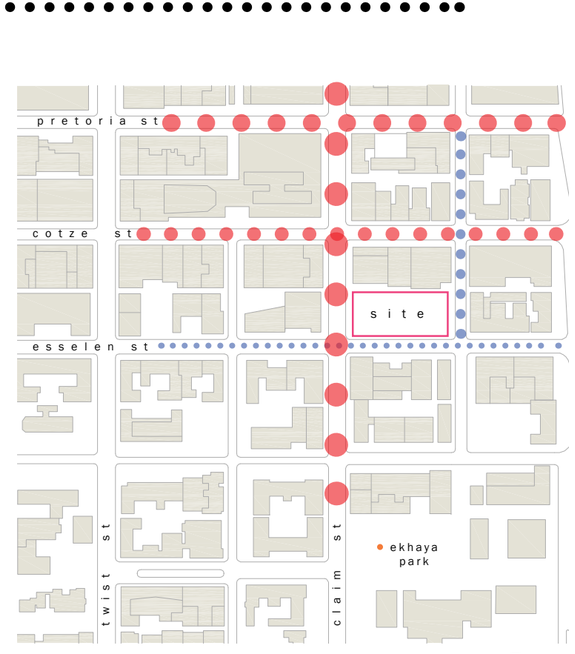


RAILWAY CIRCULATION

Site

200m radius

URBAN PATTERNS



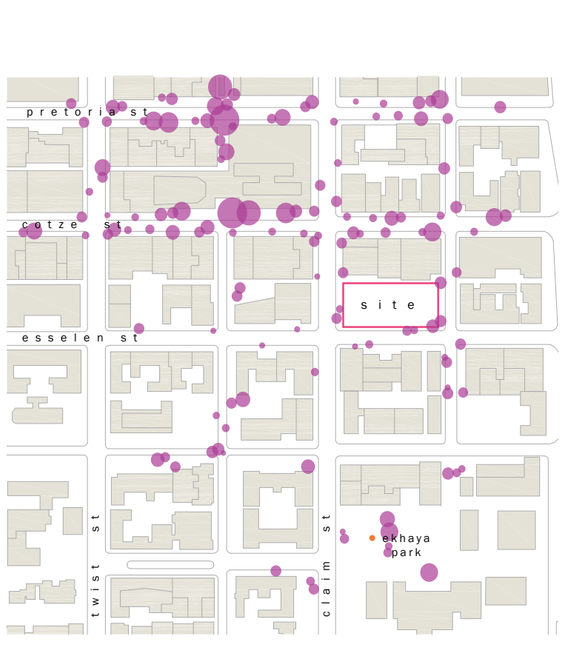


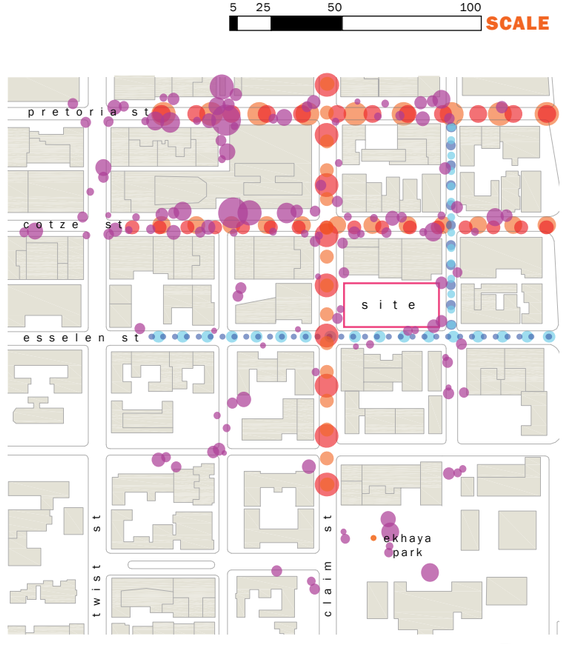
VEHICULAR MOVEMENT

Claim Street, boardering the site on the West is characterised by fast pace vehicular movement. Pertoria an Cotze Streets make up the commercial strip in Hillbrow, are usually heavily congested and have a slower pace. The Streets to the South and East of the site are narrower and quiter streets mainly used by residents.

PEDESTRIAN MOVEMENT

Cotze and Pretoria streets have the greatest pedestrian movement due to the diverse amenities centrally available. Claim Street, again is characterised by a fast pace of pedestrian movement, mainly residents moving to and from their homes. The other streets around the site are characterised by a steady pace of pedestrian movement.





PUBLIC LOITERING AND SOCIAL NODES

Loitering is a common site on the streets of Hillbrow and is largely due to the high unemployment rate. Hawkers and general residents make up the social nodes scattered around Hillbrow. In many cases, the high presence of people on the street makes for a dynamic and punctuated urban environment.

COMPOSITE MAP

Combining the mapping renders a highly charged network of in-between space. The most energetic spaces are often a catalyst for the spaces adjacent to them. The intervention can benefit from the public energy resonating from the busy commercial strip.

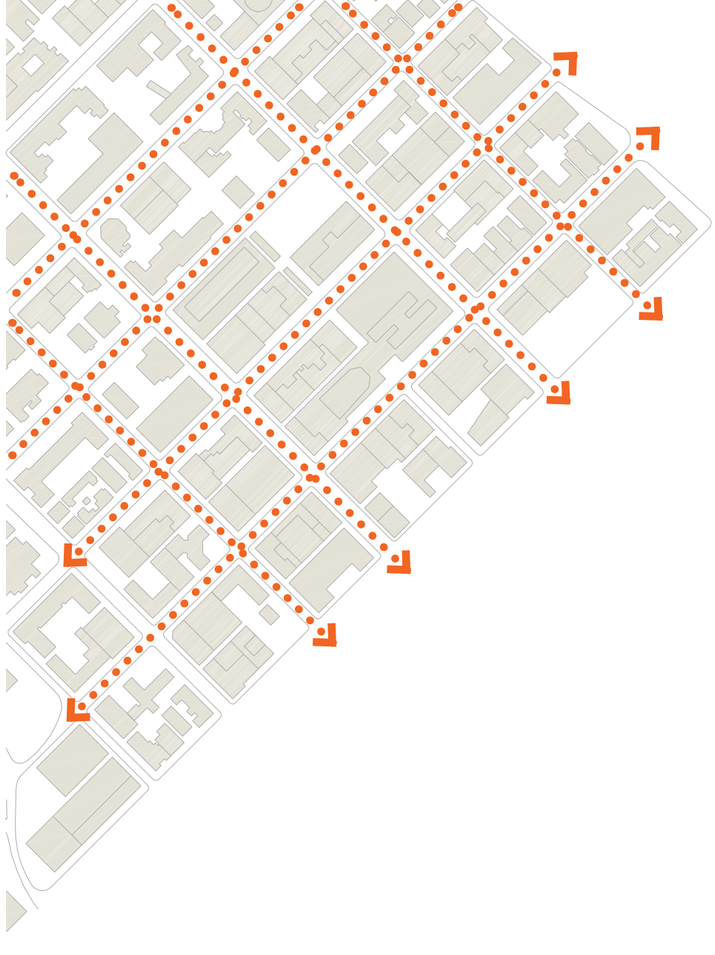
04.

DESIGN DEVELOPMENT

CONCEPT

In-between space is used as the primary concept for the Sports and Knowledge Centre. A **hybrid building** that overlaps different programme functions is used as a base for the various concepts to emerge as spatial interventions of high social integration. It is hoped that the in-between spaces, where the different functions intersect and meet, will generate opportunities for chance encounters. **The social concept** of the intervention, realised through the appropriation of the in-between spaces, is a key aspect of the design. The intention of the intervention is for new relationships to be formed between different functions and their users. This will be further enhanced through porosity, where users form any of the different functions are able to filter through the various parts of the building. Here, users are able to maintain a visual connection to a multiple of different spaces where the different activities and spaces are like **jewels on display.** It is hoped that this will enhance the internal environment and create resonance between the spaces. Thus, acting as a catalyst for the in-between spaces that define the circulation routes, and social nodes throughout the building.

The urban concept of the building favours translucent and porous environment, in order to generate a relationship with the public. Again, the various spaces are on display as jewels of activity, which is hoped to resonate into the community, thus, giving the building an identifiable presence. The various activities of the building animate the spaces and further reinforce the identity of the building as a highly charged accessible public node. In contrast to the heavy nature of the built fabric in Hillbrow, the concept favours an urban environment in flow, enhanced by translucency, light and community participation.

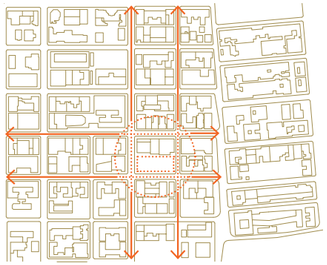


The City Grid

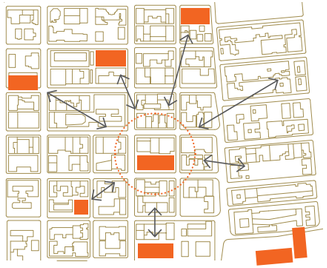
In-between space as a concept began with an observation of the current city grid. Row upon row of buildings line the street and seem to bear little to no relationship with each other of the in-between space of the street. The inner workings of the city are concealed behind fortified spaces rendering an in-between environment that is largely placeless.

Urban Concept

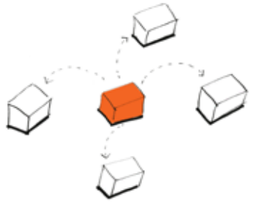
01. URBAN INTEGRATION
The strategy of the intervention is to create a porous zone within the urban context of Hillbrow. The building is to contrast the monotony of the fortified grid by encouraging connections to the urban context and allowing flow through its spaces.



02. URBAN STIMULUS
In generating urban connections with the surrounding public spaces, the intervention's implementation is hoped to stimulate growth within the urban context. Therefore, defining a network of urban interventions that enhance the overall image and legibility of Hillbrow.

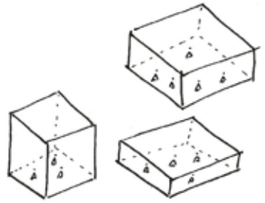


03. URBAN ARCHETYPE
The intervention can be used as an urban archetype, where similar public programmes can be replicated in other areas of the city.

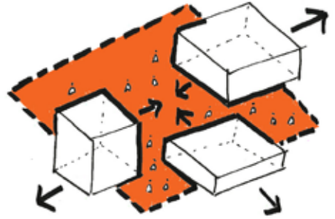


Building Concept

01. HYBRIDITY AS ENABLER
In order to attract a diverse group of users, the Integration of various functions into the building programme will add diversity to the intervention. Architecture thus becomes an 'enabler' for different kinds of diversity.

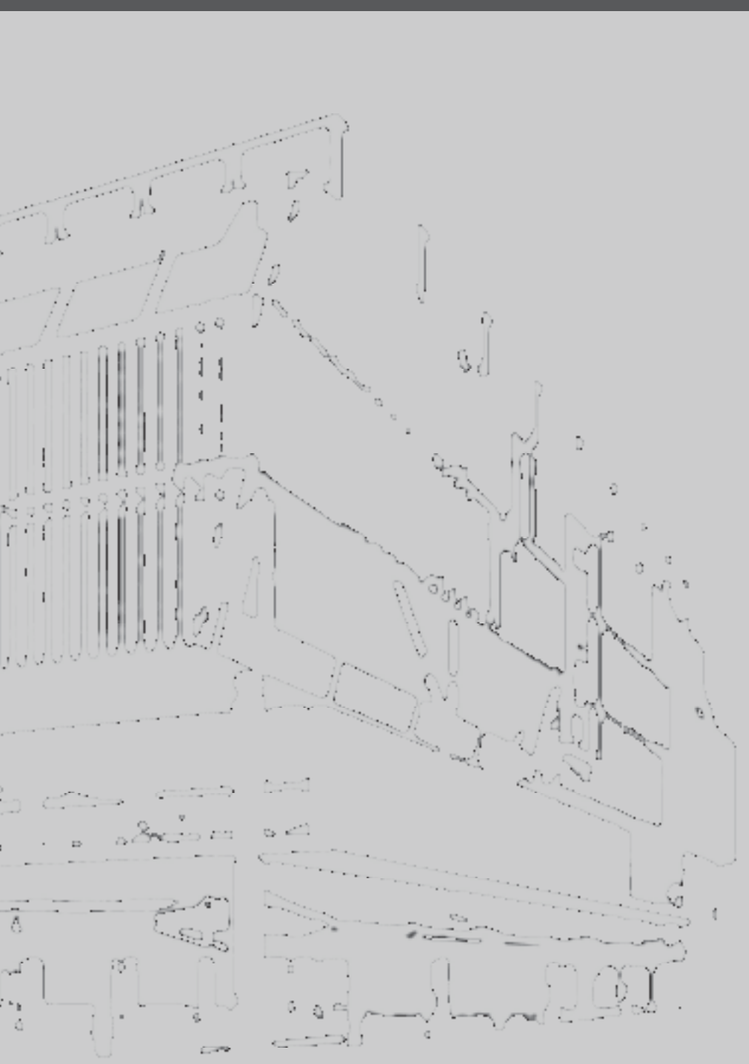


01. IN-BETWEEN SOCIAL SPACE
The concept of the intervention manifests itself through the In-between spaces of the building. These spaces are the binding agent that connect the different parts of a hybrid programme. The In-between circulation spaces of the building act as a social conduit that connects the various social platforms throughout the building.



03. JEWELS ON DISPLAY
The architecture of these spaces is used to express the building's functions. The concept envisions the various functions and their respective activities as jewels of activity on display. The spaces are thus able to define an identifiable environment within the urban context.





CONCEPT DEVELOPMENT

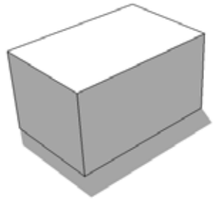
The following section investigates the way in which the concepts are developed through the exploration of architectural elements and spatial representations. Through this exploration a number of design decisions have been made that influence the final design.

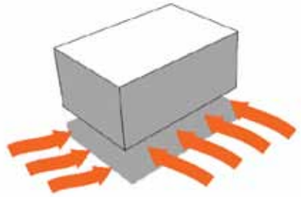
Urban In-between

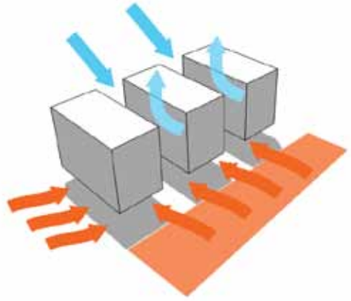
01. INTERVENTION
The urban intention of the design intends on promotimg urban connections so as to provide accessible public space. Beginning with the intervention as a solid mass or blank canvas, the diagrams to the left illustrate the urban response of the intervention.

02. RAISED SOCIAL PLATFORM
A significant urban intention of the intervention is the raised social platform. It clears the ground floor and provides a common urban stage and entrance into the building from where the users can disperse into various spaces. The raised social platform groups the formal functions of the building, those being sport and knowledge, into a dense cluster of activities on permanent display. The lower floors being open and loosely programmed initiates movement vertically into the building and generates connections with the surrounding context.

03. DIVIDING THE INTERVENTION
The raised social platform is divided into three parts separated by atria. The primary reason for this is for orientation and to allow for light and ventilation. The last urban intention involves pedestrianising and landscaping Esselen Street in front of the site. The pedestrian street defines a threshold change from the high paced edge on Claim Street, allowing users to filter into the building.









Conceptual model exploration: The raised social platform is shown above the loosely programmed lower levels.

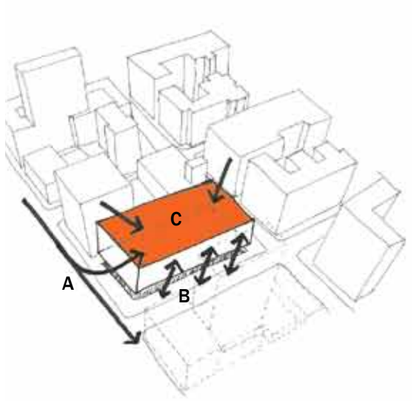
Urban Response

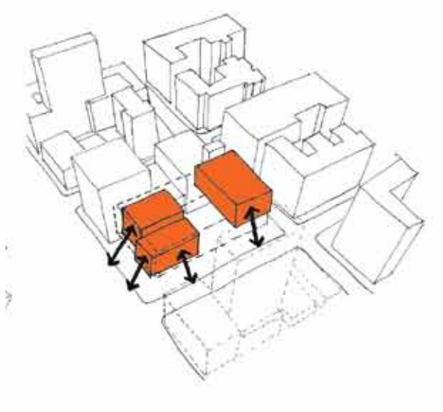
01. URBAN CONNECTIONS

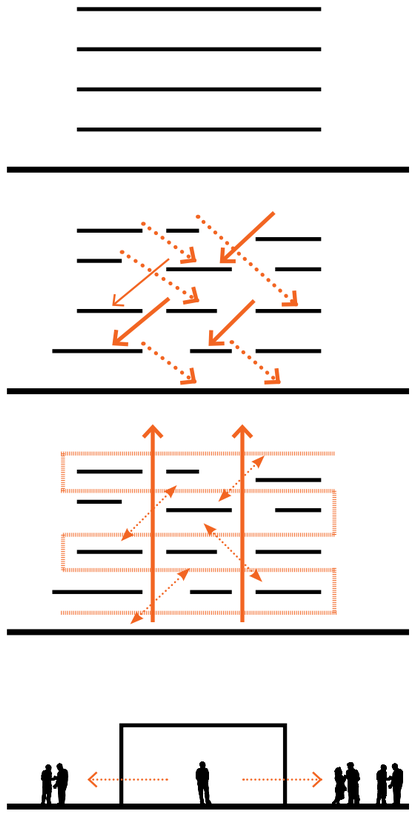
The intervention reinforces connections to the street, particularly with Claim Street A, a major thoroughfare into the Johannesburg CBD. This connection is further enhanced by allowing for a high level of translucency in the design B. In furthering the concept of urban connections, the roof acts as a fifth facade to the residents of the tall high rise apartment block surrounding the site. A secondary urban stage within the intervention. C.

02. JEWELS ON DISPLAY

In order to generate an interactive urban environment, the spaces of the intervention are put on display like jewels of activity for everyone to see. This allows the energy of the intervention to seep into the surrounding context. Various scales of spaces within the raised social platform make up a diverse mix of “jewels’ that punctuate their surroundings.







Internal Arrangement

01. STACKING FLOOR PLATES

The design of the Hillbrow Sport and Knowledge Centre re-appropriates a typical sports pitch or park into a vertically stacked intervention. In so doing, creating a dense urban node in place of a vast empty track of land.

02. BREAKING UP INTERNAL FLOOR PLATES

The stacked intervention is further punctuated by braking up the internal floor plates and varying their sizes. This creates an interesting internal arrangement of social platforms that are visually connected.

03. CIRCULATION AS IN-BETWEEN

Further connections are made between spaces and their functions by emphasizing circulation routes as social thoroughfares that link the social platforms.

04. CONTAINING PROGRAMME

The containing environment of sport and learning spaces will force their users into the social in-between spaces. This emphasises the social intention of the intervention.

Programme arrangement

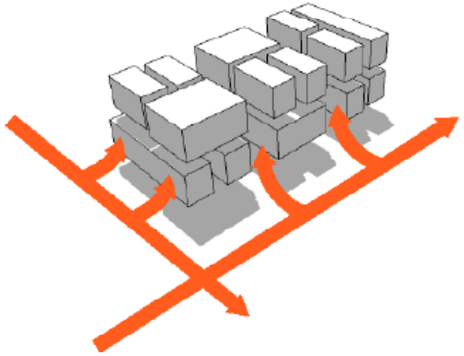
SPORT INCUBATOR

LINK INCUBATOR

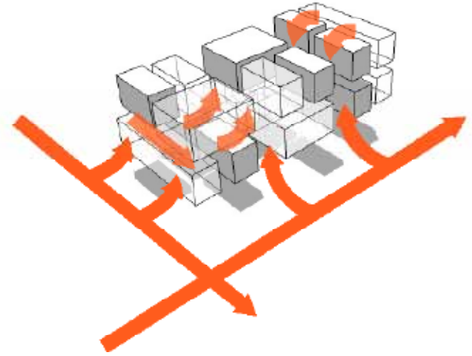
KNOWLEDGE INCUBATOR

01. INCUBATORS
As mentioned before, the raised social platform is divided into three parts, each being an incubator for different functions. The incubators are defined as a dense concentration of people and their activities, connected by the social medium of in-between space.

The Sport Incubator houses the majority of the sporting and recreation spaces. These spaces respond to the high pace environment along Claim Street and engage the public with views into its spaces. Internally, a connection is made between the observer and the observed, where the activities of those engaging in the sport and recreation programme are revealed in moments as one circulates through the spaces.
The Link Incubator initiates the vertical circulation into the spaces above via a staircase that climbs the facade of the incubator. Along its path, the staircase links across to the other two incubators. The Link Incubator is also programmed with meeting rooms, a gym, childcare and activity rooms. Penetrating the incubator from roof level is a courtyard that reiterates the link between landscape and architecture.
The Knowledge Incubator is programmed with spaces for learning as well as knowledge consumption and production. The open format of the spaces terraces into the incubator and provides a social platform for users to share information with each other and stay connected within their social networks. The Knowledge Incubator includes a restaurant at ground level, multi media cafe, library and auditorium.



02. FRAGMENTING PROGRAMME
In generating a multi faceted environment, the Incubators of the raised social platform are fragmented. This integrates the various social platforms and circulation routes making up the in-between spaces into the three incubators.



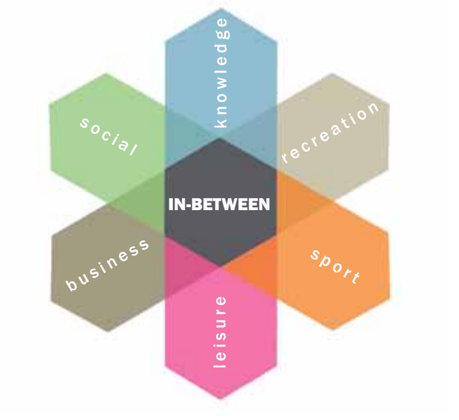
03. POROSITY
Translucency is used to generate visual connections both internally and externally with the urban context. The Atria between the incubators further enhance the visual connections vertically throughout the intervention.

Hybridising Programme

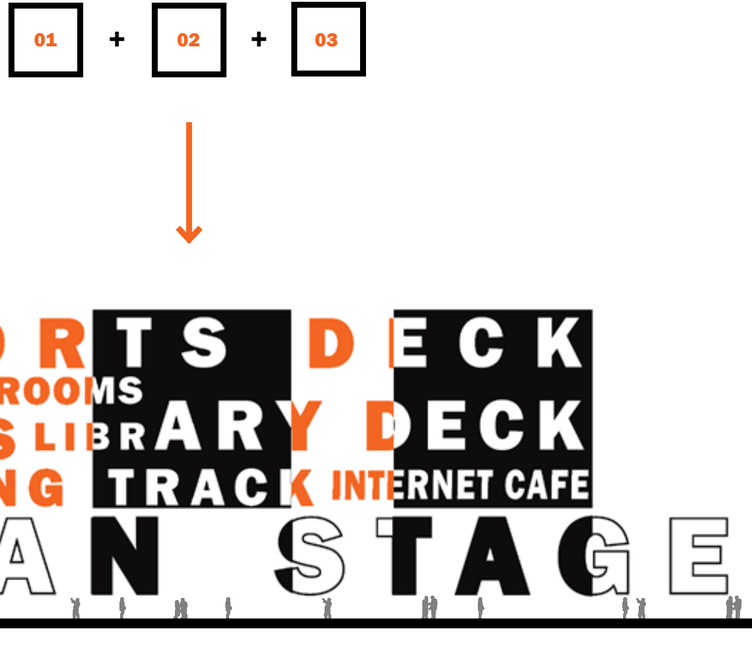
The hybrid environment of the Hillbrow Sport and Knowledge Centre aims to generate meaningful social encounters amongst its users. Various social platforms are designed throughout the building for this purpose. In creating a hybrid environment out of sport and knowledge, it is hoped that the overlapping of various functions will generate new programmatic relationships. Where different programmes meet, the in-between threshold spaces encourage new relationships and ultimately integrate different users of the facility.

In contrast to conventional planning, where typically public functions are programmed at street level, the Sports and Knowledge Centre envisages a public facility that draws users into accessible public spaces at all levels of the building. Thus, the internal landscape is defined by a programme that is layered vertically with different public spaces. It is the intention that this will enhance connections as one moves up and through the spaces and that it will establish nodes of activity that are visible throughout.





OVERLAPPING PROGRAMME.
The diagram above illustrates how various functions, when overlapped, intersect and are connected by in-between space.



OVERLAPPING PROGRAMME.
The diagram above illustrates the three incubators and how the various functions within the intervention overlap. The urban stage provides a base for the functions above, where sport and recreation is overlapped with spaces of knowledge and information.

ACTION SPACE

Sport spaces are usually associated with large open green spaces, but in a dense urban environment, the integration of such facilities is not always possible. Thus, The Hillbrow Sport and Knowledge Centre looks at re-interpreting a typical playground or sport pitch into a densely clustered network of spaces. The containing nature of the formal sport and recreation programme forces users into the in-between social spaces of the intervention. Therefore, these spaces become punctuated with activity and the possibility of chance encounters among users, a key intention of this thesis.

The different make-up of sport and recreation spaces that define the social platform, further enhance the social intention of the building. This is achieved where varying scales of spaces are in juxtaposition with one another and are on permanent display for everyone to see. From large studios and small activity rooms to an indoor sport court and roof top sport pitches, the varying scale of spaces and activity renders an exciting sport and recreation environment. The social in-between spaces are where a dialogue can be formed between the observer and the observed, rendering a layered environment that engages its users. The design of the internal spaces for the sport and recreation programme is intentionally modest. Thus, an opportunity is created where the external environment, in-between the sport spaces, can be more articulated and directed towards layering the experience of circulating through the building.

SPORT AND RECREATION PROGRAMME

The programme for the various sport and recreation activities is defined by both informal, unplanned use and formal structured use. The intervention encourages community participation where users can access the facility and make use of the spaces informally. In addition to this the development of sport skills and learning is a key intention of the sport and recreation programme. Therefore, a sport training programme is envisaged where the youth can enrol and become part of 'The Sport Academy,' much like a sports club. Other formal activities may include, dance, aerobics, karate and an action soccer league. Being a community centre, the spaces are also accessible for community events and gatherings.

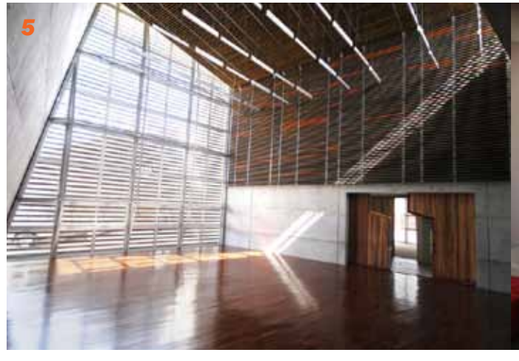
The following images were initial inspiration and design drivers for the design process. These images show the various types of spaces that the intervention may implement.















1. *Indoor sport court, Bello Compo Vertical Gymnasium, Caracas, Venezuela.*
Image Source (all on this page): http://mp-into.com/index.php?/architecture/vertical-gym/ Access date: 05/03/2011

2. *Action Soccer Pitch, Discovery Soccer Park, Johannesburg*
Image Source: By Author

3. *Rooftop sport court, Basket Bar, Utrecht, The Netherlands by NL Architects.*
Image Source: http://www.nlarchitects.nl/slideshow/44 Access date: 12/07/2011

4. *Indoor Sport court, Z5 Aix-en-Provence, France by Christophe Gulizzi Architecte*
Image Source: http://www.archdaily.com/176840/z5-christophe-gulizzi-architecte/z514_08-photo-lisa-ricciotti_terrain-couvert-nuit/ Access Date: 16/10/2011

5. *Studio space, Ubuntu Centre, Port Elizabeth by Field Architecture.*
Image Source: http://fieldarchitecture.com/public-commercial/ubuntucentre/

6. *Activity room, Nike Football Centre, Soweto, Johannesburg.*
Image Source: http://www.archdaily.com/96408/football-training-centre-soweto-rufproject/interior_classroom-w1500-h1500/ Access date: 22/04/2011

7. *Studio Space.*
Source Unknown

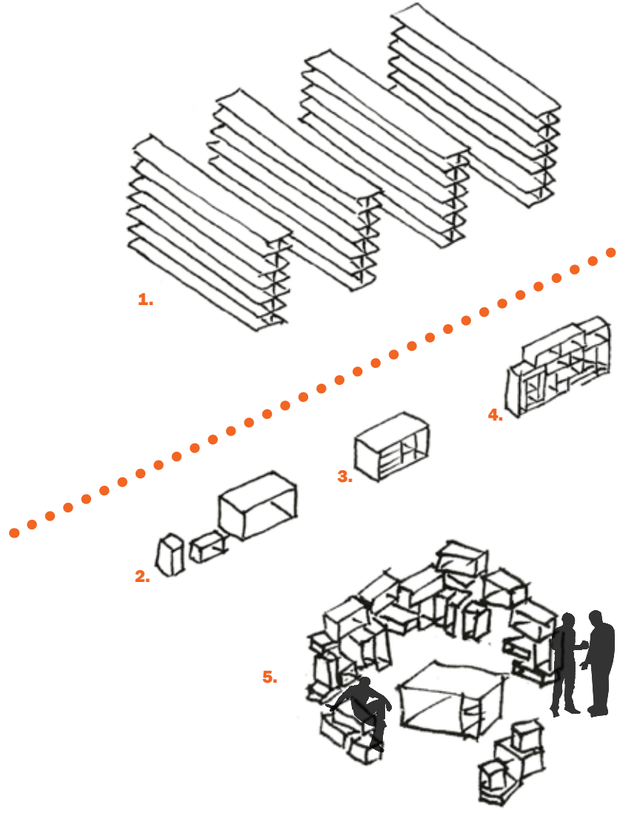
LIBRARY OF THE FUTURE

The library of the future looks at creating an integrated approach to the consumption and production of Knowledge. Printed books and other forms of digital information and technology, in the library of the 21st century, need to become an integral part of the library experience. The library model of the past, being a container of books, needs to be liberated from its physical archiving constraints. Therefore, a new system that breaks down the static nature of the library is needed. The role of the contemporary library thus becomes the base for the shared production and consumption of knowledge. The library of the future is based in socially defining activities, much like the freedom and flexibility existing in digital networks.

RADIO FREQUENCY IDENTIFICATION

The library as a flexible source of knowledge can be realised through the use of Radio Frequency Identification (RFID). This technology enables books to be managed and tracked electronically, freeing them from their fixed location. Books can be arranged and sorted by users and easily found aging via RFID technology. Therefore, popular books remain in circulation, while boring books can be identified an archived in a more traditional manner.

The use of RFID technology is able to re-interpret the traditional Dewey decimal classification system and re-invent the book stack as a more sociable format. Thus allowing users of the library to engage and interact more freely in the production and consumption of knowledge. The diagrams to the left illustrate the possibilities of new library spaces.





Concept for The Rotterdam Public Libray.

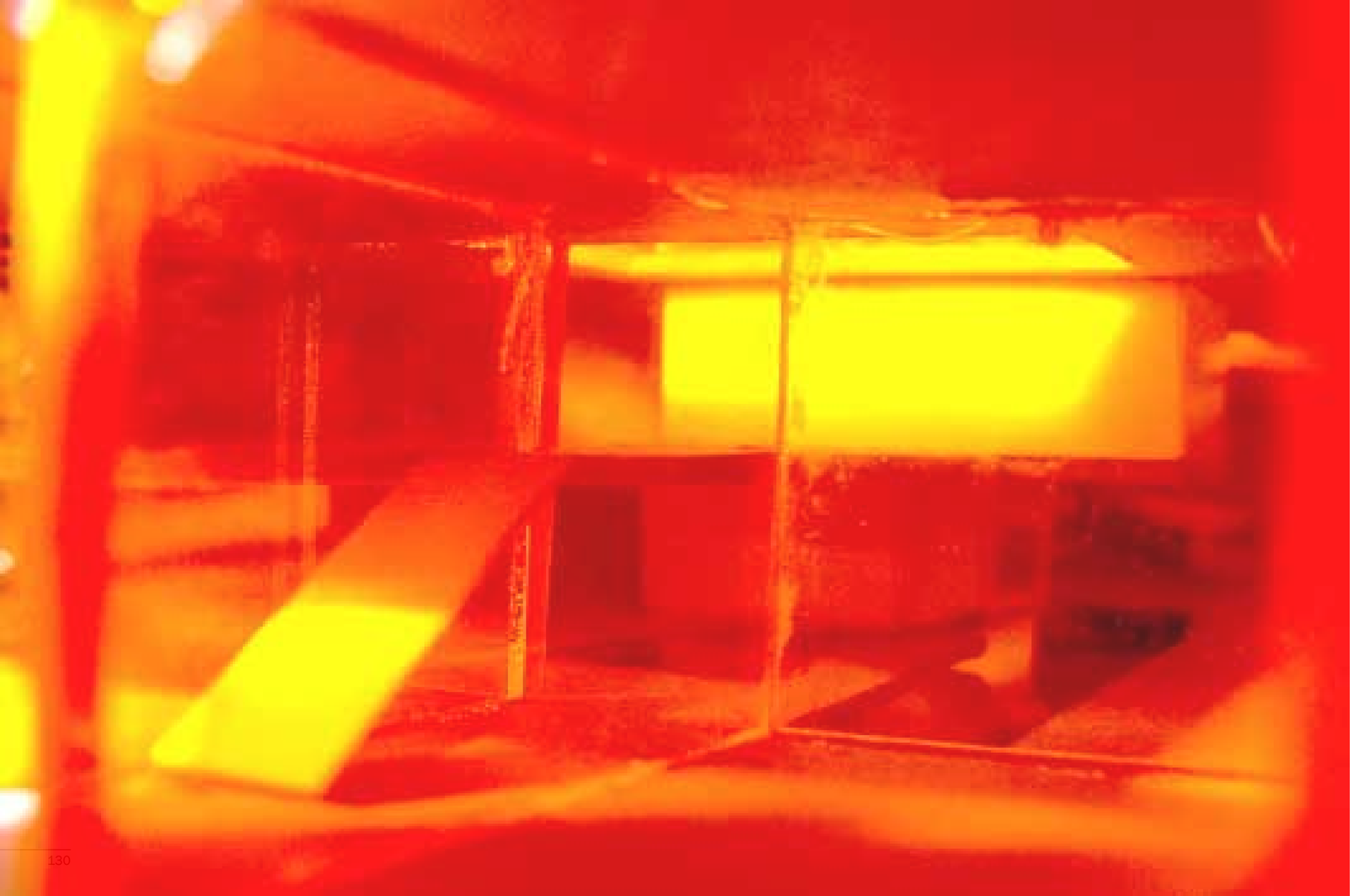
VAN DER WERF, (2010). The Architecture of Knowledge: The Library of the Future

DESIGNING SPACES

1. The re-interpreting of the traditional library book shelf, rendering a more porous and accessible library, can be achieved by a flexible modular system of smaller book shelves. **2-4.** A series of smaller book shelves can be arranged into different configurations to suite user needs, from smaller to larger arrangements. **5.** The possibilities of a flexible arrangement of book shelves can take on the form of social knowledge nodes. Thus, book shelves are organised in to clusters and create a network of nodes throughout the library, where each node defines a different genre. The genre of each node is flexible to change, as it is the users who define the content of the node. This system encourages a more social approach to knowledge production and consumption. It embraces an environment where a variety of information sources can be accessed, from print to digital media.

DESIGN ANALYSIS

05.



DESIGN SPACES

Six spaces have been identified in the design that enhance social integration and emphasize the buildings function. The following section dicusses the spatial representations of these spaces within the Hillbrow Sport and Knowledge Centre.

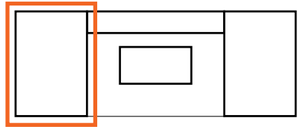


A night time view of the Hillbrow Sport and Knowledge Centre. The porosity of the spaces generates a distinct identity for the centre and allows its activities to permeate into the surrounding urban fabric.

Open Multi-Use Court

The Multi-use Court at ground level is envisioned as a porous space that opens up onto the street. The space creates a porous edge to both Claim Street and the pedestrian street on the sothern edge of the site.

- The court is sunken into the earth in order to create a threshold between the street and the activities on the court.
- It is intended to make strong connections with the surrounding public spaces, thus, allowing the activity at street level to bleed into the facility.
- The pedestrianised southern edge of the site is in contrast to the fast pace vehicular and pedestrian movement along Claim Street. The pedestrian street forms part of the public entrance into the building, where the landscaped environment is enmeshed with the programme of the building.
- The porous edge is intended to generate a strong relationship between the urban environment, landscape and architecture.
- It defines a threshold that slows down the urban pace and allows for users to filter into the spaces while at the same time creating an identifiable entrance.
- The Multi-use Court and pedestrian street work together in creating a threshold of spaces which allow porosity, access and movement into the building form all sides.
- The spaces are intended to host a variety of public activities from various forms of competitive play and community gathering to leisure and social activities.



FIGURATIVE PLAN LOCATION



FIGURATIVE SECTION LOCATION

The Multi-use Court, illustrated here at ground level, creates a porous edge to the street. The space is able to form a direct relationship to its surrounding context. The openess and accessibility of the space helps the intervention establish an identity within Hillbrow.

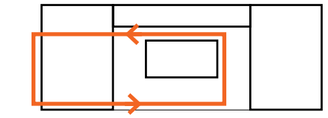
Further porosity is achieved where perforated metal louvres make up a faceted facade.





The Running track captures the urban energy of the spaces. It achieves this where at first level the track and its users are projected out beyond the threshold of the building.

Views into the raised social platform, from both the running track and the street below, are achieved where glazing is angled and directed downwards.



FIGURATIVE PLAN LOCATION



FIGURATIVE SECTION LOCATION

Running Track

The Running Track is located at first floor level where it floats above and over the ground floor. It is envisaged as an energised loop of movement that responds to the urban energy of the street and various activities within the building's programme.

- The spatial sequence of the loop is continuously defined by different thresholds as it carves and cuts its way through different spaces in the building.
- The Running Track initiates the hybridisation of different functions where it intersects and becomes part of the information playground and circulation spaces.
- Users moving through the various spaces cross the path of the running track as well as circulate parallel to it at points. Here, the user, whether of sport, learning, business or leisure spaces are made cognisant of the energy and purpose of the building.
- The track is intended to create strong relationships between the learning and sporting functions of the building.

Spaces incorporated in the loop of the Running Track includes the cardio and weight training spaces of the gym as well as observation spaces. The observation and cardio spaces are visually connected to the Multi-use Court and the external street environment which increases the porosity of the building.

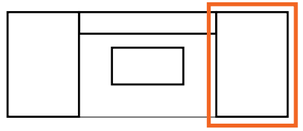
The running track forms a strong relationship with both the internal and external spaces. This is achieved where it incorporated views down onto the Multi-use Court and street below.



Information Playground

The information playground incorporates the meeting spaces at ground level, internet café on the second and library on the third and fourth. These spaces are envisaged to terrace through the building and generate strong relationships with the other functions of the building.

- Collectively the spaces form a dense environment defined by the activities of learning, business and socialising on the backdrop of sport and leisure.
- At ground level, the main circulation staircase initiates the vertical circulation into the spaces higher up in the building. As it climbs up the wall of the link incubator, it connects the various parts of the programme to one another.
- The stair case forms a part of the many in-between circulation spaces of the building, whereby it brings different users of the facility together.
- At the top of the staircase between ground and second, users cross the running track before entering into the internet café. This is an intentional move that brings users of the information playground into direct contact with the sporting environment.
- The internet café provides a communicative platform for users to engage in digital forms of information and learning. From here users can move up into the library which incorporates various thresholds of spaces, from very public social spaces to more private learning spaces.



FIGURATIVE PLAN LOCATION



FIGURATIVE SECTION LOCATION

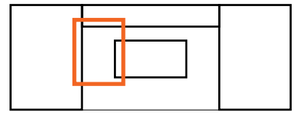


A view from the main staircase across into the Information playground. The spaces follow a hierarchy of most social to least social in order to cater for various types of knowledge production and consumption. The layering of the sport and knowledge programmes is evident where the indoor court has a prominent presence above the library. Openings and a translucent wall cladding system allow the activities of the indoor court to resonate into the spaces below.

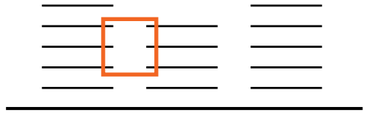


The social spaces between the studios and the around the atrium will incorporate various seating arrangements that enhance the social legibility of the in-between spaces.

Recreation Loop



FIGURATIVE PLAN LOCATION



FIGURATIVE SECTION LOCATION

The Recreation Loop creates a loop around the main entrance atrium on the second and third floors. It is envisaged as an ‘in-between’ loop of social space that feeds of the activity of the studios and activity rooms.

- The atrium and circulation thoroughfares feed into and connect the loop to other spaces within the building both vertically and horizontally.
- The loop creates a porous environment through translucency where the activities of the surrounding spaces are revealed but also concealed at the same time.
- The concept of the ‘white box’ and ‘articulated box’ is employed in the design of the spaces surrounding the loop. Here, the appropriate internal environment for various recreational activities is provided in the form of the ‘white box’. The ‘articulated box’ informs the exterior of these spaces, where they are expressed and engage the observer and users of the in-between spaces.
- The spatial quality of the space allows the observer to engage in a dialogue with the spaces and more specifically with the activities of the observed.

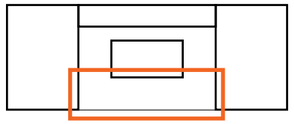


A view between the two studio spaces. The activities in the studios are allowed to permeate into this space where translucent glass is used in place of solid walls. Facebrick is also used to enhance the tactile quality and add warmth to the internal spaces

Library Deck

The Library Deck runs almost the entire length of the southern façade where it bears a strong visual relationship to both the external and internal environment. Again the main circulation stair case is used to slowly reveal more and more of the library deck as you ascend into the building.

- The deck forms the main component of the library stacks and again bears a strong physical and symbolic relationship with the rest of the building.
- The deck reinforces the hybrid nature of the building where it overlaps with and provides views into the various sporting spaces of the building.
- Symbolically it provides a visual intention of a space for knowledge and learning, defined not only by the presence of the book stacks, but also by its activities.
- The space provides social nodes in-between the book stacks. Each node has the potential to become a strong central node or quiet learning node. This will be determined by the activities of users who define each node as either a quiet reading nook or bustling social nook.
- The deck also plays a part in defining the entrance where it bridges over it from one incubater to the other..



FIGURATIVE PLAN LOCATION



FIGURATIVE SECTION LOCATION



A view across The Library Deck

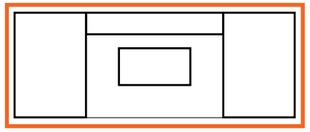
A view across The Library Deck where its connection to the internal spaces is emphasised by an activity room that punctuates the space. The large truss construction supports the span of the deck and establishes a rhythm within the space.



Sport Deck

The Sport Deck is located at roof level and runs the entire length of the building. The deck consists of two outdoor artificial sport playing pitches and an indoor pitch. Between the two pitches, a landscaped area provides spaces for social gatherings and sport viewing. Floating above the landscaped area and along the sport pitches, are bridges which provide an alternative viewing experience. The space is envisaged to act as an umbrella of activity over the building.

- The landscape is defined by multiple surface finishes and allows views into the atria and other spaces of the building.
- Collectively The Sport Deck recreates an urban park several storeys above ground level, effectively allowing an enmeshed experience of landscape, architecture and urbanism.
- A strong visual connection is made with the surrounding context, where The Sports Deck becomes a fifth facade, an urban stage of activity among the apartment blocks looking down onto it.
- As a whole the Sport Deck along with the pedestrianised street allow for landscaped green spaces to draw into the building form above and below.
- The Sport Deck will host action sport leagues on an artificial multi-sport pitch which includes action soccer, netball, basketball etc. All these sports take place on a 25x15m pitch.



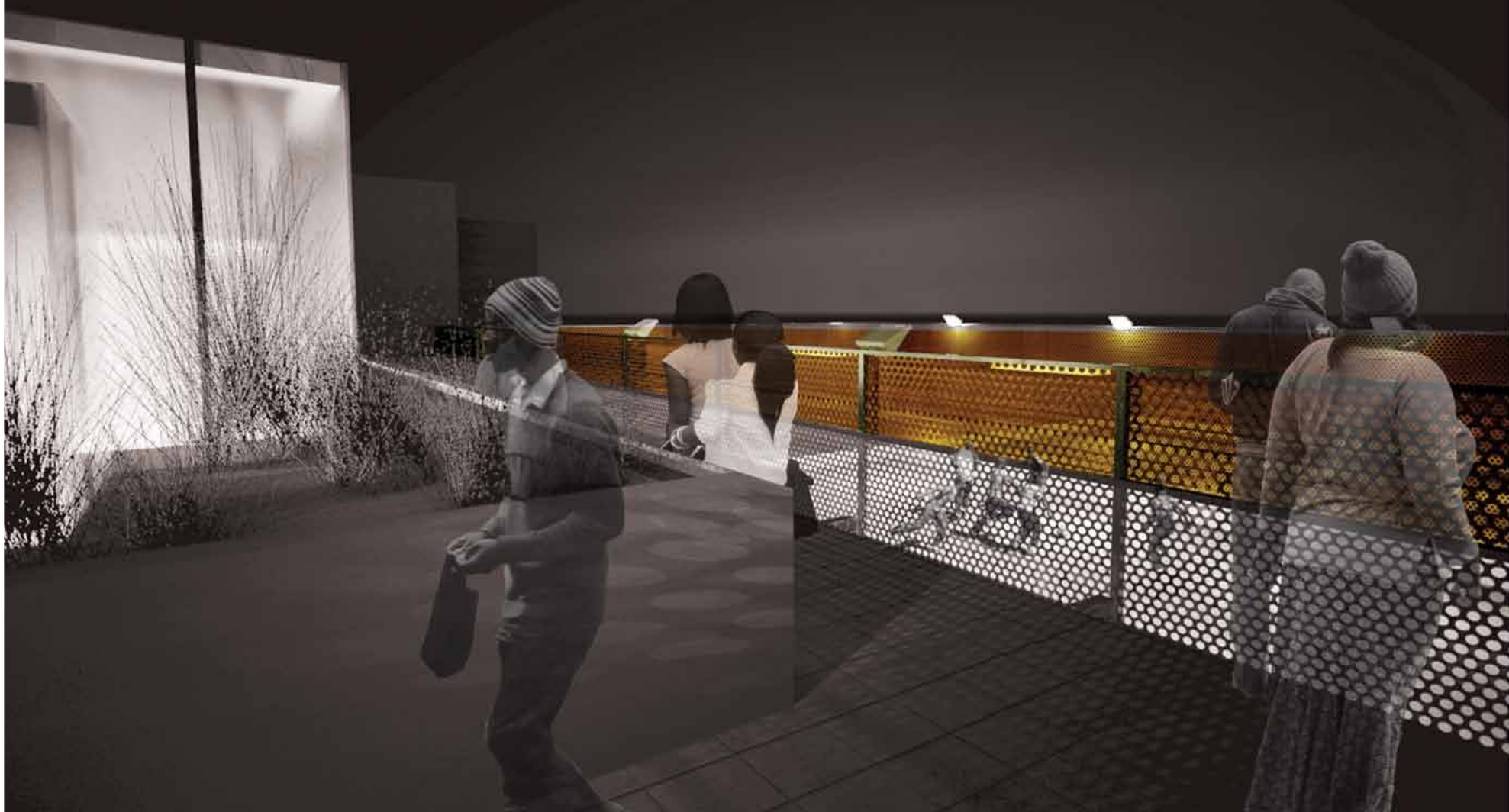
FIGURATIVE PLAN LOCATION



FIGURATIVE SECTION LOCATION

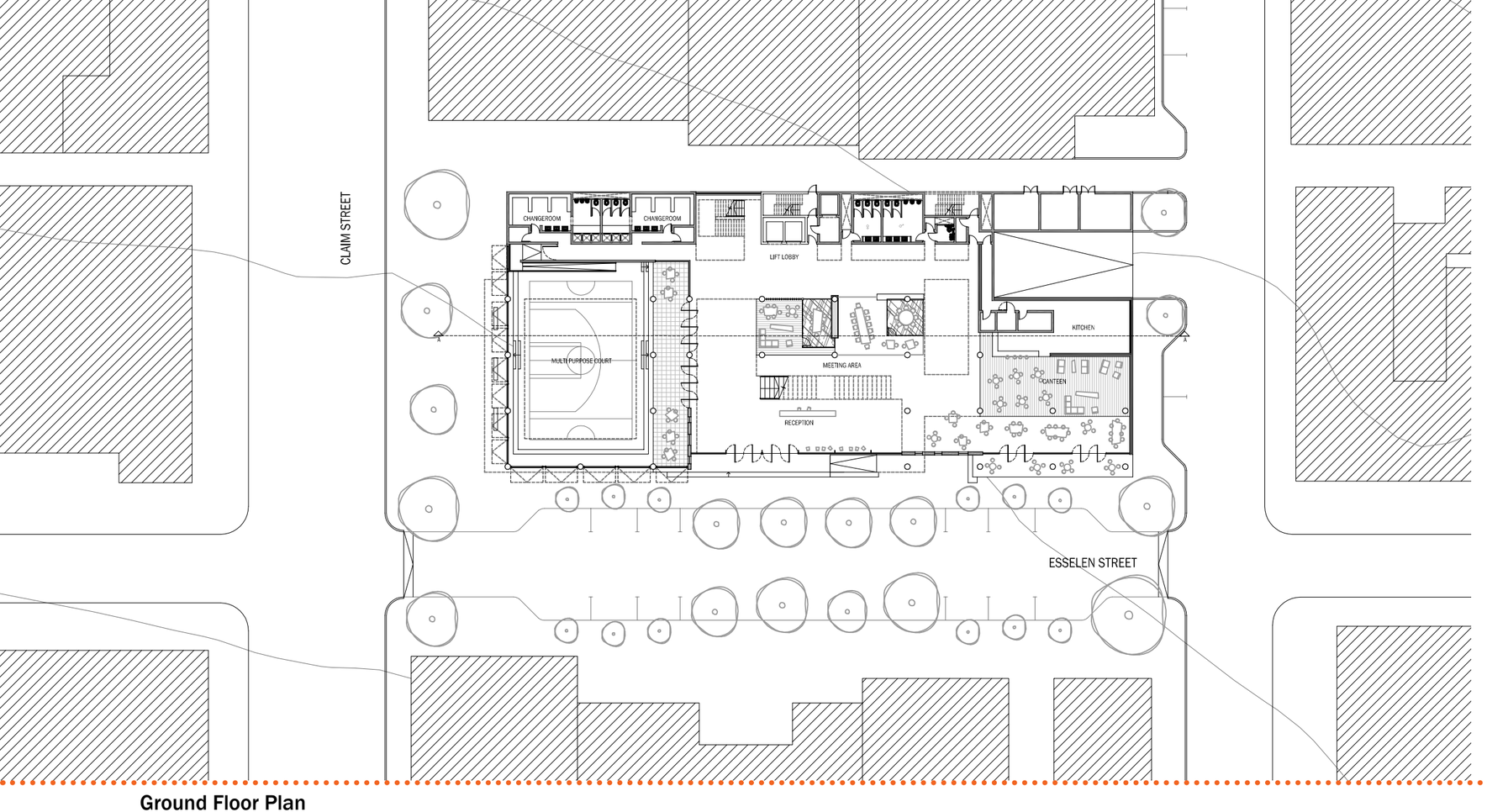
A view across The Sport Deck: One of the roof-top sport pitches can be noticed in the background. Sport Viewing bridges above the roof terrace provide an alternative to spectators.

A view down onto one of the sports pitchs from the walkways above. The wlakways are illuminated at night by a series lantern like light boxes above the atrai. The light boxes also provide natural ventilation and light for the atria.



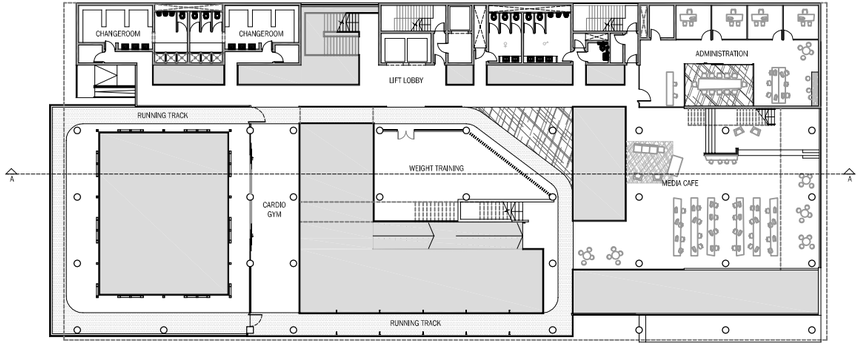
DESIGN DRAWINGS

06.



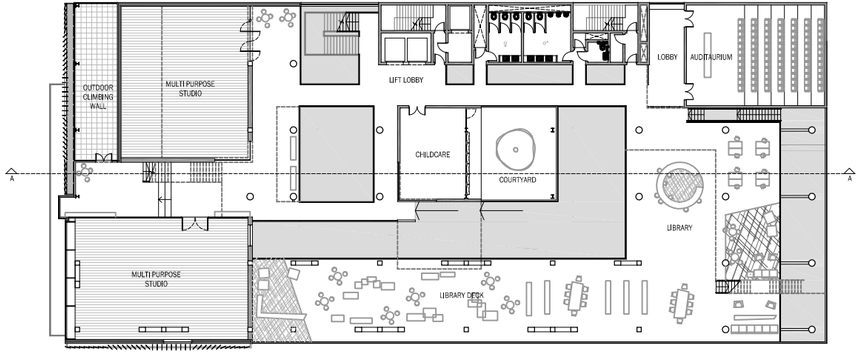
Ground Floor Plan

Scale 1:500



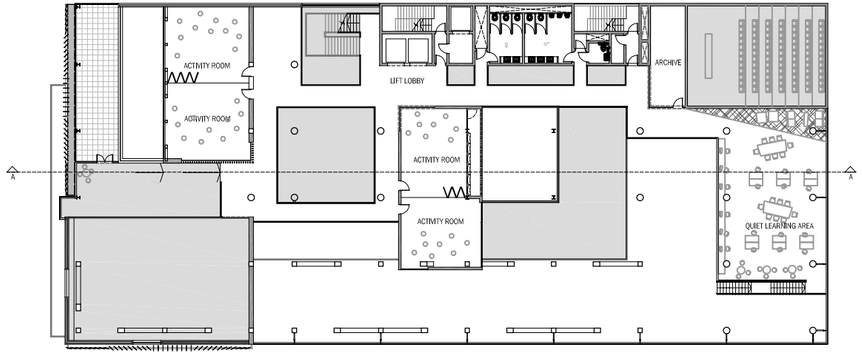
First Floor Plan

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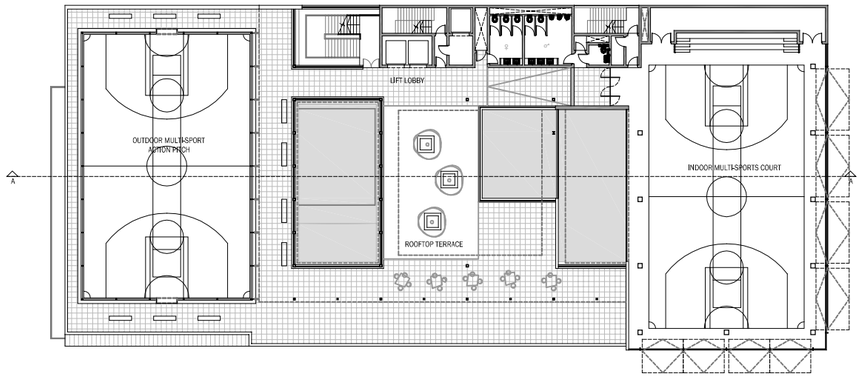
Second Floor Plan

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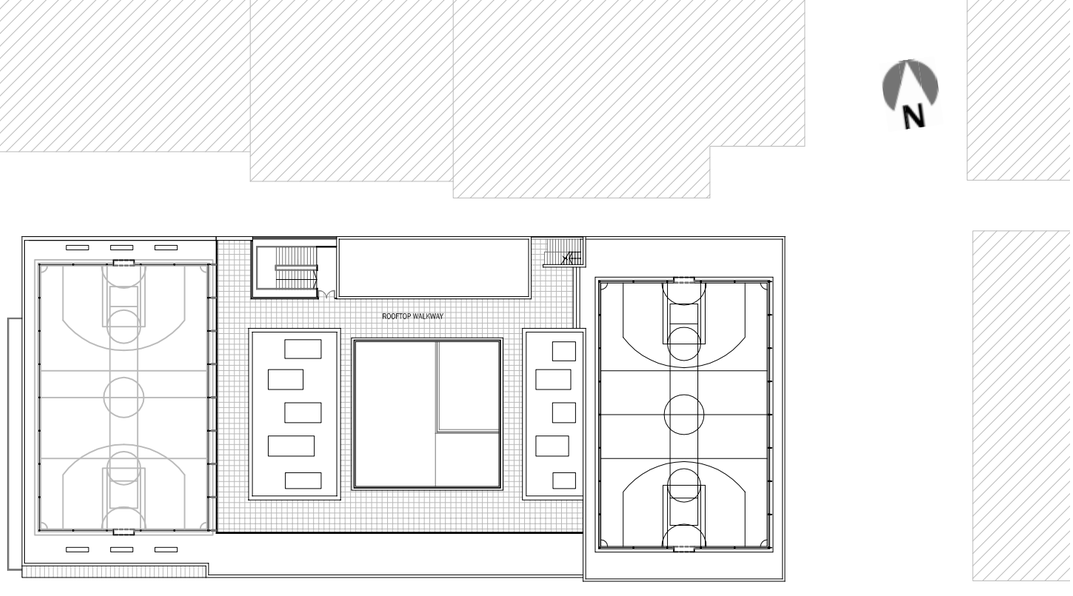
Third Floor Plan

Scale 1:500



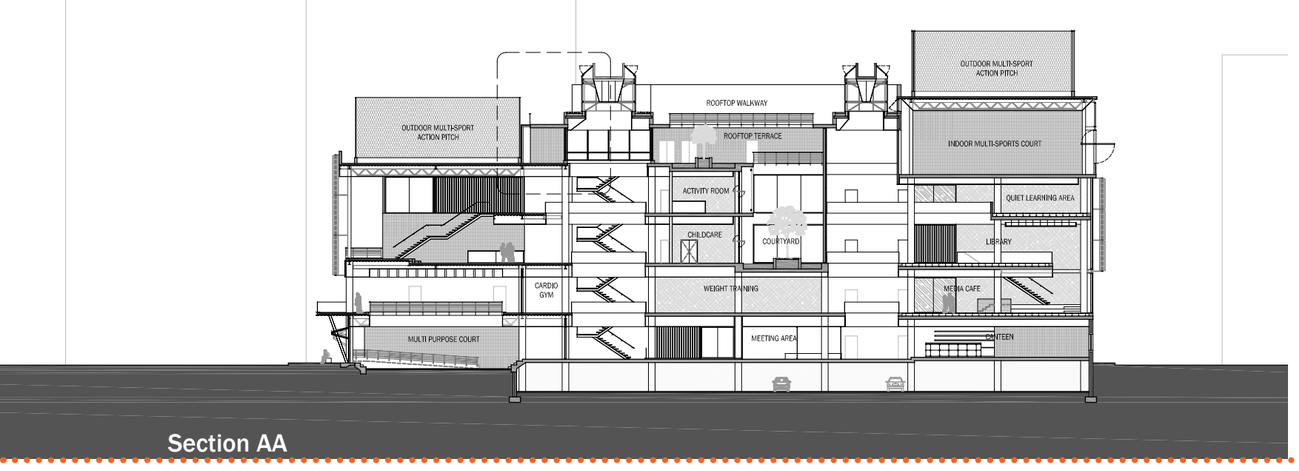
Fourth Floor Plan

Scale 1:500



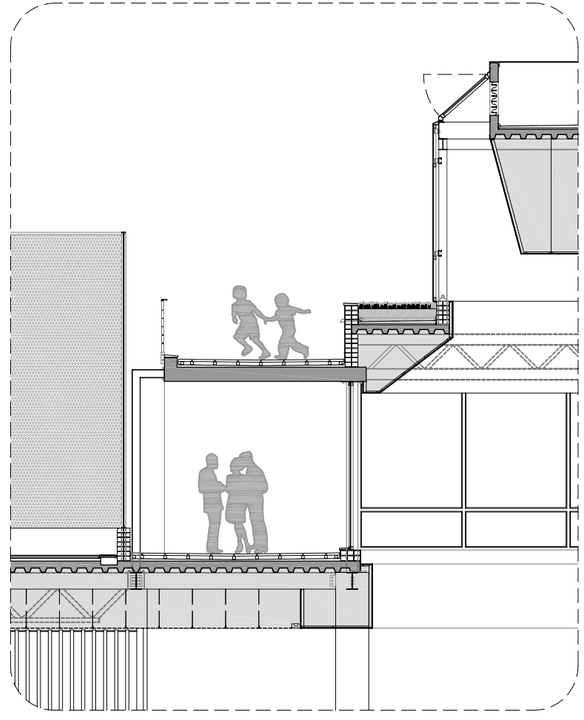
Fifth Floor Plan

Scale 1:500



Section AA

Scale 1:500



Detail Section

Scale 1:100



View of the courtyard coming down from the Sport Deck. This particular design decision highlights the porous nature of the building where landscape, architecture and urbanism become an enmeshed experience.

View of The Hillbrow Sport and Knowledge Centre along Claim Street.



LIST OF REFERENCES

AILION, G. (2009). Unpublished thesis for par tial fulfilment of the MArch prof. degree, University of the Witwatersrand, Johannesburg
ADIGARD, E AND BESTKY, A. (2000).Architecture Must Burn: A Manifesto for Architecture Beyond Building. London. Tames & Hudson
APRA, J, MOZAS AND J, A.F PER. (2011). This is Hybrid: Analysis of Mixed Use Buildings by a+t. Vitoria Gasteiz. Spain. a+t Architecture Publishers
BAKAERT, G. (1988). Architecture Devoid of Shadow. Rotterdam: Uitgeverij 010 Publishers.
BEY, J ANDVAN DER WIEL, E. (2010). The Architecture of Knowledge: The Library of the Future. Rotterdam. NAi Publishers
BREMNER, L. (2010). Writing the City Into Being. Fourthwall Books. Johannesburg
BREMNER, L. AND SUBIRÓS P. (2007). Johannesburg: Emerging/Diverging Metropolis. Mendrisio Academy Press. Italy
BROWN, R AND CAPOZZA, D (2006). Social Identities. Motivational, Emotional and Cultural Influences. East Sussex. Psychology Press
CARMONA, M, HEATH, T, OC, T AND TIESDELL, S. (2003). Public Spaces Urban Places: The Dimensions of Urban Design. Oxford. Architectural Press
CASTELLS, M. (2004). The Network Society: A Cross-cultural Perspective. UK. Edward Elgar Publishing Limited
ELLIN, N. (1996). Postmodern Urbanism. Massachusetts. Blackwell
ELLIN, N. (2006). Integral Urbanism. New York. Routledge
HERNANDEZ, F. (2010). Thinkers for Architects: Bhabha for Architects. New York. Routledge
HOLL, S. (2009). Urbanisms: Working With Doubt. New York. Princeton Architectural Press
JACOBS, J (1993). The Death and Life of Great American Cities. New York. Random House Inc.
KEIM, M. (2003). Nation Building at Play: Sport as a Tool for social Integration in Post-Apartheid South Africa. Oxford. Meyer & Meyer Sport (UK) Ltd.
KOOLHAAS, R. (1978). Delirious New York: A Retroactive Manifesto for Manhattan. London. Academy Editions Press
LIANE LEFAIVRE, DOLL (2007). Ground Up City Play as a Design Tool. Rotterdam. 010 Publishers
MADANIPOUR, A. (2003). Public and Private Spaces of the City. London. Routledge
MOLINARI, L. (2008). Y08: Skira Year Book of World Architecture 2007-2008. Italy. Skira Editore S.p.A
MORRIS, A. (1996). Inner City Transition: A Case Study of Hillbrow, Johannesburg. Johannesburg. University of the Witwatersrand
OMA. (1995). S, M, L, XL. New York. Monacelli Press.
SMITH, C ANDBALLANTYNE, A. (2010). Flow: Architecture, Object and Relation. United Kingdom. ARQ: Architecture Research Quarterly Cambridge University Press
VAN DER VELDEN, (2010). The Architecture of Knowledge: The Library of the Future. Rotterdam. NAi Publishers
VAN DER WERF, (2010). The Architecture of Knowledge: The Library of the Future. Rotterdam. NAi Publishers

Archdaily. http://www.archdaily.com (Access date 23/10/2011)
GAPP Urban Planners and Architects). http;//www.gapp.net (Access date 02/04/2011)
Office of Metropolitan Architects http;//www.oma.eu (Access date 11/05/2011)
People for Public Spaces http://www.pps.org (Access date 23/10/2011)
REX Architecture http://www.rex-ny.com (Access date 08/09/2011)
Urban Think Tank http://www.u-tt.com (Access date 05/03/2011)

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[RE] PLAY

A Sport and Knowledge Centre FOR THE Hillbrow Community

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