

trans-PROGRAMMING

the student, the university and the community

An Architectural response to changing social structures and systems in universities through negotiating boundaries



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DECLARATION

I, Keabetswe Karen Mabote 0511764k, am a student registered for the course Master of Architecture [Professional] in the year 2009. 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 in my own work.

.....
(Signature of Candidate)

..... day of year

ACKNOWLEDGEMENTS

This paper is dedicated to my loving family. To my parents Robert and Motshwari Mabote, thank you for your patience and encouragement through the years. My siblings Tshepo, Neo and Bame, thank you for your support and belief.

To supervisor Hannah Le Roux thank you for your continued support and input through the year. Many thanks also to Prof Lone Poulsen.

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ABSTRACT

Issues such as diversity and inclusion are highlighted in the developing world due to their post colonization. Education is deemed to be the key to attaining equal citizenship in a global economy. Architecture has to function in a political, physical and social landscape that is hybrid and diverse, a space in which multiple publics exist and compete for resources and opportunities(Murray-Blank).

This paper investigates how spatial and programmatic organizations promote internal knowledge transfer and social interaction, while simultaneously integrating with surrounding urban environments. The thesis focuses on University students in developing countries through understanding their diverse backgrounds which include a rural urban divide. It focuses its investigation at the University of the Western Cape.

History shows the power of the University as an institution in society, its architecture should adapt rapidly to its environment. Given the situation of a new genre of economically challenged people coming into Universities in developing countries, trans-programming in the University is a necessity. The concept is explored through a review of current literature on the postcolonial theory of hybridity, the impact of globalization on the local identity, creating an inclusive built environment for diverse cultures and constructing a learning environment that addresses the immediate needs of students. Interviews and literature reinforce the need for architecture to function in a political, physical and social landscape that is hybrid and diverse. Our environment effects our development and this thesis suggests a trans-programming of facilities that will assist in the development of students,

the communities they come from and those they reside in.

This new spatial order will also evoke awareness, security, participation, a sense of inclusion and therefore bring about a possibility of narrowing the rural/township urban divide.

An aerial, black and white photograph of a city, likely New York City, showing a dense grid of streets and buildings. A large, white, stylized outline of the number '3' is superimposed on the right side of the image. The word 'introduction' is written in a white, lowercase, sans-serif font across the lower-left portion of the image.

introduction

INTRODUCTION [context,aim,questions]

'What has the advancement of education and a democratic state meant for architecture?'

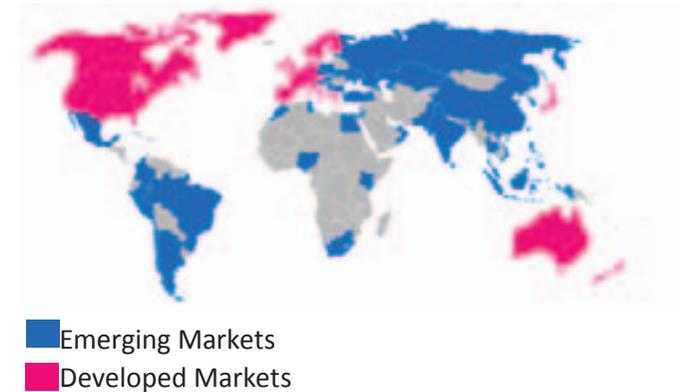
Issues such as diversity and inclusion are highlighted in the developing world due to their post colonization. Education is deemed to be the key to attaining equal citizenship in a global economy and for people in developing countries. The University is a platform where a direct relationship to development through education is demonstrated. Here architecture can contribute in creating a more inclusive built environment, through responding to needs of the different publics. This paper proposes the development of a hybrid building prototype that focuses on the model of students in the developing world. It proposes place making through an understanding of their diverse backgrounds. Place making is achieved through acknowledging the existing sense of hybridity in spaces of origin for the city dweller (the families of these students). They design new forms of knowledge and cultural expression in order to cope with the demands of urban living and a globalised market economy that has no place for the poor. This research will investigate the psychology of space and investigate the social relationships it will help build through creating an inclusive built environment.

Furthermore this research will investigate the students' understanding the value of claiming an education. Through designing a prototype that will help support and significantly contribute to the retention and success of students through not only the design of space but the programs it will house. In addition, it will investigate the connections students will make with the communities in which they are learning and living. In order to enhance these connections and the

relationship between civic life and robust intellectual enquiry will also form part of the investigation. Furthermore the thesis will construct a prototype which will help build the self sustaining student who will also be able to engage in a dialogue across all disciplines and be eased into the transition from the informal to formal space. (The First Year Experience: 2010)

Landscapes in developing countries are made up of cities, townships, towns, farmlands and rural 'homelands'. The influx of Rural/township- urban migration is still one of the major phenomena in these cities. (Robinson 2000:) Residents of the township and homeland seek a life reflective of those economically well established. The city becomes a symbol of affluent development. Those who manage to make it to the urban realm come in pursuit of furthering their studies or finding better paying jobs. The inner city, being the space where most of these migrants settle becomes a space of mixing/s of various kinds as well as the fulcrum of alternative modernities. The city becomes a foothold for many entering the economy but also a site of modernity and transculturations.

Transculturation is a term used to describe the coexistence of different socio-cultural groups used to construct a univocal architectural narrative. Transculturation is both a challenge for those engaged in it and a highly productive phenomenon for society. It is a challenge because the city dweller finds themselves having to reflect the context in which they find themselves in-between the rural and the urban. By negotiating liminal places and periods of their lives, by learning to make new places and identities for themselves, people become stronger, and society is enriched by their experiences. In addition, it is a



global phenomenon. Urban rural migration presents the new city dweller with having to create alternative modernities resulting in transculturation.

Although migrants come in pursuit of a better life, the developing countries in which they reside also bare the same aspiration of advancement. Politics, economics and infrastructure play an important role in the advancement of developing countries. Therefore developing countries have to breed intellectuals who will redress these issues in their context in order to compete in the global market.

The direct relationship between education and development at an economic, social and cultural level is clear. Societies throughout the developing world still consider literacy, especially through access to educational institutions such as universities, to be the primary example of development. Amidst these concepts of development the built environment (architecture) could play an important role. The design of buildings can respond to, frame and be transformed by people and the diversity they bring into the city.

The question for us in the future is what kind of transition do we imagine for young intellectuals to assist their countries' development from a developing to developed world? If the majority of the population of these countries are in the under privileged areas, which provide very little resources because of the rural urban divide, what should developing countries be doing for them? The cities need to allow for an intellectual environment required for the emergence of the young intellectuals. This environment should not only cater for the young mind's intellectual and psychological needs but their physical needs as well as integrate them into the urban realm and its sense of modernity. The question arises of what the psychological and physical needs of the disadvantaged cultural sectors of society are in space (architecture)? These disadvantaged cultural sectors of society are those that come into cities and end up in townships where their aspirations come to an end. What then is the role of architecture in their advancement to create a supportive intellectual,

emotional and economic environment.

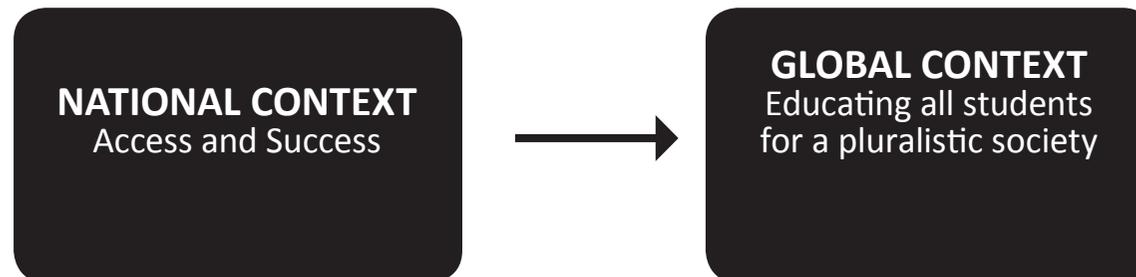
In her book *Campus and the City: Urban Design for the Knowledge Society* Kerstin Höger presents three questions, which are set in a present and future context:

1. How can architecture and urban design be used to consciously stimulate social, cultural, and economic life in and around universities and communities they are placed in? (Hoger 2010:)
2. What kind of spatial and programmatic organizations promote internal knowledge transfer and social interaction while simultaneously integrating with surrounding urban environments? (Hoger (2010:)
3. What kind of urban strategies can best nurture the dynamic synergies needed to create sustainable centres of knowledge and learning –incubators of innovation that can flexibly respond to the fast

changing demands of industry and society? (Hoger 2010:)

These are questions asked today to challenge the role of the university in the 21st century, in a context of globalization, post-colonialism and specifically to South Africa post-apartheid.

This thesis has asked similar questions and tries to give voice to the African perspective of things as most of its investigations take place in the West. How might educational knowledge be more inclusive and relevant thereby challenging the canon of colonial perceptions? And how do increasing levels of migration challenge the aims of education in traditionally perceived homogeneous societies? (Lauder, Brown, 2006:14) Therefore the question arises of 'What has the advancement of education and a democratic state meant for architecture?'



What is your name?

Sibongile Dyantyi

How old are you?

20

What are you studying?

Bio-technology

What year are you in?

1st Year

Where do you stay?

Old Belhar ,8 Lavender Crescent

How do you feel the space affects your state of mind and learning capabilities?

Safety is an issue which determines my study time so im not as free as i would like to be. I have to go home early even if i want to study for longer because i walk to school and the route i take is not safe.

How do you pay your fees and what sustains you?

The people at home pay my fees. And i work part time to have spending money

Where is Home?

I'm from Eastern Cape-Queens Town

And who is Home?

My parents and my younger brother nad sister.

How did you find the shift from home to here?

It was hard but my friends helped me adjust and also i found comfort in God. But still every time i get a chance to go home i do.

What do you do for pass time?

i go to Church, love reading, sleep (hahaahaa) and go out to eat but there isn't much to do around here so we get really bored.

All the mall are very far away



setting



STUDENTS

“Previous research has indicated that in the US between 80% and 90% of gains in student knowledge and experience occur during the first two years of college, indicating the importance of initial college experience” (Reason, Terenzini, & Domingo, 2006). In Australia, approximately one third of all students entering university fail to graduate and of those, nearly half of them leave during or just after their first year. “Lamese Abrahams (Pitkethly & Prosser, 2001) One can only imagine the statistics in developing countries students are faced with so many more challenges. The following paragraphs are dedicated to depicting the challenges students in developing countries face.

ZHINHLE is a 19 year old repeating first year student from a family of 9 and one of two who have made it to varsity. Her mother is unemployed and does odd household jobs for people from time to time. She resides in a township in Kwa Zulu Natal. Here is her story:

I did well in my matric my mother was very proud of me and I was accepted at the University of Pretoria to study Actuarial Science. I had financial aid and res and everything was set in place for me. The day I arrived to register the faculty told me the program was full and I should check the department of education seeing as they might have some places left. I was crushed and thoughts of becoming a teacher just made my heart heavy. I wanted to make my mum proud and didn't know what to do. I had run out of money to commute to and fro to the university as I was staying in Soweto at that time. My sister called me and told me Wits was having a late registration and I was like why not let me just go try my luck. So I came and managed to

register for computer science but then it hit me. I had no funding whatsoever to pay my fees and living expenses for the year. Still living

In Soweto the family my mother had asked for me to stay with asked me to move into their cottage and being an unfamiliar space it was just hard to adapt to the new environment, the walls were dull and most of all I was alone, an experience that was rare to me . Varsity started and still I had no way of paying my fees. I applied for financial aid and it looked promising. By now though my studies were beginning to suffer, I contemplated suicide thinking I have failed my mother, but Gods strength is made perfect in weakness so I persevered. I finally got financial aid and res accommodation, but the year was almost at an end and my marks were too bad to improve, I was excluded. It's a new year I appealed my case and was readmitted into my program but now I've lost my financial aid, my older sister who was helping sustain me is sick, I got mugged the other day of the R300 my mother had sent me for the month, rushing to class from the taxi rank since I had to move back to Soweto because I don't have the R6000 secure my place in res. The future looks bleak but every day I pray for a miracle. I sent an e-mail to a local Dj who helps students in need and have also gone back to financial aid and they said if I improve my marks they will help me again.

From Zinhle's story the issues that affect students coming in from outside the urban realm are namely:

- lack of information flow;
- lack of accommodation;
- single financial aid model and study path unsuitable for her needs;
- strong relationship with her family but lack of communication with key family members in time of crisis, leading to sense of loss to



- and need for short term intense support to improve marks
- The University World News 2007-2009 published that:

'My neighbour... not my friend'

DENNIS GEORGIANNIS AND BIANCA MARIE SAMPSON

TWO international postgraduate students have died in Wits residence in over the last month, but many students don't know which procedures to follow or how to react in the event of a medical emergency.

Residents are encouraged to get to know their neighbours and to be aware of their whereabouts, but this does not seem to be put into practice in reality, according to one student from Barnato Hall who wishes to remain anonymous.

"You might be my neighbour but you're not my friend," he said, describing the general attitude at Wits.

This indifference between senior two students may be due to a lack of postgraduate orientation. Programmes included in O-Week at the beginning of the year are directed primarily at first year students and not at postgraduates.

New postgraduate students therefore struggle to find their way around the residence system and create close friendships within a short space of time.

Head of Student Accommodation and Residence Life, Mr Rob Sherman, confirmed that postgraduate students are never orientated.

"We are not dealing with ignorant people," he said. "We don't

know them down like undergrads." Dr Wellness Centre has (2014) and explaining what one should do in a medical emergency. Plans are being to various residences to find out if the students had seen the posters in their corridors.

Students in College House and Delanyville House have never seen any posters of the sort.

Carol Mawless, a sixth year nursing student in Barnato Hall has never seen any posters either. She has also never received any information on what to do in a medical emergency.

Signboards with emergency contact numbers were seen outside West Campus Village.

When asked what should be done in a medical emergency, many residents suggested talking to security. The Barnato house committee chairperson, Topsy Nkomo, confirmed that security would be your first point of call.

Other universities like Rhodes and Cape Town have made postgraduate orientation programmes and information booklets with details of support services available to students.

Wits postgraduate students, however, are expected to find information on their own. "We assist them if they ask," added Sherman.

VUVUZELA

Know your alcohol limits 2

SRC blocks Facebook 3



Othello like you've never seen it 6

Zakumi is really a Witsiel 8

Suicide in Senate House



EMF LALLA
ANOTHER Wits student has died in campus. This time in an apparent suicide.

The student was identified as Shivanthi Madhavan, 24-year-old, from Durban.

She was registered as a first year student with the faculty of Commerce. Madhavan was from Limpopo province and is survived by her father and mother who have been informed of her death.

Campus security found the body in Senate House on April 14.

Two English lecturers, Professor V. B. Madhavan and Dr Arlene Erasmus, on the third floor of Senate House, were approached by campus security to look out of their windows to confirm there was a body inside.

The two lecturers were in Madhavan's office when Erasmus

found her. She was registered as international relations (IR) second year. She, social and performance arts (SPSA), psychology and early studies accountants.

A member of the Wits psychology department said Madhavan's study was her final semester psychology paper last year.

She was also registered as second year international relations as a possible major but failed to attend classes, according to IR Department.

The third year class was approached for comment but they were so late to the class who knew her.

In media studies Mr Van Dyk said she had been in the class three times from IR class.

She was described as quiet and

VUVUZELA
UNIVERSITY NEWS PAPER ARTICLES ON STUDENT LIFE
WRITE TO VUVUZELANEWS@GMAIL.COM

- 62.5% Matriculation pass rate 2009;
- 40% of South African students drop-out of university in their first year;
- And the Student Pathways study by the Human Sciences Research Council also found that on average only 15% of students finish their degrees in the allotted time. Furthermore the Government of South Africa has established a financial aid scheme for underprivileged students;
- The National Student Financial Aid Scheme (NSFAS) offers a unique opportunity to access a loan, part of which can be converted to a bursary, but this fund cannot reach every student, so some are left to find other means.

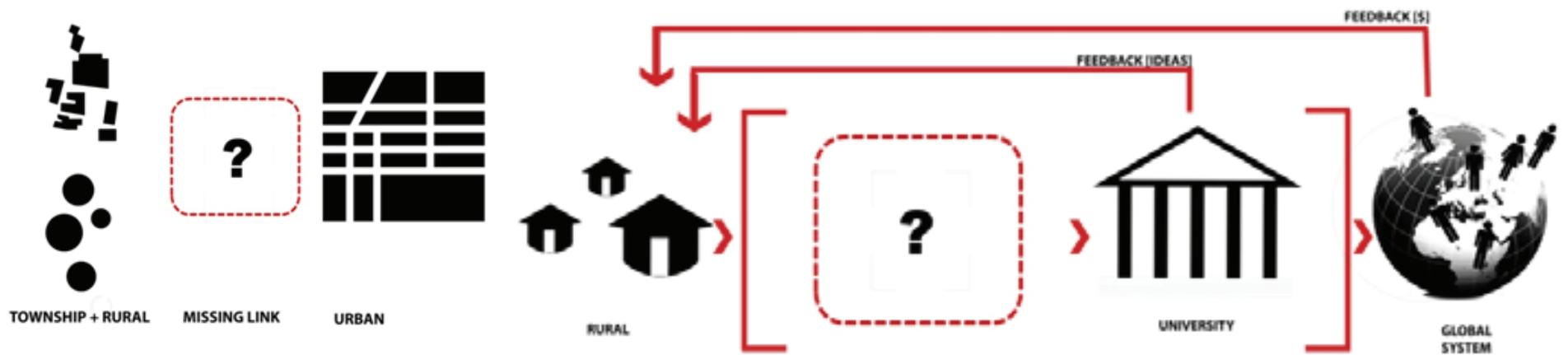
This is the setting from which this thesis will approach its architectural question. What has the advancement of education and a democratic state meant for Architecture? The thesis addresses the problems highlighted, through the creation of a new typology of trans-programming the spatial needs of university students. The focus will be on accommodation as it is a spatial need and a part of the university that can branch out into the community, whilst still retaining the image of the university. Therefore being an agent of community transformation, while allowing students to gain an enabling university experience.

Some of the key aspects of design that should be considered when designing spaces within Universities should draw on the cultural and historical resources of the students, to create an inclusive environment. Jennifer Robinson in her contribution to the book *Blank* based on the state of architecture in a during apartheid, post-apartheid and the future states that

: 'Architecture here has a role to play in the cultural growth and development of the whole people. It should therefore draw on cultural and historical resource, the possibility and memory of ways of living in spaces other than those dictated by a dominant order.' (Robinson 2000:) This concept demonstrates the theory of Hybridity which will be the overriding concept of the architectural development in this paper.

The built environment is a physical representation of man's rationales and understanding of space. If the everyday lived space of the city is one that doesn't reflect on this current cultural reality of the variations of cultures that these students are from then advancement is hindered. Architecture has to test the threshold of design and forge dynamic, functionally elegant interventions, more than that socially responsive. (Makeka: 2002)





TOWNSHIP + RURAL

MISSING LINK

URBAN

RURAL

UNIVERSITY

GLOBAL SYSTEM

FEEDBACK (IDEAS)

FEEDBACK (S)



What is your name?

Lungi Citwa

How old are you?

19 in June

What are you studying?

Bio-technology

What year are you in?

2nd Year

Where do you stay?

Collin Williams Res on Campus. I stay in a single room but had to fight my way into Res

How do you feel the space affects your state of mind and learning capabilities?

It depends how you adapt to it.

How do you pay your fees and what sustains you?

My Parents pay some and then NAFSA the Bursary scheme pay for my books and food

Where is Home?

I'm from Eastern Cape

And who is Home?

My parents and my younger sisters and daughter.

How did you find the shift from home to here?

No drastic change because I was at boarding school for high school

What do you do for pass time?

I facebook, watch TV, sleep, go to Tyger Valley

Future Plans?

Work in Dubai

theory

1. EB

14 A STATE OF HYBRIDITY [architectural context]

Who Am I
An African
An African African
A young African woman
A young African African woman
Am I defined by my place, My roots, My soil?
Or is there room for change ...change...change
I won't forget my place, find new roots, or plant in new
soil
I will embrace the two for I cannot stop the world from
growing
But also the world should embrace me
I do not have to prove myself
Because I am a young women ngwanyana
Caught between two worlds
I shall be ngwamen
Nwga taken from the first letters of girl in my native
tongue
And men the last letters of women from a language
than is not my own,
But have learnt to embrace to be accepted in today's
society
So I shall answer myself and say
I am Ngwamen
Keabetswe Karen Mabote

By Keabetswe K Mabote 2005

To address the different questions regarding the role

of architecture in the life of a student; one has to understand the architectural of the 21st century, a state of Hybridity. The poem is personal reflection of the emotional state of the author which is reflected in the architectural theory of Hybridity.

1 + 2 = 3rd space

Architecture was one of the principal means used by colonisers to impose a new social and political order. It was also used to maintain control over colonised subjects. Colonised cities with their orthogonal grids countering the colonizeds' roundvells were deemed to educate the colonial 'savage' to elevated forms of habitation, as they were considered backward in relation to western norms. This was their idea of transforming space form informal to formal. History dismissed the colonizeds' existing way of life, architecture and its principals, which were a representation of their way of surviving (Hernandez 2008). The act of colonization which had its polarizations has transformed in the post-colonial era. Post-colonisation through the globalization phenomenon is reflected in the spatial divide between the rich and the poor. The architecture of the poor also still not having a voice like that of the colonizer is produced as an act of survival in a world-system that is adverse to poverty. Certainly buildings provide the physical space where people perform and negotiate their differences. Even though buildings are inherent, they express those narratives of conflict between people, power technology and social change. How then does a non literary subject like architecture travel across cultural borders? (Hernandez 2010: 18-25) This is where the concept of Hybridity, comes into play: where a heterogeneous space of difference and diversity is displayed spatially and as the poem has

reflected internally. New spaces that reflect this very phenomenon have to be constructed to represent a change in time where differences are negotiated.

The idea of economic advancement is associated with Tertiary education institutions and they hold a perception of prestige in developing societies. So they serve as a platform where differences can be negotiated. Then spaces within the institutions have to provide spaces that reflect this concept. Post-apartheid has given the country a platform to form new institutions that would deal with the phenomenon of diversity and development and the Educational institutions seem the ideal space to create these new spaces that reflect a state of Hybridity.

Hybridity, as Herendez describes is a useful vehicle to study the particularities of socio-cultural interaction between different groups in circumstances of colonialism and contemporary globalization. Architectural Hybridity does not lead only to the formation of new synthetic architectures. Instead hybrid architectures are a testimony of deep and complicated procedures through which they emerge (social, political, historical, economic) He continues to make reference to quote Bhabha who describes Hybridity as neither one nor the other but instead always in-between, where it continually transforms itself according to the dynamics of cultural interaction.

The gap between cultures is not void but a space where cultural meaning is constantly negotiated and reconstructed. Spatially this gap can be described as the space left barren, purpose less or in the future planning in a neighbourhood in the township of Khayelitsha is appropriated for cultural purposes. A space culturally meant for improving the community but the

community taking it upon them to improve it.

Architecture today is there to be representation of all people and be a celebration of its kinetic temporality as with human culture, a non stagnant aspect of a human being. Contemporary architecture should not be an expression of colonial power or the vernacular because both cultures are impure and has to express the coexistence of different cultures and forms of dwelling, to exceed any simplification of the colonized.

16 Interpretation Centre]

Firstly, science has transformed the meaning of matter, and the science of construction has turned building from a historical experience of inter-generational cooperation –learning over time what works and passing this on by tradition and apprenticeship into one of thinking through by means of structural formulas (Mitcham, 2005). The Mapungubwe Interpretation Centre presents a hybrid typology between science and tradition. It reflects relationship that architecture in the 21st century has to have with its surroundings and within a global context which is technologically advanced.

The Mapungubwe Interpretations Centre is an example of a building that attempts to re-root building in the earth capturing the spirit of place, working with and enhancing its surrounds rather than being an object in the landscape. The design concept had to respond to the direct history of Mapungubwe in order for the centre to be considered vernacular architecture. The spatial designs principles, the materials used, the shapes and forms architecturally had to tell the story of Mapungubwe for the building to be a true reflection of vernacular. “...the locals used caves not necessarily for living but for shelter against rainfall or bad weather.” (Peter Rich, Interview). The domes have a cave-like feel; they offer shelter and security for the artefacts and at the same time appeal to the need for dark and minimal lights required for sacred spaces. The Mapungubwe interpretation centre is an ecological building and is built with the idea of permanence in mind, it is meant to be a building that does not require maintenance, as was mostly the case in the ninth century at Mapungubwe, although at that

time the thatch roofs and clay walls had to be re-done whenever it showed signs of ageing. The entrance dome is based on a system used by the Venda’s where their huts were placed on the apex of an equilateral triangle; the spaces between them were used as social spaces.

Upon doing the research and contextual analysis, it was clear that the ancient society had symbolic traditional values and place making was a result of ritual. (I.e. the arrangement of huts around the kraal created a sense of a defensible space, the practice of burying people at their homes in places related to where they spent most of their time, the class separation, wall enclosures, etc.) In African architecture, the circle represents inclusivity and even democracy (Frescura, 2002:3).

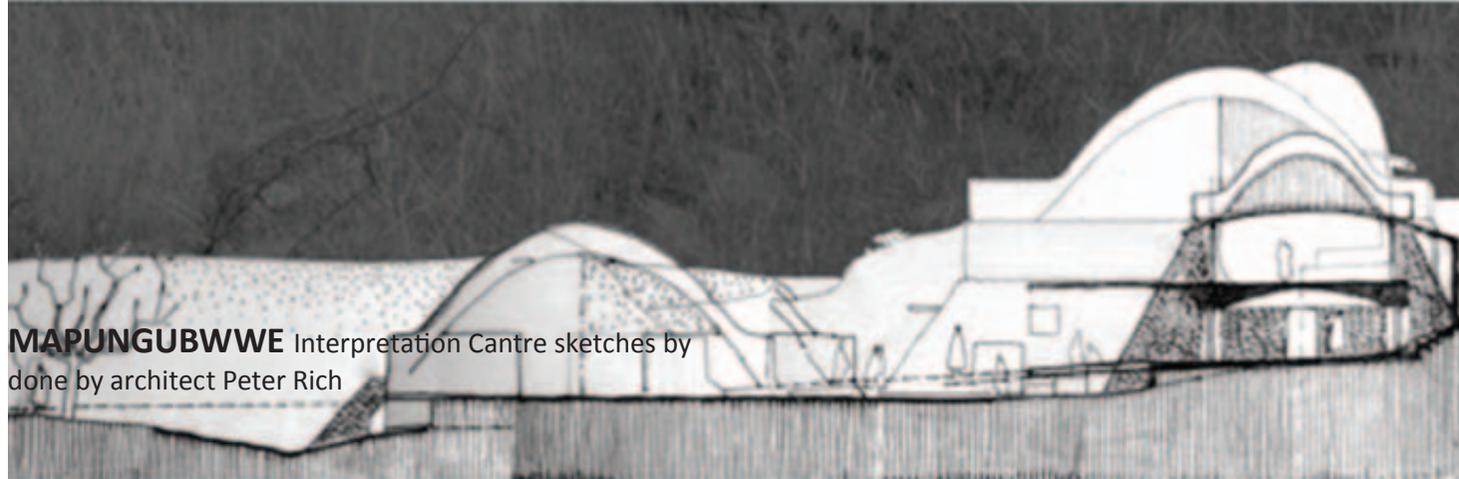
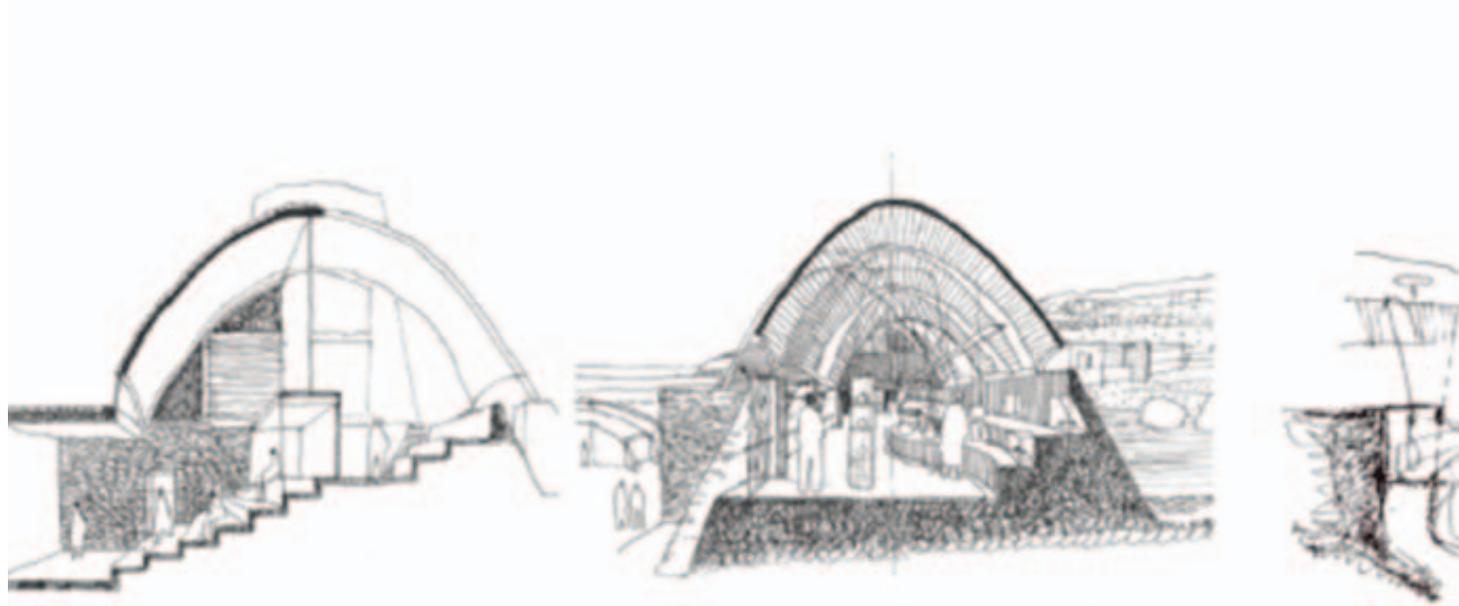
The site was chosen for its heritage; it provided the perfect place where Africans could pay homage and celebrate their ancestors, and secondly its location at the base of the hill was the place where the natives lived, the king resided on top of the hill signifying importance above the community. Another reason why the building is placed on the bottom of the hill is purely for views into the landscapes; here we find the first similar idea of the past re-used in the present as a means of understanding space hierarchy. The architect, Peter Rich, describes the positioning of the building as “a place where you come in and get out of something for view.” (Peter Rich Interview, 2009)

The building is a product of a life-long process by the architects’ involvement and curiosity African architecture, understanding of local issues and site, and how all of that came together to inform the response to the brief. The Architecture evokes a feeling



MAPUNGUBWE Interpretation Centre

a local avant-garde language which if adapted can be a new vernacular. The building proves the success of architecture that draws on its spatial principles of its context, of which this thesis draws on. Given the diversity of the people surrounding the site the architect accepted this transculturation phenomenon and designed a building that reflected a univocal architectural narrative.



MAPUNGUBWWE Interpretation Centre sketches by done by architect Peter Rich

18 meaningful way to finding a way forward (Harrison). A Hybrid setting is thus required to counter the formation of dual cities.

The new urban development pattern of polarization which has continued the legacy of spatial segregation which apartheid had began. The three most important structural elements in a city are employment, housing and the transport connections between them. To a significant extent they determine how efficient and equitable cities function. Integration seems to be the consented solution at both a national and local level. This would be done through establishing low-income housing close to employment centres and develop an economic base in the township. (Harrison)

There are four spatial trends that are affecting spatial economy in Cape Town namely: decentralization, deconcentration, northern drift and differentiation. The obstacles hindering development in the South of the city are lack of infrastructure and financiers believe there is poor commercial prospects of developing in such areas. Development is also hindered by politics and lack of professional skill in the areas. The challenge then to strengthen the economic base of the south is to create employment and income through the production of goods and services for wider markets beyond the locality. Sustainable solutions are needed that also address new priorities with changing times. (Turok)

The sustainable solution that the thesis takes on is that of enhancing the life of a student specifically because only through education can the poor break into the professional world. Due to certain obstacles this progression is hindered and thus this thesis aims to address them. The thesis also aims to aid the

community they dwell in so as to empower the both of them. This is done through a variety of things such as site selection, and trans-programming.

ARCHITECTURE AND CULTURE

The theory of Hybridity includes the idea of culture and so the significance of culture in architecture has to be explored.

“To be truly expressive, a building should grow out of its natural, social, and civilization context. It should reflect not only the personal values, needs and interests of its dwellers but should also respond to its natural and architectural site. Thus the formal organization of a building cannot be imposed on a people from the outside; it should originate from the context of human life in the given region. In this origination the process of spatial articulation results from a thought-full grasp of the dynamic interaction between the material elements of the architectural work and the human vision which guides this activity.” (Mitias 1994:103)

Mitias denotes the important role in which culture should play in the design and construction of buildings. He stressed the idea that a building should grow out of its natural, social and civilizational context. Meaning these issues should not be ignored when we think of architecture.

The Modern movement is an adequate example of how architecture expresses those narratives of conflict between people, power, technology and social change. The key concept that shaped the Modern era was characterized by changes in society, from feudal systems to industrial capitalism. Technological

advances gave society hope for a better world where technology was the solution to all mans problems; therefore modern architecture was a product of the ‘machine age’ cultural discourse. Architects designed buildings that would facilitate the new programs that would house technological advances without typological precedent (Mavunga 2008: 12).

This epoch of hybridity where we see cultures hybridizing should shape the buildings being designed in a like manner. This is especially seen in developing countries where life has had to become an amalgamation of two identities (the western and local). Locals appropriate their lives to achieve a sense of belonging in the global sphere. We are in a globalization era which is shaped by hybridity.

For Lefebver the production of space occurs along three different but related dimensions or levels- space as ‘practiced’, ‘conceived’ and ‘lived’. ‘Spatial practice’ is the material and functional reproduction of a society, incorporating competence in every day routines. ‘Conceived’ spaces involve the intellectualizing of space through codified languages of planning schemes and design discourse. The ‘lived’ is the sensual world of the everyday life- the ‘space’ which the imagination seeks to change and appropriate. This project reiterates this concept of ‘lived space’ in relation to the city migrants (the student in particular). It recognizes the significance of the imagination that seeks to change and appropriate oneself to fit into a global context but emphasizing the importance of maintaining ones identity and culture simultaneously.

When designing, the architect engages consciously or unconsciously with culture to produce buildings that are in some way an interpretation of culture.

PRECEDENT [The Brazil Pavilion]

This project was a joint commission between the Brazilian architect Lucio Costa who did the proposal and Le Corbusier who oversaw design development and construction. This student residential building amongst many other residences was commissioned to house the Brazilian student's coming to study at the Cite University in Paris. The residence was a primary example of the Modernist movement, with utopian universals of the 5 principals of modernism. For instance the dormitory slab sits on pilotis giving free expression of the communal rooms in the residence. The pilotis also give the building a monumental feel as it is raised of the ground allowing continuous view and passage through the campus. The local technical conditions of price hikes due to the war did not allow for Le Corbusier to use a steel frame as intended for the design but a one constructed of concrete. (Gans 2006:54-55)

This form of architectural expression did not display an international style or a national one but had the intension of displaying a utopian style. This after the World War was a response of the built environment to rectifying the situation. The idea was to create a uniting architecture set with no precedent and to produce structures that were economically friendly was a direct response to the situation at hand of a very low economic status after the war. Architecture framed by societal needs.



Brazillion Pavillion by Le Corbusier in Paris

The state of Hybridity has been greatly influenced by globalization, but the assumption of some critics then is that through globalization cultural identity is lost and this is not the case. John Tomlinson a sociologist describes cultural identity as more a product of globalization that its victim (2003). The widening, deepening and speeding up of world-wide connections in all aspects of life, from the cultural, to the criminal, the financial and the spiritual, as Anthony D King describes, is the process of globalization realized. He continues saying that there is no identity outside its social, cultural and, historical or geographical context. Only within this overall frame work is the concept of globalization. His definition of cultural identity is a group, culture, or of an individual as far as she or he is influenced by her or his belonging to a group or culture. (2008)

Identity can be described as common ideas or shared characteristics; it is what becomes a form of cultural power to resist the homogenous forces of globalization (King 2008:222). Globalisation is not a new concept but dates back to colonization. Although it is a worldwide concept, because of the different cultural, historical and political context which it is manifested into architecture, space and nomenclature which prop new identities it cannot be associated with homogenous thoughts. (King 2008:230) King proves that identity is relational even in an era where globalization seems to be more profound. When cultural ideas and practices are transplanted, they not only carry the marks of history they also get translated. Hybridity is at the heart of identity

EXCLUSION & INCLUSION IN ARCHITECTURE

[shared space]

We live an age when there is a great optimism about education to influence the well-being of individuals and nations. Education holds a unique position in modern societies become many people believe that it benefits society at the same time as meeting the aspirations of students and their parents. Although what strengthens this faith is the idea that it is a source of social justice and national efficiency. That education offers students the promise of equality of opportunity irrespective of social background, gender or ethnicity, while providing the economy with an educated workforce. (Lauder, Brown, 2006)

This concept of inclusion through education follows suit in architecture, where architecture is mans' rational of their world and will therefore reflect the dominant order. If the dominant order in South Africa now is one of democracy and development, the new order should be reflected in its architecture. The idea is not to emulate the 'western' architecture but develop a new language that would be reflective of a this age where Africa has found a voice. An inclusive architecture is one which engages with the complex social conditions of the present circumstances, to open up new spaces for negotiating the future (Noble 2008:90). 'Form follows function' is the idea that carried modern architecture and is still adhered by the architectural world today. Function is taken broadly to include any social, political or cultural purpose (McLeod 2004:50). If the social condition is that where education is one of the important means of being included in this world order then new institutions should be design that cater for these social conditions. Architecture should house programs that are stepping stones for the development of all.

"...part of the architects task is to give form to

function, to make it more than function. Architecture accommodates function, but it also interprets and potentially expands and transforms function. That is a fundamental dimension of its influence." Mary McLeod

Through acquiring architectural inclusion human plurality can be mediated (Nobel 2008: 91). This draws us to the conclusion that architecture has to diverge into designing buildings that would accommodate new typologies of buildings that cater for the social, political and cultural conditions. The typology set out for construction in this paper does exactly this. It fuses functions together that would support a majority that seeks an inclusion but is lacking a stepping stone to do so. The Intellect, Emotional and Economic need to be housed under one roof allowing for all to have a chance at advancement.

"... The architecture of identity requires our awakening to the surrounding environment." Jonathan Noble

PSYCHOLOGY OF SPACE [place making]

In order to answer the question: What are the psychological and therefore physical needs of space that will create a supportive, intellectual, emotional and economic for the disadvantaged student? The thesis explores the psychology of space in a Hybrid context. The psychology of space refers to the interplay or relationship that humans have with their surroundings. Their surroundings being all that is natural on the planet including social settings, the built environment, learning environment and information environment. The psychology of space investigates the effects of environmental stress on human performance and restorative environments.

The mind can experience openness, lightness and receptivity. The formal structure of the architectural

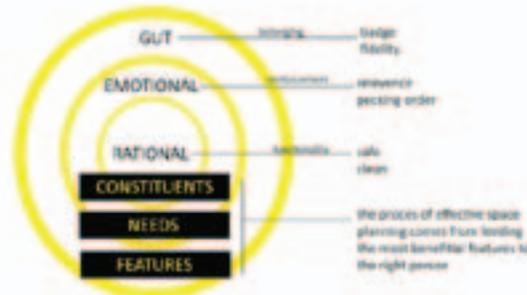
work is an intelligible structure, and as such can be grasped in the fullness of its significances by the mind. (Reference) Gestalt psychologists say a building can possess structural features whose experience can produce in the mind a state of cheerfulness. This goes to prove that there is indeed a relationship between space and the mind. Ralf Weber says architecture can represent express or communicate, through this explanation expression is then defined as the sheltering and encouraging of human activities and makes clear to us the traditions and cultural heritage in which those activities are placed. (Mitias 1994: 104-110) Architecture in our contemporary context then has to express this notion and not only represent a single perspective in its representation but be all encompassing of all cultures that make up a city, resulting in a shared city with cultural anchors. If architecture is a shared expression then the mind finds comfort in familiarity and therefore will be cheerful.

Henry Watton says ‘well-building has three conditions: Commodity, Firmness and Delight’. He supports his argument by adapting a line from Vitruvius saying commodity is defined by a building must be arranged so that it fulfils its function and the human activities that it was intended to shelter can be carried on there in a useful fashion.

To further prove the idea that indeed space/architecture does affect the mind and intern ones culture. Mitias gives an example of the Bororo a South American tribe who were colonized by Salesian missionaries and they reconfigured their built environment. Originally the Bororo laid out their village in a circular manner and the missionaries reconfigured it into a rectilinear layout. This led to people losing their sense of cosmic orientation and their social relationships were altered

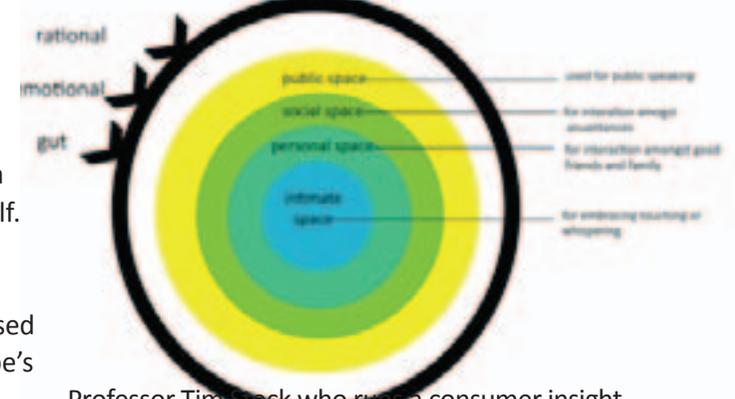
(Mavunga 2008: 15) The practices and beliefs set out and facilitated by the circular layout of their built environment were altered, hence they became more susceptible to an alternative Christian explanation to life when they could no longer see the embodiment of their own values in the built environment(Mavunga 2008: 15).Our sense of space is tied to our sense of self. How we plan begins with our sense of position to the space we inhabit (Stock) This is demonstrated in the effect of the Bororo tribe being colonized. The Colonised automatically assumed a position of power so the tribe’s resistance to being reconfigured was over-ruled.

PEOPLE CHOOSE SPACES BECAUSE



discerned. They speak of democracy or aristocracy, openness or arrogance, welcome or therat, sympathy for the future or harkening for the past... In essence, what works of design and architecture talk to us about is the kind of life that would most appropriately unfold within and around them. They tell us of certain moods that they seek to encourage and sustain in their inhabitants.... We require buildings that generate a feeling of reassurance or of excitement, of harmony or contentment. Very often we may expect a building to connect us to the past or stand as a symbol for the future.” (De Botton 2006)

PROXEMICS IS TIED TO OUR SENSE OF SELF...



Professor Tim Stock who runs a consumer insight company called scenarioDNA that helps brands connect to culture, gave a presentation on the psychology of space. After a thorough investigation of the concept they discovered that meaning evolves from our sense of self and so our sense of space is tied to our sense of self. Aspirations are shaped by the limits of our existing vocabulary. Needs drive what is important. These discoveries reflect the idea that this paper is driving at, that people residing in areas that are disadvantaged are driven by their sense of self worth and need to uplift their homes so find a need to migrate and educate themselves. Their homes are at the core of their emotional identity.

Spaces of learning should therefore be shaped by the needs that these students have to help them reach their aspirations. These spaces should be shaped by learning and not instruction, be socially catalytic spaces allowing for experimentation, innovation and user involvement.





An aerial grayscale photograph of a city area, possibly a university campus, with a blue outline of the number '23' overlaid. The number '2' is on the left and the '3' is on the right. The word 'context' is written in blue lowercase letters on the left side of the image, partially overlapping the '2'. The background shows a grid of buildings, roads, and a large open area with a circular feature.

context

THE UNIVERSITY [\[site\]](#)

If we recall Kerstin Höger presents three questions, which are set in a present and future context:

How can architecture and urban design be used to consciously stimulate social, cultural, and economic life in and around universities and communities they are placed in?

What kind of spatial and programmatic organizations promote internal knowledge transfer and social interaction while simultaneously integrating with surrounding urban environments?

What kind of urban strategies can best nurture the dynamic synergies needed to create sustainable centres of knowledge and learning –incubators of innovation that can flexibly respond to the fast changing demands of industry and society?

This section of the essay will give a brief history of the University as an institution and will further focus on the history and vision of the University of the Western Cape which is the University the thesis will be analysing.



THE HISTORY OF THE UNIVERSITY AS AN INSTITUTION

The Western notion of the University dates back to the medieval periods and they have always had an impact on the development of settlements surrounding them. The close relationship between many universities and industry, a result of the close involvement of civic and commercial elites from the 1850's, led to universities being a key agent of modern society and therefore a key instrument of modernization. The key political factor that affects university activities has virtually always been funding. (Larkham 1998:1-4)

History has shown the strong relationship between the University and the culture of a society. The University serves as a platform for the dominant culture to be displayed in its architecture. Onushkin a renowned educationalist, saw the interrelation between changes in the environments of universities and its planning.

"... while there has always been a need for planning universities, that need has lately grown enormously, as a result of vastly accelerated changes in the environments of universities, accelerated increase in the demand of higher education and the many new tasks and pressures being thrust upon universities. The universities must therefore, now change and adapt more rapidly than ever before and this calls for an essentially new kind of planning...(Onushkin 1971:17)

Unfortunately the new kind of planning vision was 'green field' development. Where the University would stand in isolation and have no relationship with its urban context. But the Carnegie Commission of 1972 stated that " ...most campuses should no longer and

can no longer build medieval walls around themselves... instead they must create pathways to their many doors..."

This statement was only adapted by very few and in relation to our South African context most universities were designed for this very concept but over time security became an issue for some universities and they once again became gated communities with very minimal or no relationship with their urban context. The hybrid landscape of public and private functions became private once more in some cases. But physical isolation doesn't necessarily mean institutional isolation.

Most universities have had ambitions of making a physical and spatial impact with buildings and complexes of buildings that are distinguishable from their context. Brentano of the University of Berkley said they set out to become 'stately and glorious buildings'. Because of this the University of Central England stated that " it could be argued that universities ... have an obligation to produce new buildings of the highest quality which will contribute significantly to the built environment". Like the colonizer the university uses architecture to make a statement about the profile and prestige of their organization.

Having understood through history the power of the university as an institution on society, its architecture should adapt rapidly to its environment. This proves the necessity for trans-programming in the University, given the situation of a new gender of people coming into Universities in developing countries. This new gender of people is economically less fortunate and need a supportive environment that's not only intellectual but economic as well. The need for creating a relationship with communities

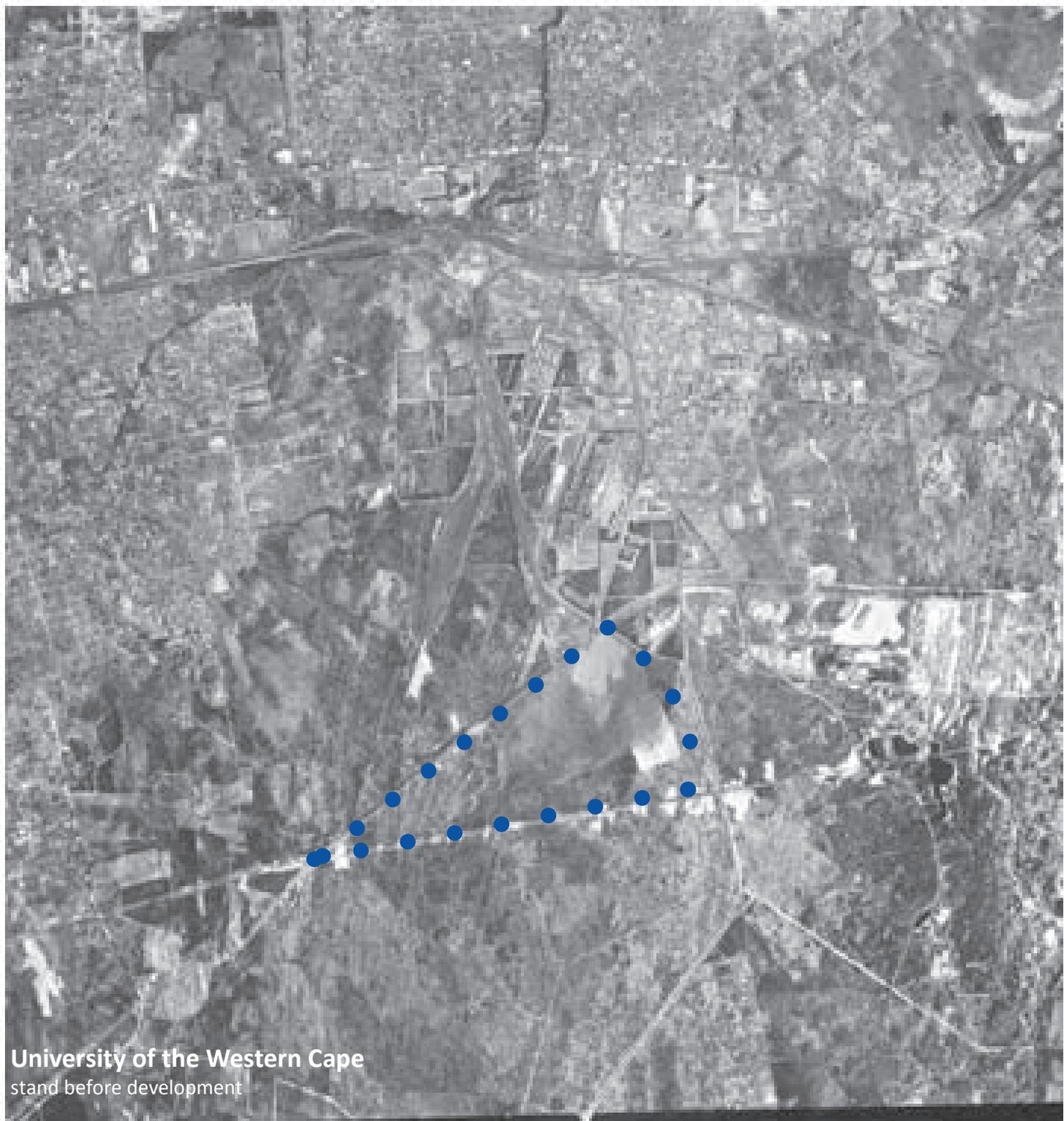
surrounding these Universities is also proved, for both the development of the University and Community it serves.

UWC HISTORY

Constructed during apartheid the University of the Western Cape was a product of this racial system, built to educate the 'coloured' people but survived a history of creative struggle against oppression, discrimination and disadvantage. The physical environment of the University at that time enforced the political agenda of apartheid in that it emulated a college or high school, not a university. The initial buildings erected due to need, funds available and the concept was to meet growth and lost opportunities and these were the Sports Centre, New Library, University Centre, Science Building, New lecture theatres and an administrative building.

The University first opened its gates to the first group of 166 students enrolled in 1960. What they were offered was limited training for lower to middle level positions in schools, the civil service and other institutions designed to serve a separated Coloured community. In 1970 saw the beginning of a new era and the institution gained university status and was able to award its own degrees and diplomas.(www.uwc.ac.za)

Five years later 1975 the black students were admitted to the University after a protest by students and black administrative staff under the leadership of Professor Richard E (Dick) van der Ross. UWC formally rejected the apartheid ideology on which it was established in its mission statement in 1982, adopting a declaration of nonracialism and "a firm commitment



University of the Western Cape
stand before development

A black and white photograph of a landscape. In the foreground, there is a path or a clearing through dense, low-lying vegetation, likely fynbos. The path leads towards a range of mountains in the distance. The sky is filled with soft, diffused light, suggesting an overcast day. The overall mood is quiet and somewhat desolate.

BUSH COLLEGE

Before the University was built, its plot of land consisted mainly out of sandy grounds forming dunes dotted with fynbos. These dunes are remnants of the strait the Cape Flats used to be. Nowadays these kind of vegetation still can be found in the university's Nature Reserve.

This gave way to nickname the university "**THE BUSH COLLEGE**" mockingly, due to its isolated location within these dunes.



UWC
The University growth over the years

to the development of the Third World communities in South Africa.”(www.uwc.ac.za)

Professor Jakes Gerwel, who took office as Rector in 1987, saw an unambiguous alignment with the mass democratic movement and a new edge to the academic project, under the banner of “an intellectual home of the left”. Despite severe constraints, students from the disadvantaged communities graduated in increasing numbers, equipped to make a professional contribution to the new South Africa.(www.uwc.ac.za) To the extent that one third of the first president of the democratic South Africa Nelson Mandela’s cabinet was UWC Alumni.

UWC VISION

The University’s goal is to strategically influence and develop the campus and surrounding areas, and develop and maintain a modern coherent physical and ICT infrastructure. They have divided this goal into four interrelated parts.

Firstly through being a

- Catalyst for regional innovation;
- Pinnacle City revitalisation;
- Corridor development ;
- and Node for providing Community links

All these under the sub-heading Sub-regional campus surroundings

Secondly by providing a coherent campus master plan and precincts which would address the following:

- Master Plan;
- Distinctive precincts;
- Decanting;
- Edge development;

- Off-campus sites;
- And Vehicular flow

Thirdly would be for the University to provide an environment that would provide flexibly re-use, refurbish and maintenance this would entail:

- Renewal and upgrade;
- Maintenance;
- And Health and safety

Lastly the concept of Space and data management which would deal with:

- HEMIS space data
- Space and venue management
- Timetable
- Location of functions

The University is working towards creating an environment able to help attract and retain the best minds, empower students from a variety of backgrounds to operate effectively in the larger society, and serve as an agent of change. In addition it is trying to work on reversing the ongoing deleterious effects of apartheid planning and further the ideal of a “livable city” and the in the reintegration of South Africa’s society. This reinforces the relevance of this thesis as it aims to achieve the same goals.

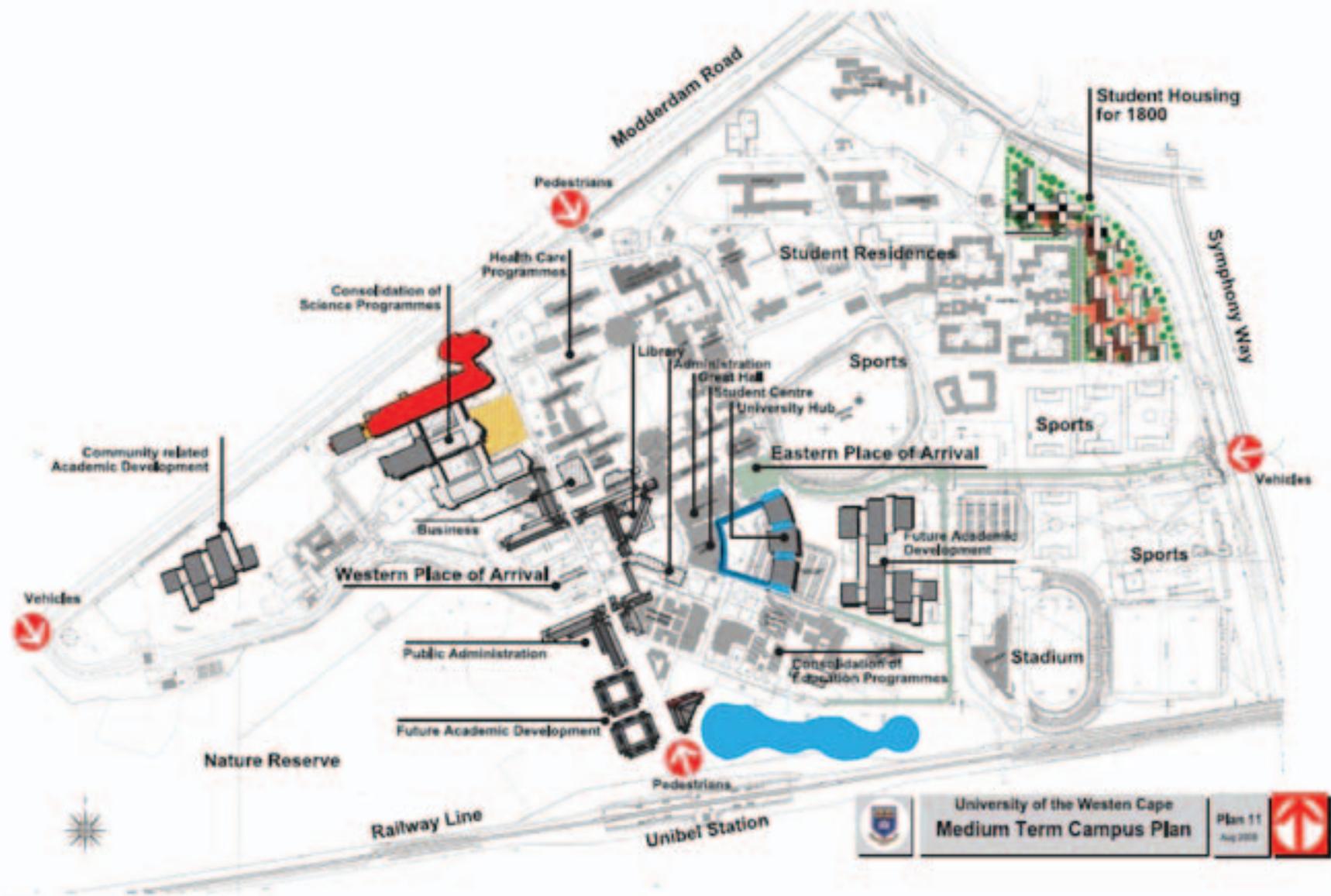
The University’s long term future plan is to expand on to the site adjacent to its existing site and proposes development of Bell rail Site. The site is 340ha of developable land, allowing for a variety of uses, both as an expansion of the City, and of three Universities in the area (UWC, CPUT, and SU Medical Faculty & Business School & Dentistry Faculty). The future plan is to break the “landlocked” nature of the three

universities, and truly integrating it into the City and Businesses in space and in use. One of the aims of this thesis was to create link the university with the community therefore the thesis is in par with the future plans of the university.

And the proposed uses of the land are:

- Campus town and cultural amenities to the south adjacent to the UWC campus;
- Technology transfer and innovation facilities i.e. Biotechnology/Bio-Health, ICT and Nanotechnology, etc;
- Test bed for new technologies and facilitator of cooperation;
- Wide scope of testing and verification equipment and services through university and other high-end laboratories available for both education, and active cooperation with the industry ;
- And an expansion of the Bellville city centre to the north

(Larry Pokpas 2010)





Medical Research Council

Tygerberg Hospital

The Tygerberg Hospital area includes the largest medical school (University of Stellenbosch) and the largest dental school (UWC) in Africa. It is also the main site for the training of nurses in the province (UWC and CPUT). Next door is the Medical Research Council. And in the immediate vicinity are six significant hospitals. This concentration of three universities, a research council, and seven hospitals suggests large opportunities for working on an appropriate scale for world class research and innovation in the health field.

Besides providing much needed exposure for new development the northern edge announces UWC's intentions to develop to the north, across Modderdam Road into poorly used Transprop land towards Belville. Initially this could be into pockets of Transprop land but later into a planned Metropolitan node for the sub region. UWC development is likely to be in the form of sports fields, a student village with commercial facilities, specialised centres for inter action with commerce and industry in the field of science and technology and community related visual and performing arts programmes.

The development would also connect with UWC facilities in the Tygerberg Hospital and the Belville CBD in the north.

Cape Peninsular University of Technology

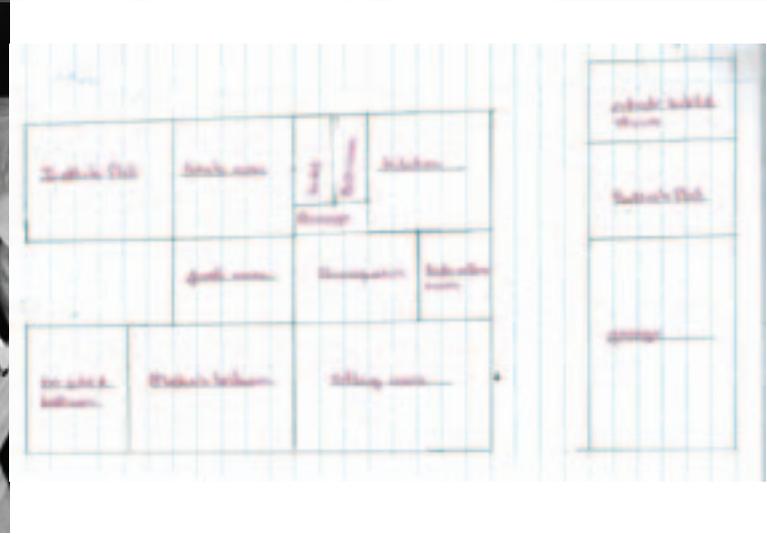
Belhar CBD Development



THE UNIVERSITY STUDENT

I come from a small community where education is deemed as the only accomplishment that can attain you greatness. When we do make it to university, it's a different world where one has to become independent but you have the confidence that one day you will be somebody. An old saying goes you can loose everything but ones you gain education no one can ever take it away from you.

The first time you walk into a lecture hall, all kinds of emotions and expectations come into play, but the ultimate goal is to make something of yourself and give back to the people who sacrificed all they could to get you to this point. Your mind is filled with ideas that are aimed at make you an independent thinker and some grasp that concept more tha others. This is the typical description of the life of a University student.





DESIGN RESPONSE

TRANSPROGRAMING [design response]

Trans defined by the Oxford Dictionary is a prefix occurring in loanwords from Latin (transcend; transfix) ; on this model used with the meanings “across,” “beyond,” “through,” “changing thoroughly,” and “transverse” .Therefore Trans-programming in the context of this paper can be defined as programming that goes across and beyond conventional Institutional programming. The purpose of this thesis is to create an inclusive environment for the student in the developing country who faces many of challenges that in turn hinder them from progressing. The thesis has thus investigated concepts of culture- to address the diversity that these students bring; creating an inclusive environment; the psychology of space; Globalization and the overriding concept of Hybridity. These investigations were a result of the different difficulties in relation to space that the students encounter.

STUDENT HOUSING

The University of the Western Cape is located in close proximity to 70% of the poorest communities in the Cape Town Metropolitan region. Of these communities very few find value in the importance of education. Student Housing is one of the University institutions that can venture out into the public and can be beacons of hope in the communities they are erected. The challenge for designers and institution is to see how they can be integrated to help each other? The question of how the university plays a role in the development of the community begins to be addressed in discussing this relationship. A further concern is the state of poverty most of

the students admitted to this university are in. How can this prototype help in creating a self sustaining student?

PRECEDENT [casa familiar]

The idea about precedent needs a thorough analysis because it has to question how it can be remodeled to fit into an African context.

Casa Familiar, living rooms at the border of San Ysidro, California designed by ESTUDIO Teddy Cruz.

Teddy Cruz in this design sought to develop a flexible urban infrastructure accommodating residents' changing needs. The housing project is described to be a high density, mixed use, hybrid neighborhood development, shaped by its location. Politics, culture and physical differences in close geographical proximity influenced the design of the both the spatial and temporal aspects of the project, reflecting the interweaving and juxtapositions created by the hybrid site of the border. (PRAXIS)

Developed in multiple stages, the project intrinsically relies on the evolution of community needs, financial opportunities, and physical growth. The first being the renovation of a historic church into a community centre, a public garden and some office space for Casa Familiar. The second phase evolves physical gestures made in the garden. A concrete arbor is built to create open-air rooms, circulation corridors through the site, a provisional market and supporting services for the community centre. (PRAXIS)

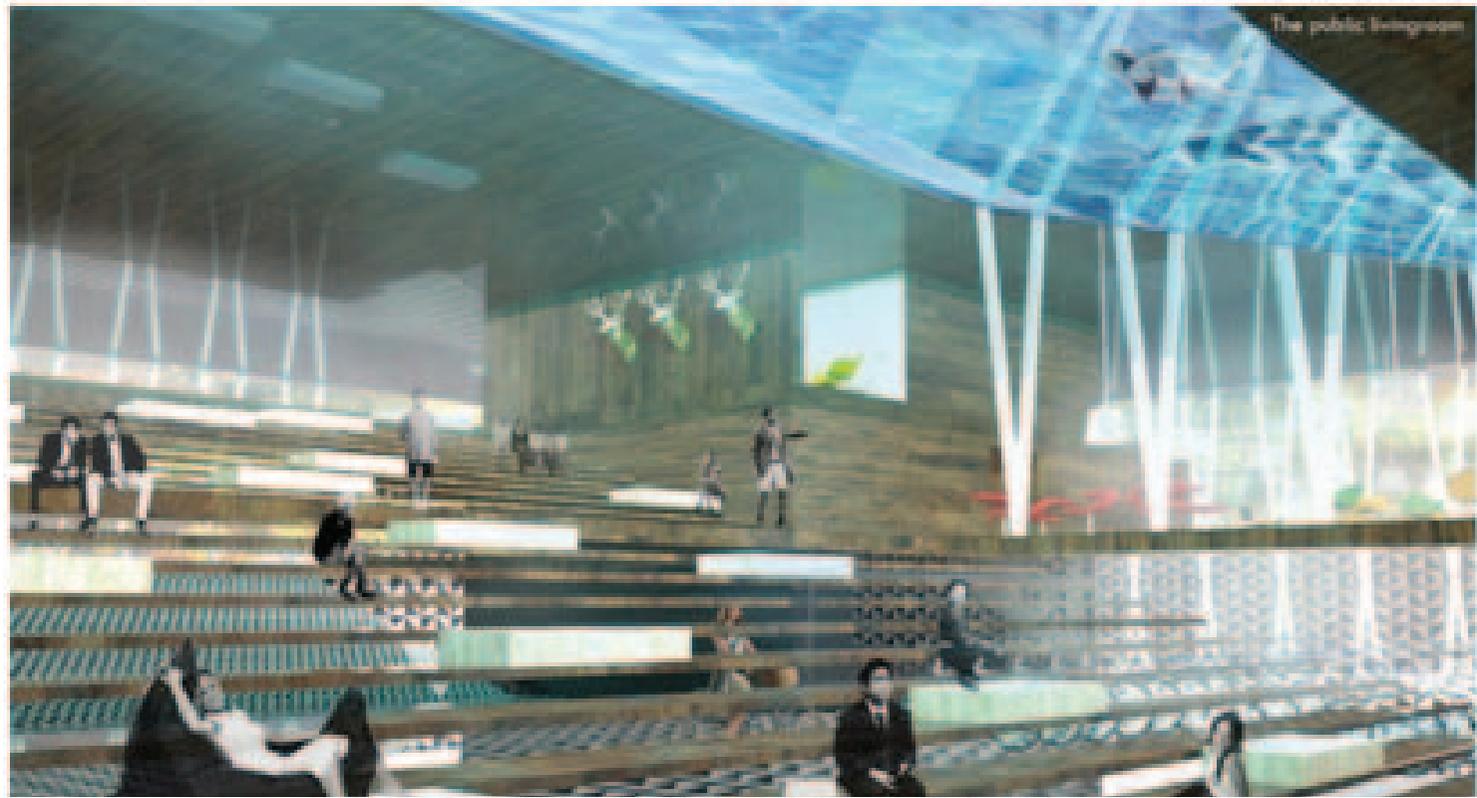
The concrete frames serve as infrastructure for affordable housing units built in the third phase. The units are occupied by multi-generational house households of extended families, and evolved from a highly user-driven program of neighborhood inhabitation, the housing units are designed to be flexible. The project hopes to create an explicit architecture for the agency's implicit expression of its philosophy of organic growth.



PRECEDENT [have a nice day]

Have a Nice is a proposal for a new student residential house in Toronto, Canada, designed by Swedish architects We Are You (WAY). The student residence consists of a public and private entity, unlike the conventional design of student housing which is usually just a private building. WAY created a single space flowing from floor to floor throughout the student housing part, the “vertical livingroom”. This creates a diversity in the spaces provided and emphasizes the connections between floors. The composition of programs that are integrated in the building, declares an identification of the need for trans-programming when designing such institutional buildings.

The student rooms vary in terms of accommodation understanding the different types of students that come to varsity and their different preferences: married, couples, friends, single, and groups. The Residence also provides flexible spaces for various activities.



MAKING ROOMS

The rooms for group activities are very flexible and divided by curtains. Depending on required space the curtains are adjustable to the needs. So whether you want a small intimate space for a group of two or a larger working area for 15, it is right there.



One open mileu. Self studies, reading, checking your mail.



Smaller spaces. Suitable for group activities and smaller discussions.



One closed mileu. For slideshows, meetings, movies etc.

THE VERTICAL LIVINGROOM

The vertical livingroom is the space between all of the private sleeping units. It is a large space flowing from floor to floor - through stairs and holes in the slab. It provides all kinds of activities for the residents. Some exist out in the open such as pool, sewing, and laundry and some are within closed rooms such as cinemas, sauna and squash. Some parts are completely outdoors such as gardens and BBQ-verandas.



WOODWORKING



VIDEO GAMES



RECREATION



GREENHOUSE



DANCING



ATELIER



SQUASH



SEWING



CINEMA



LAUNDRY



TABLE TENNIS



DARK ROOM



PLAYING MUSIC



POOL



FLIPPER



OFFICE



QUIET SPACE



WALL CLIMBING



STUDYING



LONG TABLE DINNER



SAUNA



STUDIO



CHILLIN'

THE PUBLIC LIVINGROOM

Open 24/7 the public livingroom is available for everyone who wants to come inside. It provides functions for students as well as for the rest of the community. Here you can learn how to read your e-mail and all the basics of how to work with a computer. The public livingroom is run by the students themselves, who takes the opportunity to make some extra money from the cafeteria.



Café



Computers



Concerts



Lectures



Chill out



Listening to music



Magazines



Theatre



Workshops

DESIGNING WITH NATURE

“...simply viewing nature is manifested as a compounded group of positive emotional and psychological changes. Stressful emotions such as fear or anger diminish while levels of pleasant feeling increase.” (Ulrich et al. 2004)

The effects of nature on the mind are clear and this thesis seeks to use nature as a means to create psychological ease, as a social catalyst and a source of income for the community and students. In addition the thesis will investigate the use of nature in design and its sustainable aspects that need to be considered in architecture.

Frank Lloyd Wright's approach to architecture was that it should be at home with nature, he believed the ground was more important as nature came first and would last longer. He suggests that where architecture meets nature, there was no need to blur the line or plane. The building should serve as a foil to nature and nature should serve a building as ornament. (Hoffmann 1986: 3-5) This idea of nature and building presents a new type of hybrid which was adapted also in vernacular architecture. In the pursuit of developing an inclusive environment it is important to look at this aspect of the use of nature in vernacular architecture. Charles Correa in his book *Quest for identity* describes climate as being a crucial part in the process of finding our identity and it operates on two levels. Firstly in the immediate expression on a building as well as determining patterns of culture and ritual and ultimately built form.

Location is another important factor to consider I design that vernacular architecture deal with by adapting spaces to interplay between indoor and

outdoor. An example is the *lelapa* in Tswana houses which is the outdoor extension of the living space. This space when oriented in the right direction provides a means of ventilation and access to the winter sun but protection from the evening sun. (Olweny, Wadulo 2008:183)

Function is an important aspect to human nature. The functions that take place in spaces that we inhabit have to be in par with our lifestyles or this results in a mismatch between the dwellings being provided and the actual functional requirements of their inhabitants. An example is the provision of western style kitchens in houses, where most African households find these kitchens inappropriate for the type of cooking that takes place, especially during festivities. (Olweny, Wadulo 2008:184)

Colour the use of colour on the building is of utmost importance due to the climatic conditions such as harsh winds and red soils which restrict the use of colour on vernacular buildings. But the colour of a building in the colonies was important as it indicated the status of the building and thus in the colonized state is viewed as a means of progression and modernization. African rituals such as the initiation process in the Xhosa tribe use colour as a means of indicating the progression of manhood. This analogy is an interesting one that could be adapted in the design of the trans-programmed residence as students are in a modern state of development.

Regarding using nature as a means to create psychological ease, as a social catalyst and a source of income for the community and students urban agriculture was the means in which this thesis sought to engage with the idea.

“The rapid urbanization that is taking place goes together with a rapid increase in urban poverty and urban food insecurity

Urban agriculture provides a complementary strategy to reduce urban poverty and food insecurity and enhance urban environmental management. Urban agriculture plays an important role in enhancing urban food security since the costs of supplying and distributing food to urban areas based on rural production and imports continue to increase, and do not satisfy the demand, especially of the poorer sectors of the population. Next to food security, urban agriculture contributes to local economic development, poverty alleviation and social inclusion of the urban poor and women in particular, as well as to the greening of the city and the productive reuse of urban wastes” (RUAF Foundation 2010)

The Resource Centre on Urban Agriculture and Food Security Foundation (RUAF) denotes the importance and the empowering aspect of urban agriculture. Outlining the economic and poverty alleviation and social inclusion aspects of it which are concepts important to this thesis.

PRECENENT

The Institute for Poverty, Land and Agrarian Studies (PLAAS) is a leading research and teaching centre founded in the School of Government, in the Economic and Management Sciences Faculty, at the University of the Western Cape. The organization undertakes high-quality research on land and agrarian reform, poverty, and natural resource management in South Africa and the southern African region. The organizations' mission is to engage in research, training, policy development and advocacy in relation to land and agrarian reform, rural governance and natural resource management. It strives to play a critical yet constructive role in processes of social, economic and political transformation.

As this organization is already part of the University in which the trans-programmed residence sits, the thesis proposes a joint venture with the organization and using it as a satellite site. This will be a means of engaging with the communities surrounding the university and market places.

THE ECONOMICS

The concept of the self-sustaining student is not a new one but has been practiced since universities were no longer being just government funded institutions. Students usually find employment off-campus which is strenuous as it has other implications such a travelling money and in some cases hours not conducive to their learning. These jobs include Online admissions clerks – data capturing, Shop assistant etc. In other cases students find employment at the university such as Campus work e.g. Library counter, Computer Lab supervisor but not everyone can be availed this opportunity.

The existing student accommodation offers basic needs as follows:

ROOMS WITH BASIC SHARED AMENITIES

TV/ENTERTAINMENT ROOM

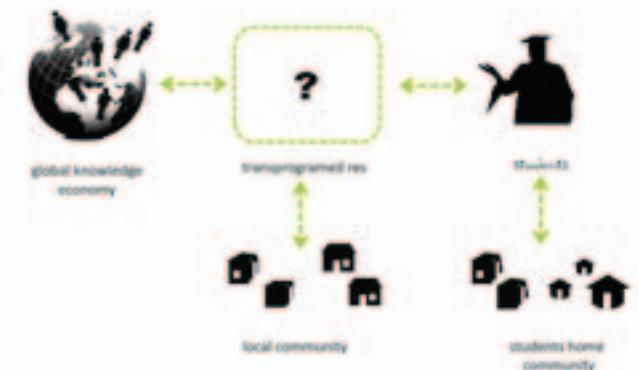
LAUNDRY ROOM

At an average price of approximately R18000/annum which is about R1500/month.

The thesis proposes a facility that will have

ECONOMIC INTERFACE

(URBAN AGRICULTURE)– CEREMONIAL SPACE
ACCESS TO TECHNOLOGY AND COMMUNICATION DEVICES
STUDY SPACE- GROUP AND INDIVIDUAL
SOCIAL SPACE
EMOTIONAL SUPPORT SPACE
ROOMS- WITH BASIC AMENITIES



The diagram reflects the proposal for a feedback system between the students and society, mainly the local community in which they reside and their home communities. Mentioned in the introduction is the reason why many travel to the urban realm. They come in pursuit of a better economic status and ultimately develop their rural or township homes. Because urban areas in the African context are not inclusive in terms of their cultural identity this feedback system fails as it turns into a demonstration of having lived in urban centers. This is done through the imitation of the built form seen in these urban areas to the rural, where people transform their buildings or add to the existing ones. No form of appreciation is seen or developed from the old architecture. Progression is still seen as an imitation of western concepts and not an adaptation of one's own. The thesis is not questioning advancement and development but the concept of development only being an emulation of western notions in design. Local architecture should be improved, appropriated and use affordable technology expressed through architecture. It is more than embossing a few traditional forms and symbols. It should be seen as an integral part of the design process. (Intsiful 2008:156)

Having understood the problem of an exclusive environment the urban realm presents, the feedback system should work towards not only giving back money to the homes of these students but a contribution in the economy of knowledge. Globalisation shouldn't have an impact that excludes local architecture but helps include it.





conclusion

The state of democracy increased waves of rural immigrants and fortune seekers coming into South African cities. Architecture has to function in a political, physical and social landscape that is hybrid and diverse, a space in which multiple publics exist and compete for resources and opportunities. (Murray-Blank) Education is a vehicle of empowerment and can therefore contribute to the development of society as a whole. Many students gain access to Universities which equip young people for the professional world, but many don't make it through and gain the qualifications to equip them for the professional world. It is not enough to gain access to the university for underprivileged students, retaining them is also a challenge. Designers have to rethink traditional ideas and programming of an institution to cater for complex needs of students who come in from rural and low-income areas in the developing world. New building types have to be developed which help improve urban problems with technical and spatial solutions.

The rural urban divide continues to hinder a cultural evolution of hybridity. The University is a cultural symbol for access to information can be used as a platform to put an end to this hindrance. It is the perfect programmatic vehicle to realize ambitions which have otherwise become impossible. Through reshaping and implementing new forces to the existing make of an area it will in turn instigate new life: social, cultural, events, spaces, interaction and development. This phenomenon can be described as trans-programming through an understanding of transculturation.

Trans-programming as a solution to the thesis question,
CONCLUSION of identifying the challenges students

are faced with that prohibit their advancement and through the understanding of transculturation. This new institutional building creates a new typology that provides a platform for cultural exchange, hybrid public functions, creating awareness, social functions and a means of meeting the financial needs of the students. The institution present itself as not a private unattainable facility but open its doors and create an inclusive environment making the dream of development attainable to all. It should provide a social, supportive and learning environment, through trans-programming.

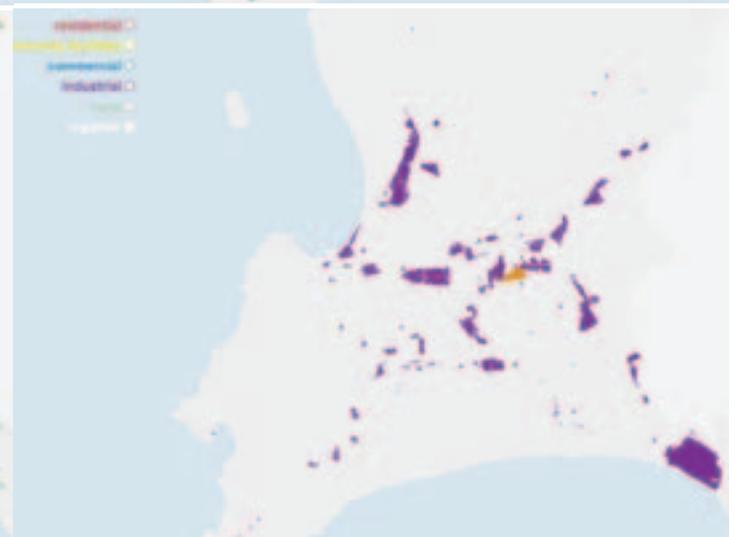
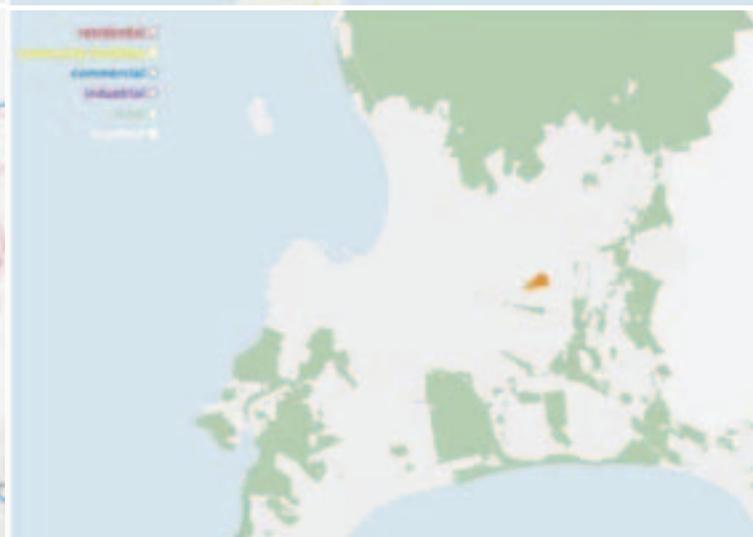
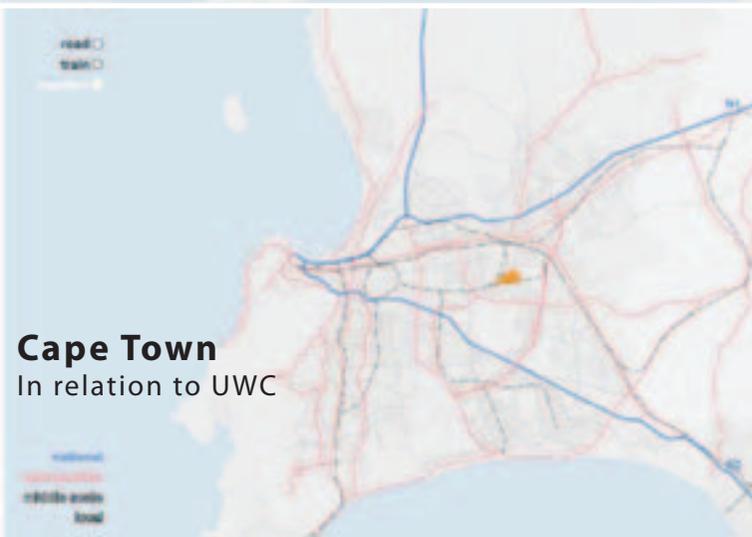
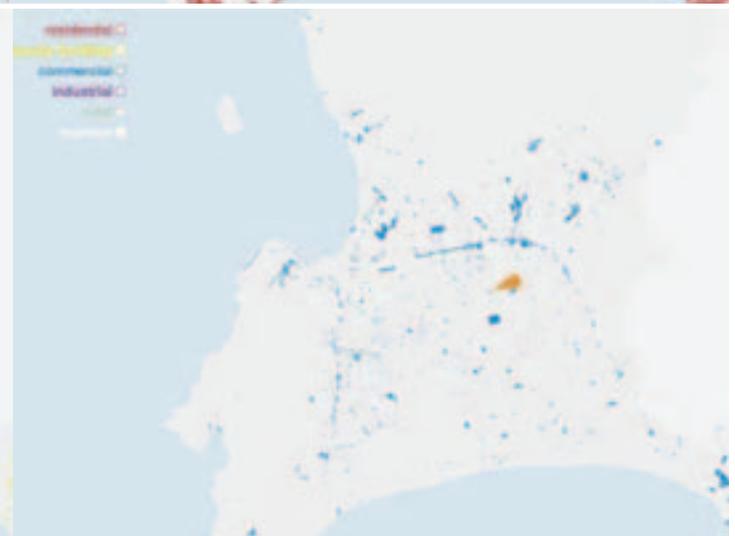
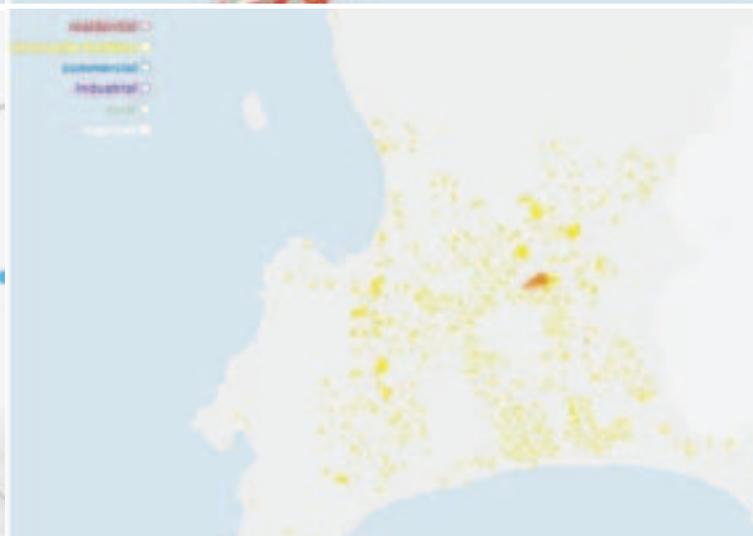
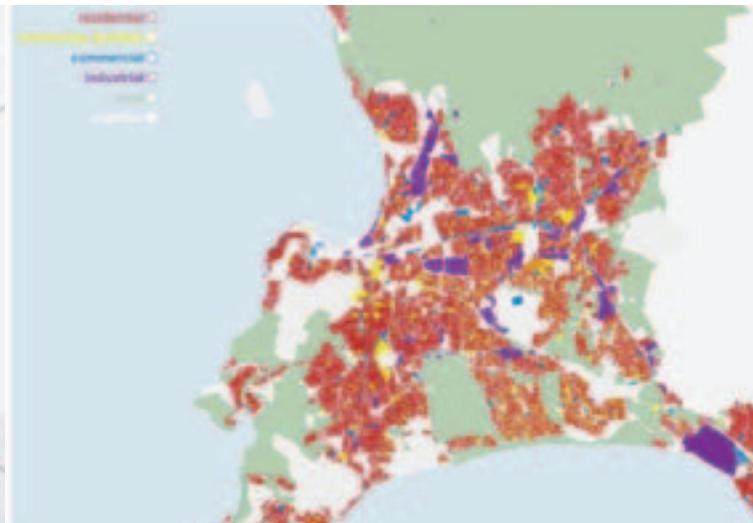
This new institutional space must consciously stimulate social, cultural, and economic life in and around universities and the communities they are placed in. Its spatial and programmatic organizations promote internal knowledge transfer and social interaction while simultaneously integrating with surrounding urban environments. This sustainable centre of knowledge and empowerment will house a mix of public and private functions as well as liminal and flexible spaces. This new space will motivate and inspire students and members of the community to gain new types of knowledge and while doing this sustaining themselves. The space will also provide a platform for cultural expression and the spaces are designed with an understanding of the diversity of culture both the community and students will bring to the space. Therefore creating urban strategies that best nurture the dynamic synergies needed to create sustainable centres of knowledge and learning –incubators of innovation that can flexibly respond to the fast changing demands of industry and society.

An aerial grayscale photograph of a city street grid. A large, thick orange outline traces the path of a specific street, starting from the left edge and extending towards the right. The word "mapping" is written in a bold, orange, sans-serif font, positioned horizontally across the middle of the image, overlapping the street's path.

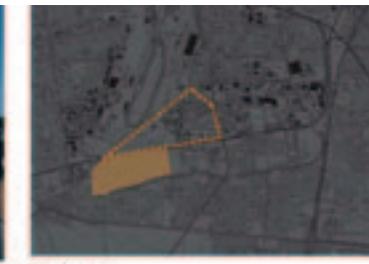
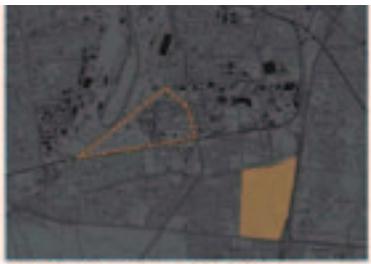
mapping

site

cape town and
belville in re-
altion to UWC



Cape Town
In relation to UWC



Belhar 18+19+20+21

Harrington Way

Erica

Rosemary Rd.

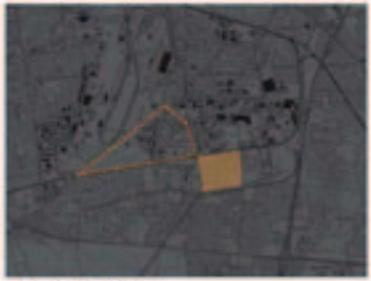


Belhar 7+10+13+16

Alabama Ave.

Belhar 3+4

Chestnut Way

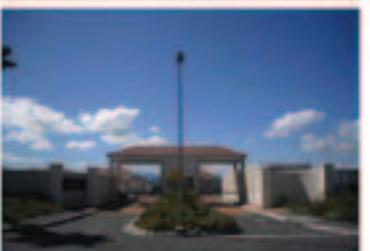


Belhar 23

Pentech

Belhar 1+2

Symphony Rd.



Freedom Park (Airport)

Belhar 17

Belhar Campus
Jecoma Place

BELVILLE
neighbourhoods sur-
rounding UWC



Modderdam



Greenlands

Waterberry Cr.



Florida

Florida St Cape Peninsula University of Technology



Parow Industria

Transnet site



Bellville South

**Bellville South Ext. 5
Bellville South Ext. 7**



Bellville South

Bellville South of Oop

BELVILLE
neighbourhoods sur-
rounding UWC

neighbourhood facilities

- place of worship
- education
- recreation
- shopping centre
- medical care
- state functions
- community centre
- library/museum
- cinema/theatre
- hotel/guesthouse/b&b
- railway station
- everything
- socio economic context



site

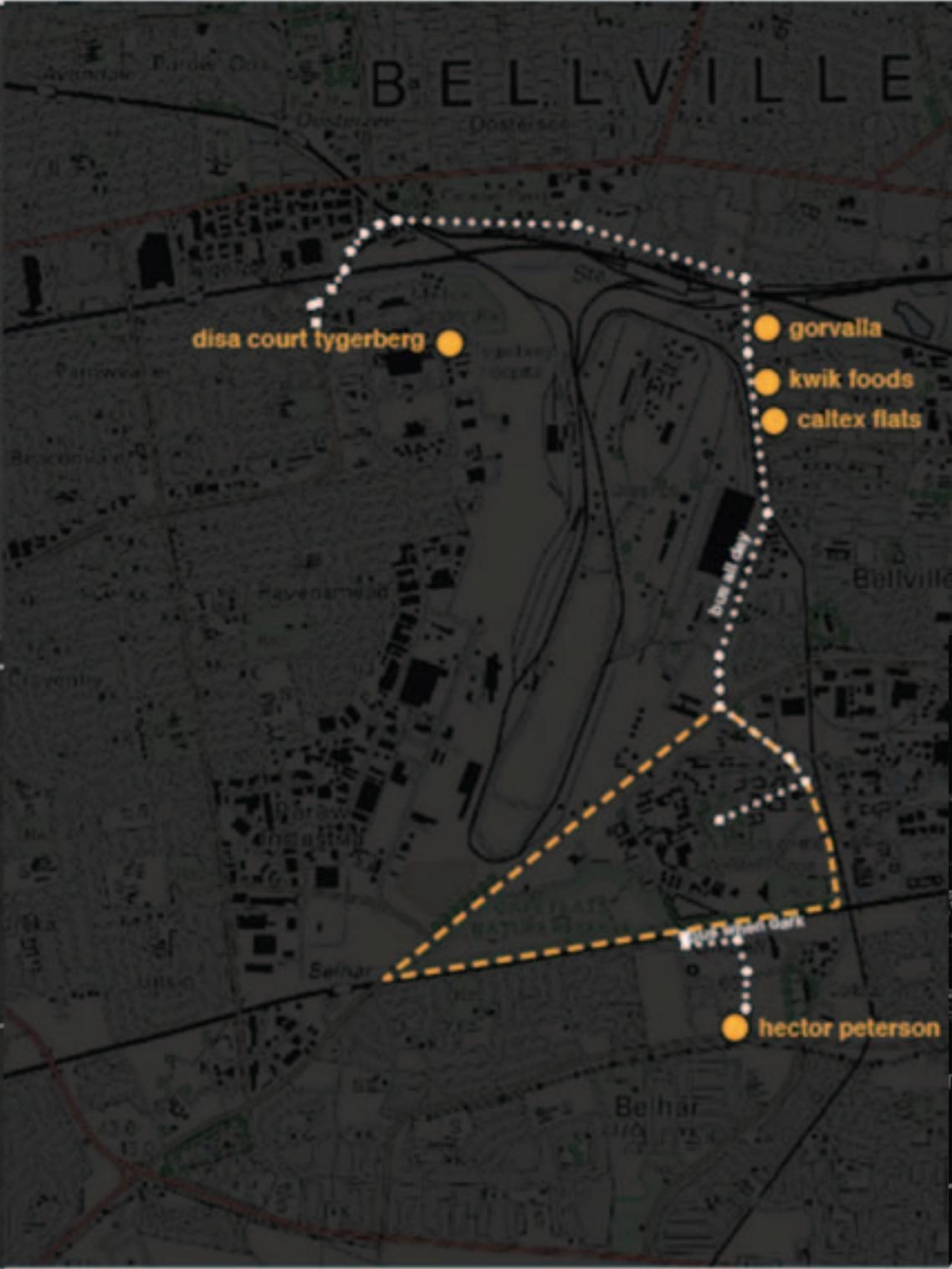
mapping the
campus





UWC

existing map of the campus





UWC
 mapping pedestrian , train
 and vehicular movement
 and access point.



UWC

mapping pedestrian , train and vehicular movement and access points off peak and during peak hours



UWC
 mapping economic,
 study, retail and social
 nodes



UWC
mapping routes, play, sleep
and eating nodes

morning



students having a picnic

noon



during the day, the stairs are crowded with people and form a main meeting spot (nickname: little Bombay)

evening



THE STUDENT CENTRE



THE REST OF CAMPUS



UWC busses taking students to off-campus residences

STUDENT RESIDENCE





UWC
the student circulation bus
stop



University of the Western Cape
North Campus



→ Economic & Management Sciences
↑ Library
Great Hall
Student Centre
Administration

UWC
outside the library



UWC
in front of the student centre



UWC
route leading outside the
varsity to the taxi rank and
train station



UWC
chisa nyama looking onto
the lecture theaters



UWC
outside the library





UWC
staduim



UWC
outside student residence



UWC
unused cricket oval



UWC
path leading to residence

program transla- tion

The program for this new institution type is set up through a combination of investigations; the University's vision for itself, Statistics from the school and a series of interviews with students attending the University.

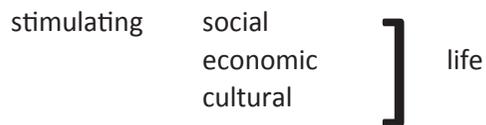
The University's goal is to strategically influence and develop the campus and surrounding areas, and develop and maintain a modern coherent physical infrastructure. The University seeks to be a catalyst for regional innovation and node for providing community links. The thesis bridges the gap between private and public space for this very reason. This is shared space

PUBLIC SPACE + PRIVATE SPACE = SHARED SPACE

Statistics show that 70% of the students who are admitted to the University apply for campus accommodation but only 30% get offers. This becomes a major problem as some students end up having to find off campus accommodation, limiting their study time on campus and in most cases deems to be unsafe and rent very expensive. This fact should be considered with the fact that 70% of the students that attend UWC are classified as poor in the eyes of society. Most have to work to sustain themselves and work usually clashes or makes students compromise their studies.

Another element that the program entails encourages interaction amongst students. Most come from social networks that support them and when they come to University this social network is broken and a new one needs to be built. This can only be achieved if it is encouraged through the design and program of the building.

The outlining principal guiding the building:



SOCIAL

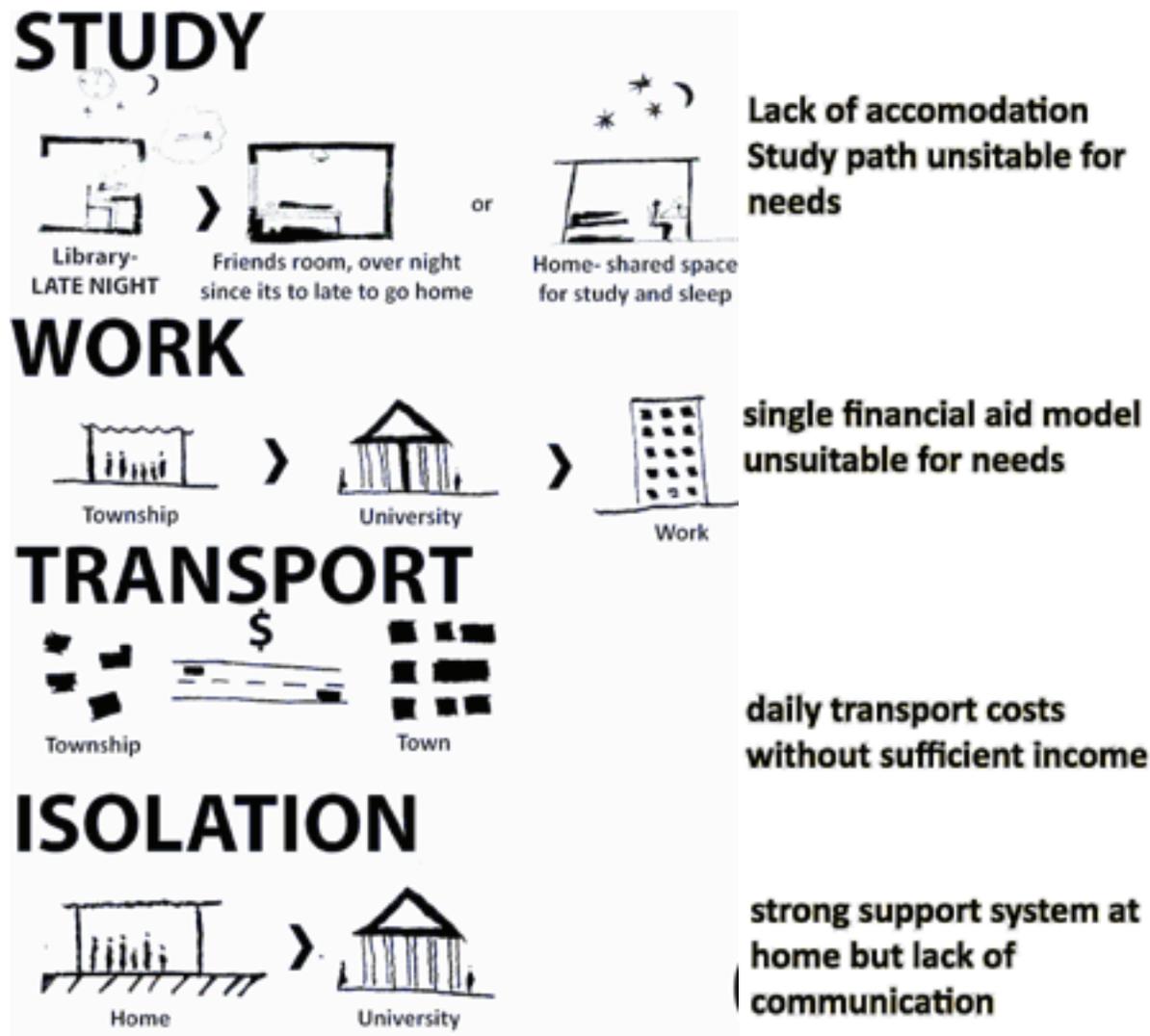
Isolation is a demon that faces every student living away from home when they come to University. A new environment can have the same effects to a student thus the building program should entail social functions that force integration amongst students and in some cases the public and to avoid the University being an island in a community. The programs seeks to do this through educational leisure and social facilities.

ECONOMIC

The programs seeks to play on the idea of the Bush University (the apartheid identity of the University) and use it to benefit the University. This will be through the use of urban agriculture as a means for income for the University at large, the individual student and the community. Intern Bush University builds on a name that was used to discriminate it.

CULTURAL

Students coming into the University come in from various homes thus have different cultures. For architecture to function in the hybrid and yet diverse landscape of South Africa the idea of culture has to be addressed in the program. This is considered in the Residential aspect of the building where a flexible system is designed to permit optimal account for social and cultural conditions (Negotiate my Boundary).



OBSTACLES

These are the obstacles the students face when they go to University

EXISTING MODEL STUDENT RESIDENCE

rooms	>>	living
tv/entertainment	>>	leisure
laundry room	>>	living
cafeteria	>>	living

living + leisure + social + educational + economic

EXISTING + **EXAPANSION**

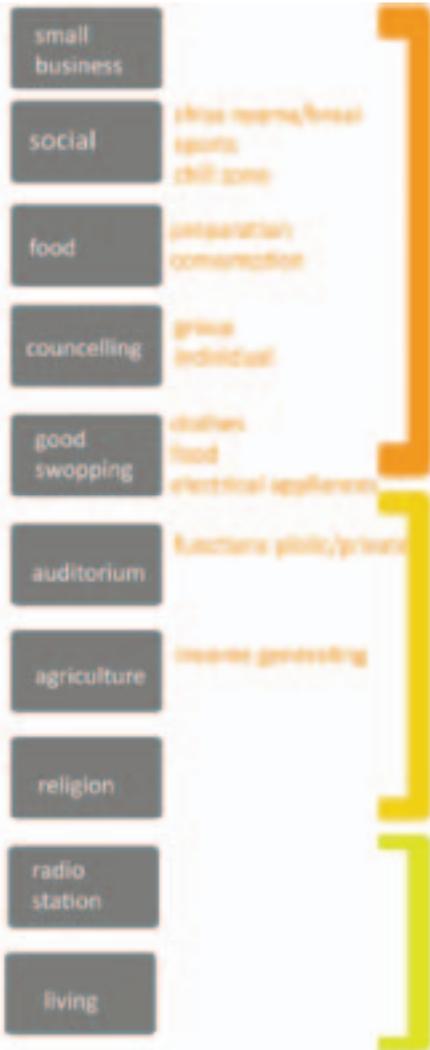
= **SUSTAINABLE STUDENT**

- small business ●
- chisa nyama ●
- chill zone ●
- cafeteria ●
- counselling facility ●
- goods swapping ●
- auditorium ●
- agriculture ●
- religion ●
- radio station ●
- rooms ●
- study ●



PROGRAM EXPANSION

This a program expansion demonstrating the addition of economic, educational, social elements to the existing living and leisure facilities that usually exist in student housing.



chisa nyama, chill zone
 preparation
 communication

group
 individual

clothes
 food
 electrical appliances

functions public/private

income generating

PUBLIC

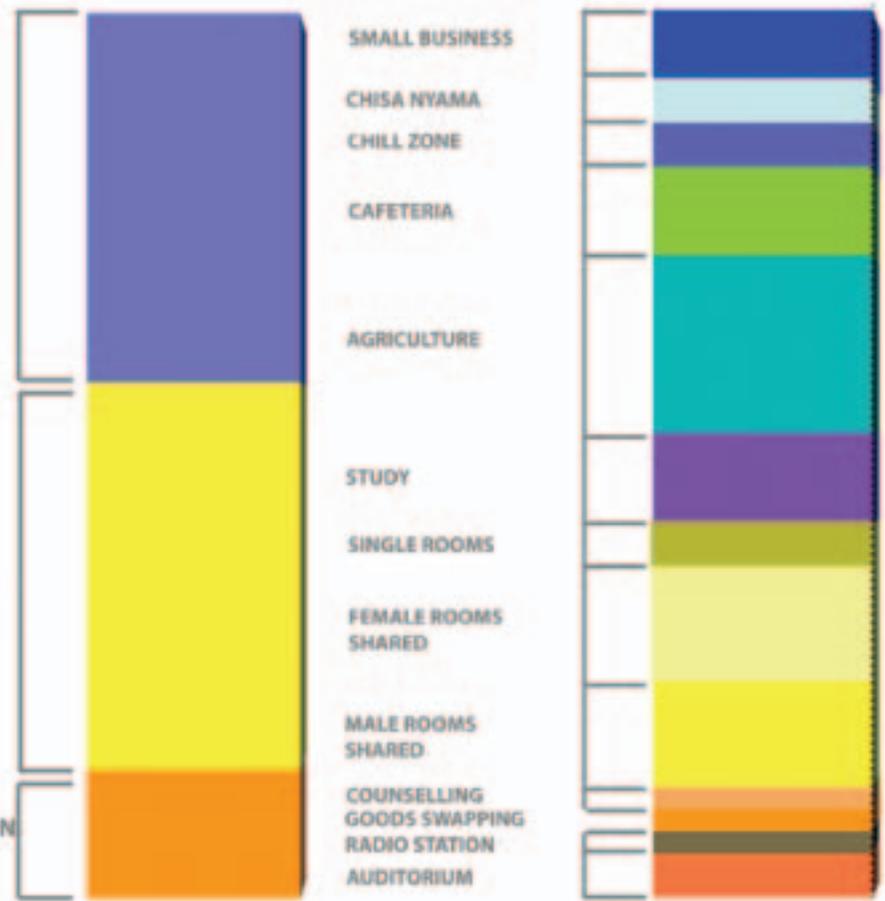
PUBLIC SPACE

SEMI-PUBLIC

RESIDENTIAL

PRIVATE

COMMUNICATION & SERVICE



concept

Seeing as the program was set up using the three principals of social, culture and economic. The concept hovers around the same ideas. These being:

STIMULATING SOCIAL INTERACTION

BUILDING AND NATURE

HYBRIDITY AND DIVERSITY

SOCIAL INTERACTION

This concept is driven by the same notions that drove the program. Enhancing interaction to counter loneliness and create social links between the community and students.

BUILDING And NATURE

This concept driven by the economical factor influencing the building. And how the site will affect the building design.

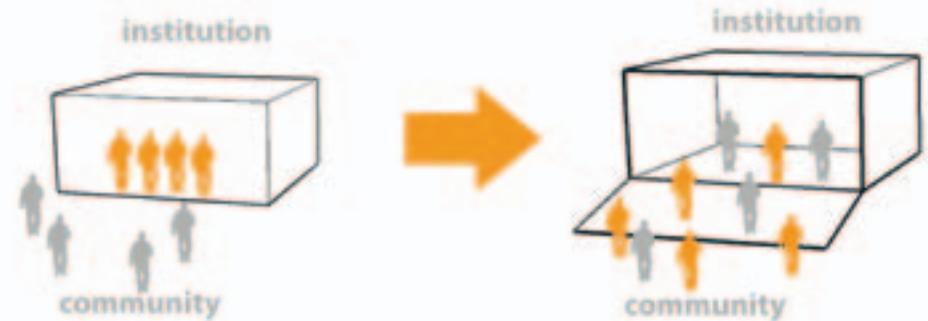
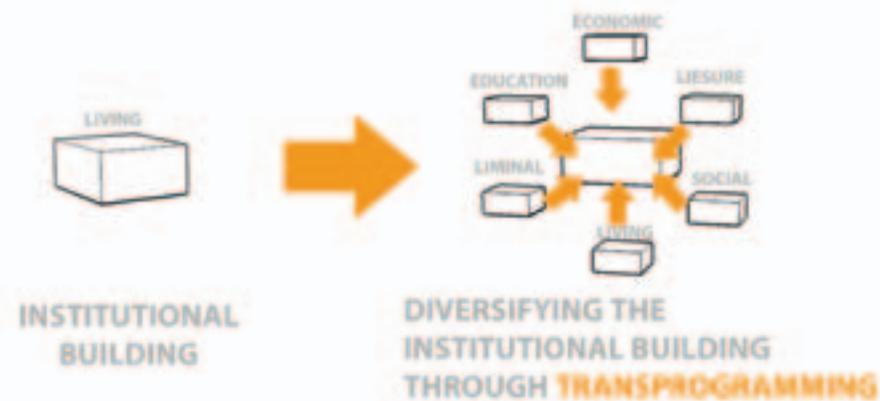
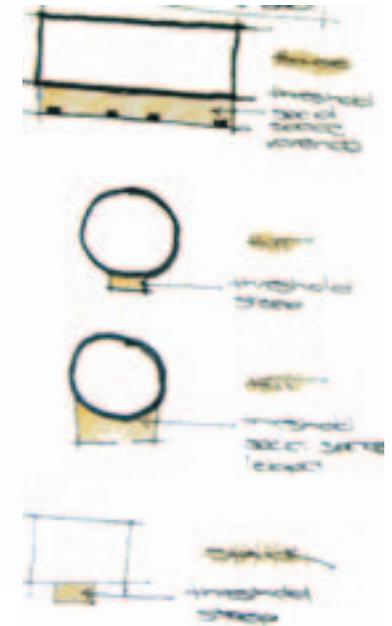
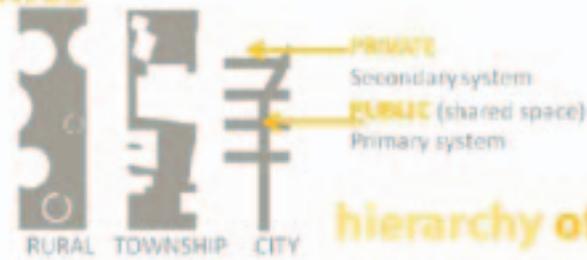
HYBRIDITY AND DIVERSITY

Although the students using the building have a single purpose in common which is gaining an education, they bring the diversity of that they are all individuals from different backgrounds with different personalities and needs. Thus spaces need to be feasible and negotiable.

Seeing as the context in which this building is set is Africa where most home settlements have a hierarchy in space from PRIVATE - SEMI PRIVATE - PRIVATE, the building is influenced by this set of principles even more so because the building seeks to integrate an institution with a community and both have a set of rules that govern them especially in terms of safety.



DIVERSITY in students and community homes

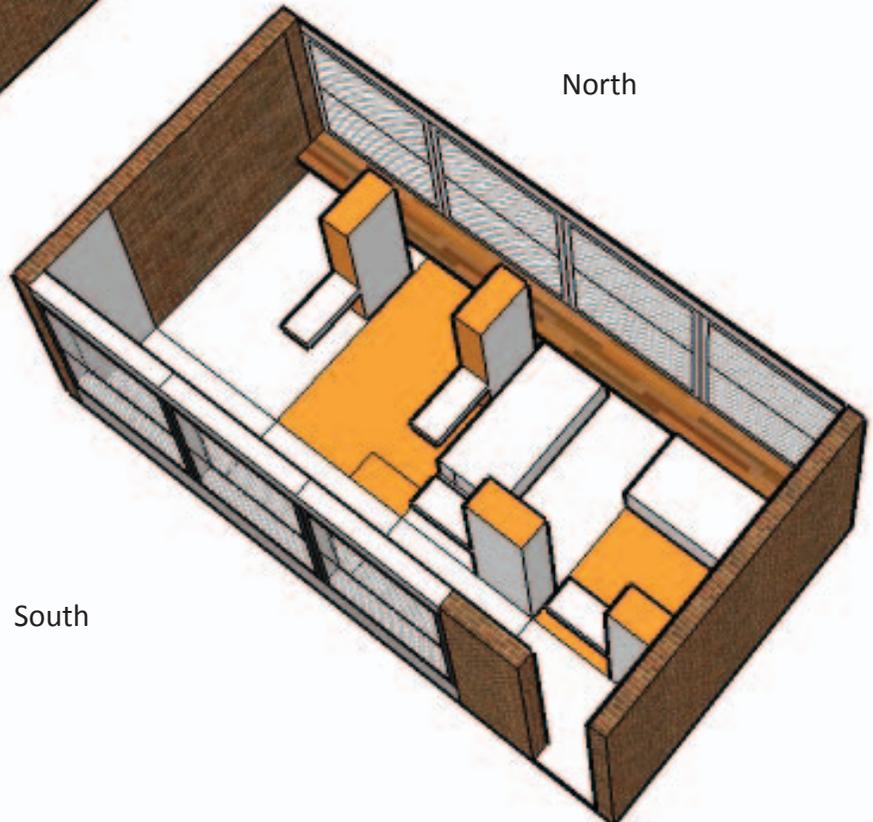
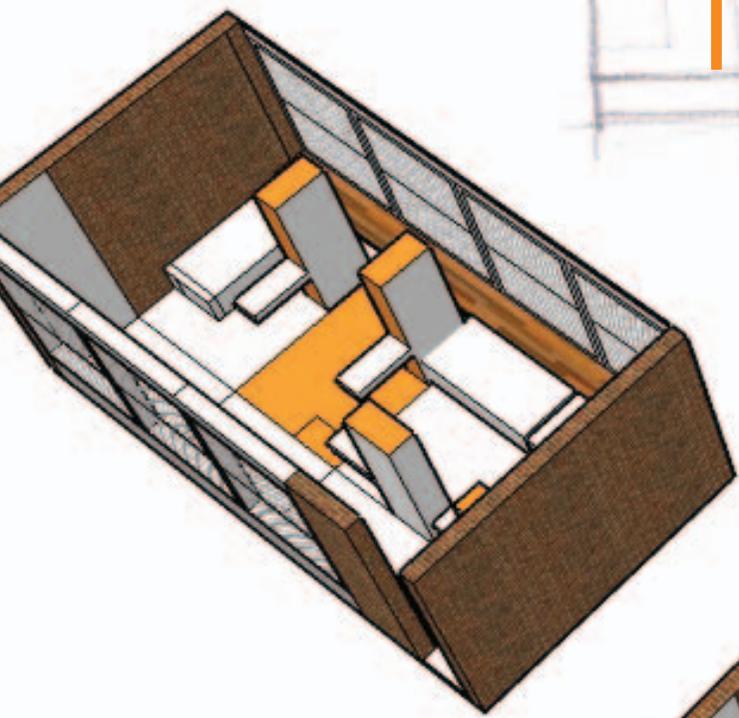
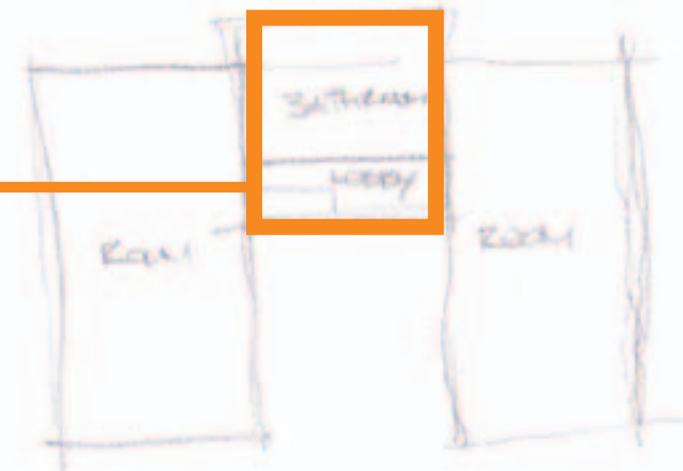
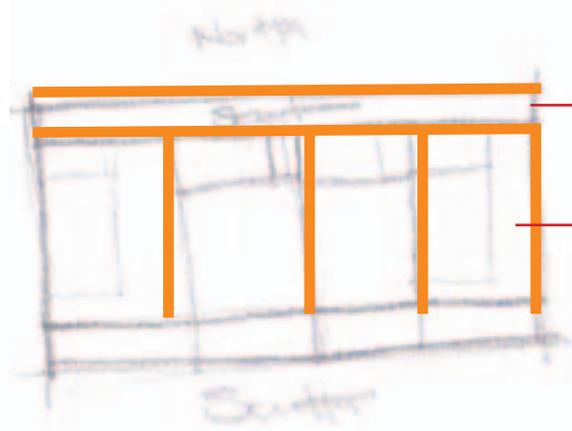


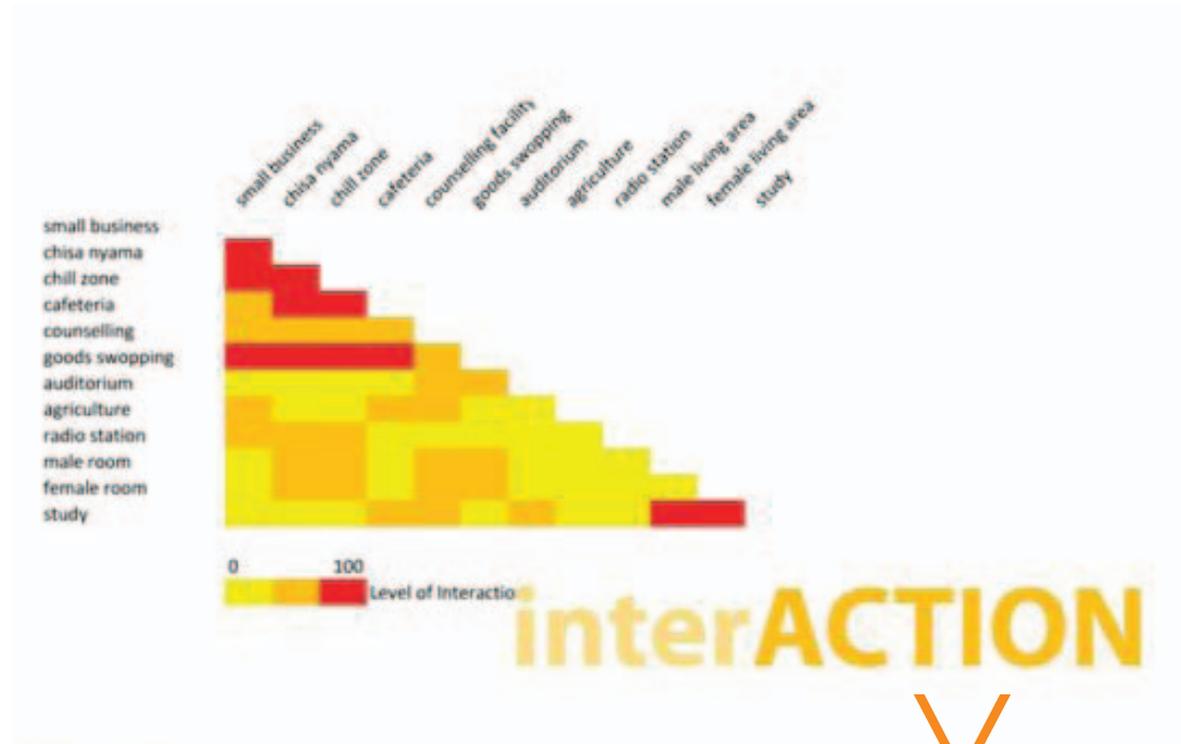
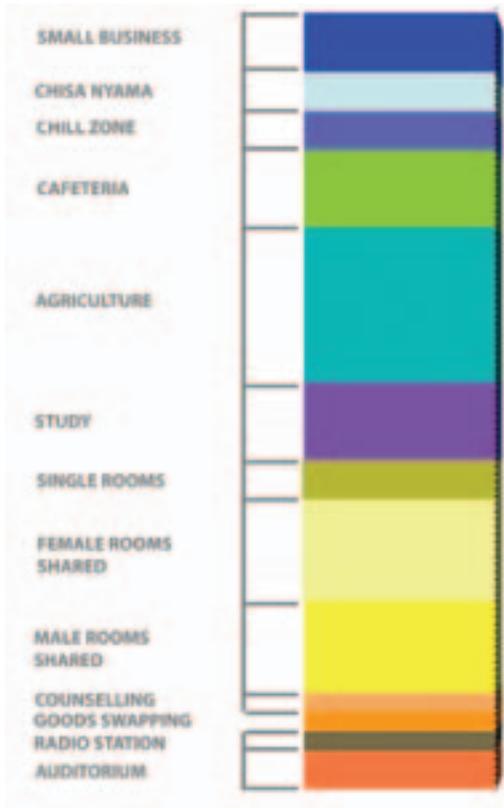
interACTION



Every student enrolled in the university comes with a sense of individuality. The concept of mass customisation then comes into play when designing their living spaces. Natural Lighting is also an important aspect for study and living areas thus the living space tends to maximise of these two qualities. After a study of a number of residences the common lacking space is that of social spaces within the rooms and this is an additional aspect that the design will include.

Although interaction amongst the students is encouraged in the spaces designed sometimes a student may feel the need to escape the hustle and bustle of student life and want to retreat to a quiet space which is included in the design.





The **chill zone** is open 24/7 and available to anyone who wants to come and just enjoy some chill time. Its program caters for both students and members of the community. The functions provided entail skill learning opportunities i.e. learning how to use the compute. The Chill zone is run by students thus creating an opportunity for students to earn an income while trading skills.

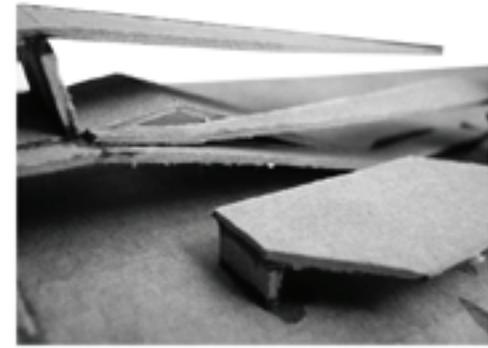
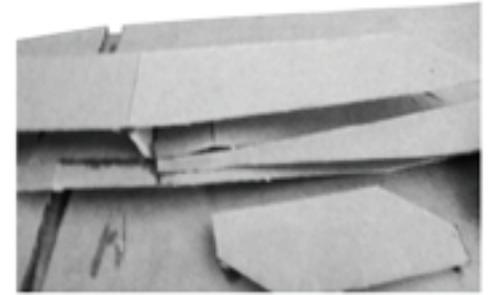
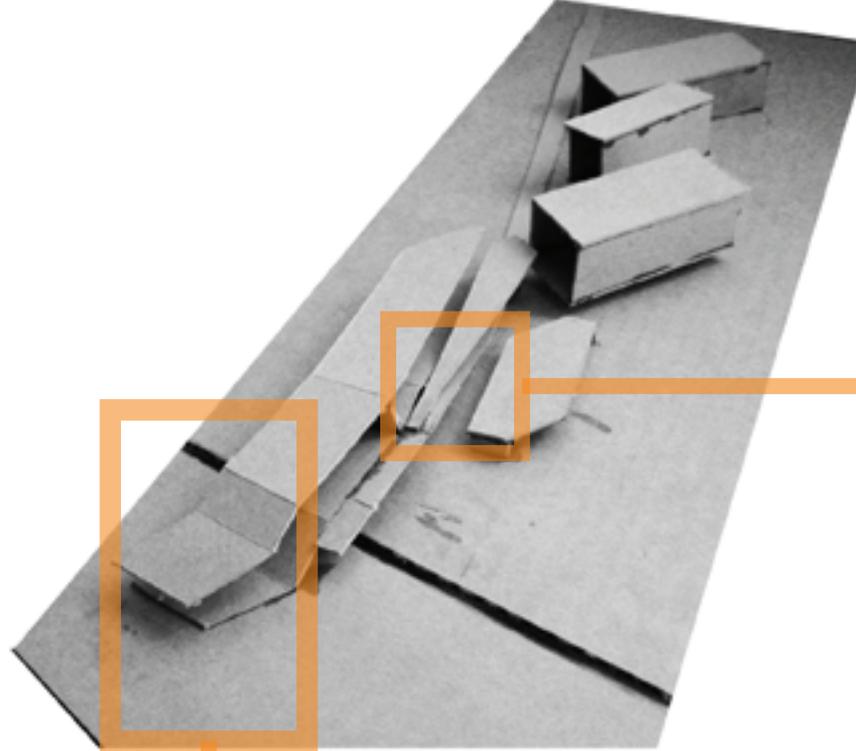


The **Chisa Nyama** is a space between the sleeping units. It is a leisure space where students can interact amongst each other and with members of the community. Further more it is an outdoor area that provides a range of activities such as out-door games, braai's etc



The **Shared Space** are a set of facilities distributed between and around the sleeping units. The facilities are shared either between students or between members of the community. The shared facilities build a relationship amongst the students and integrate the community with the students and institution.

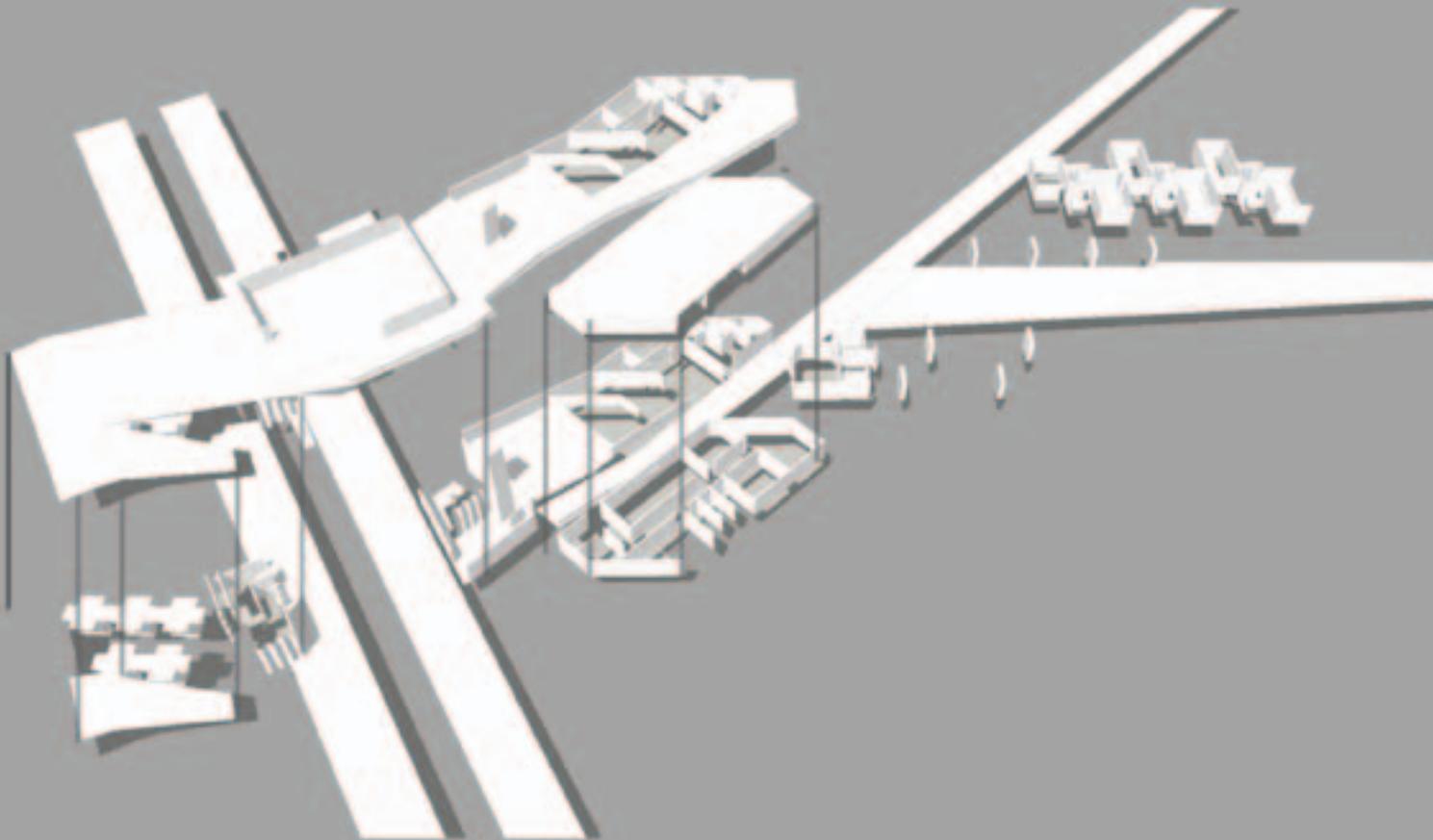


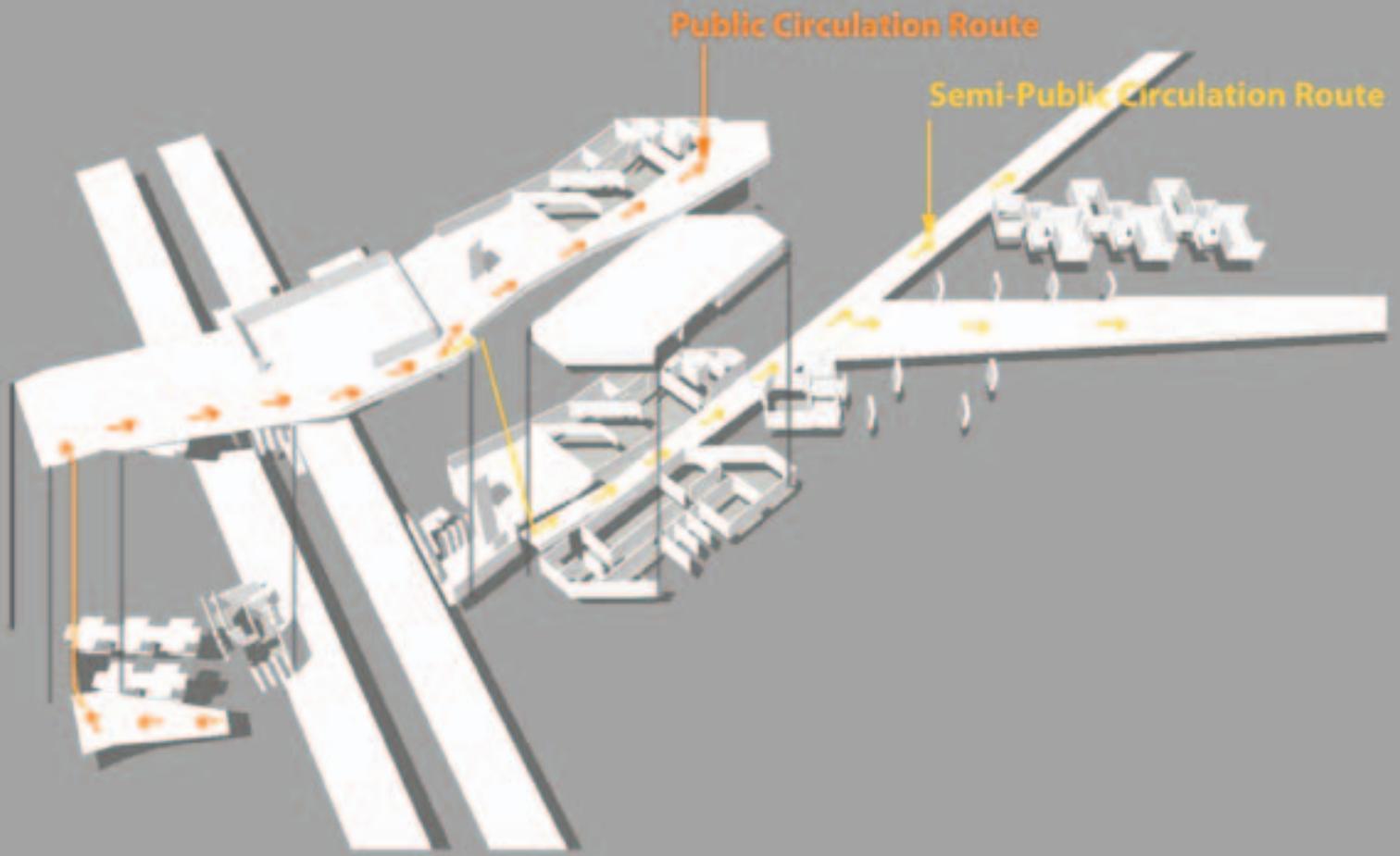


CONCEPT MODEL



DIAGRAMS





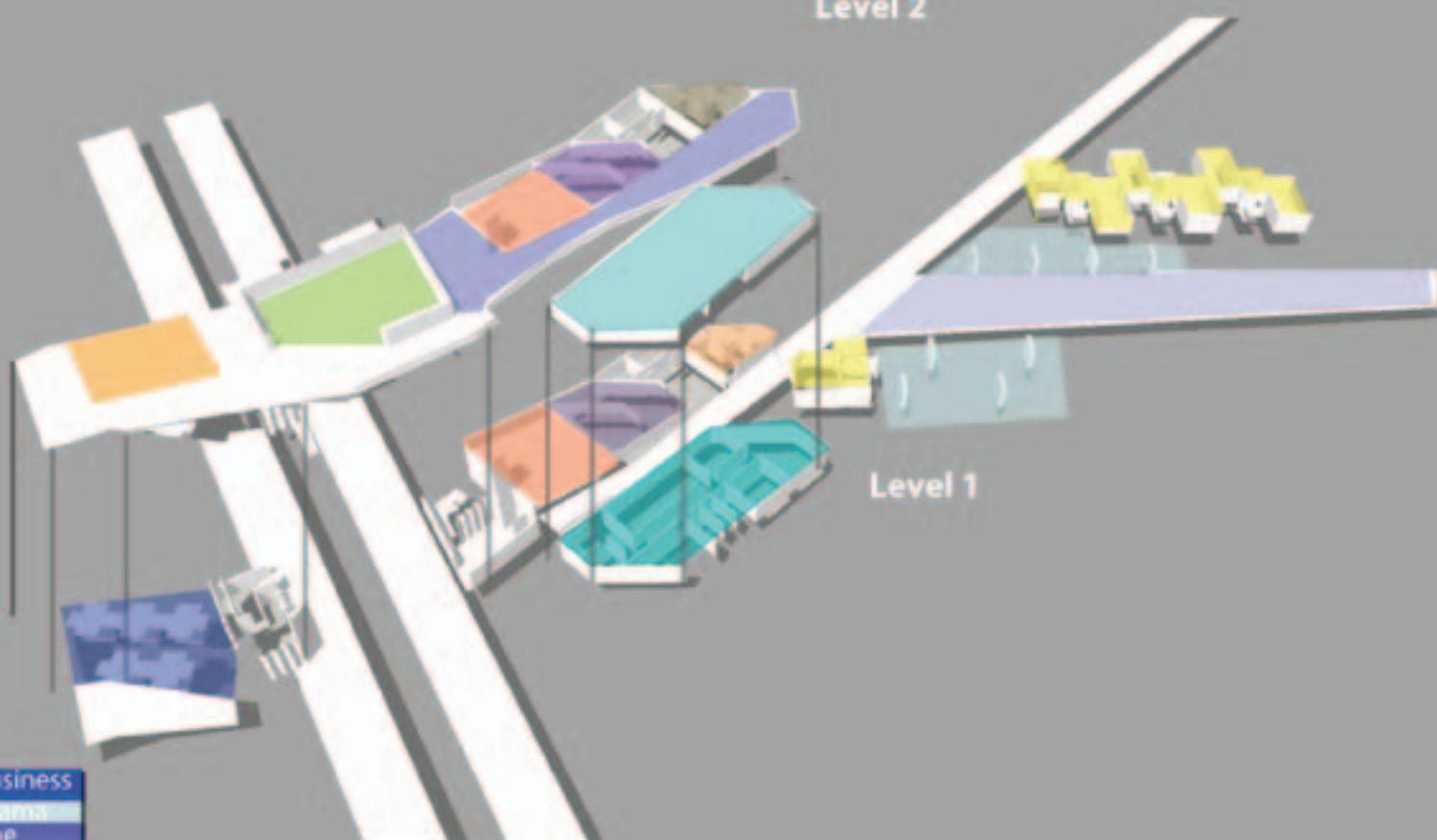
Public Circulation Route

Semi-Public Circulation Route

Partial axo of
Level 2

Level 1

- small business
- chisa nyama
- chill zone
- cafeteria
- agricultural centre
- study centre
- residential
- marketing centre
- globe marketing





IN-BETWEEN BUILDING AND NATURE

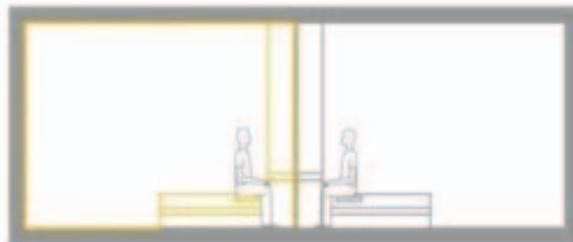
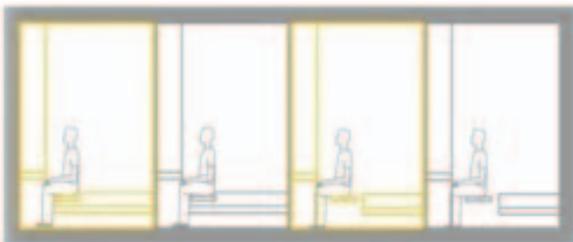
The Residential component of the building comprises the majority of the program. The rooms are standard rooms designed with a designated area but the furniture is not set in place so thus can be manipulated by the student in the manner they wish. The rooms are divided into

4 Sharing

2 Sharing

Family room

This is due to the fact that students have different individual needs that the building design seeks to address. The plan is designs so as to encourage sharing amongst the students . Facilities such as the bathroom, social bench and a small study space.



negotiating BOUNDARY

site

building site



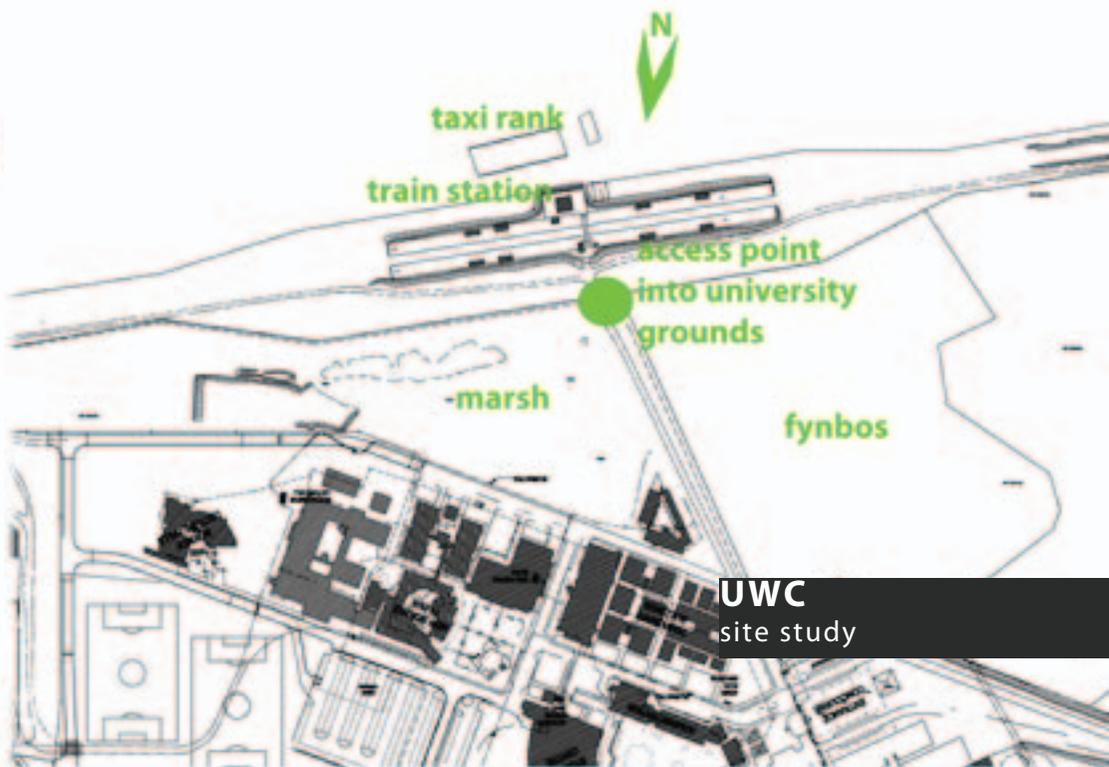
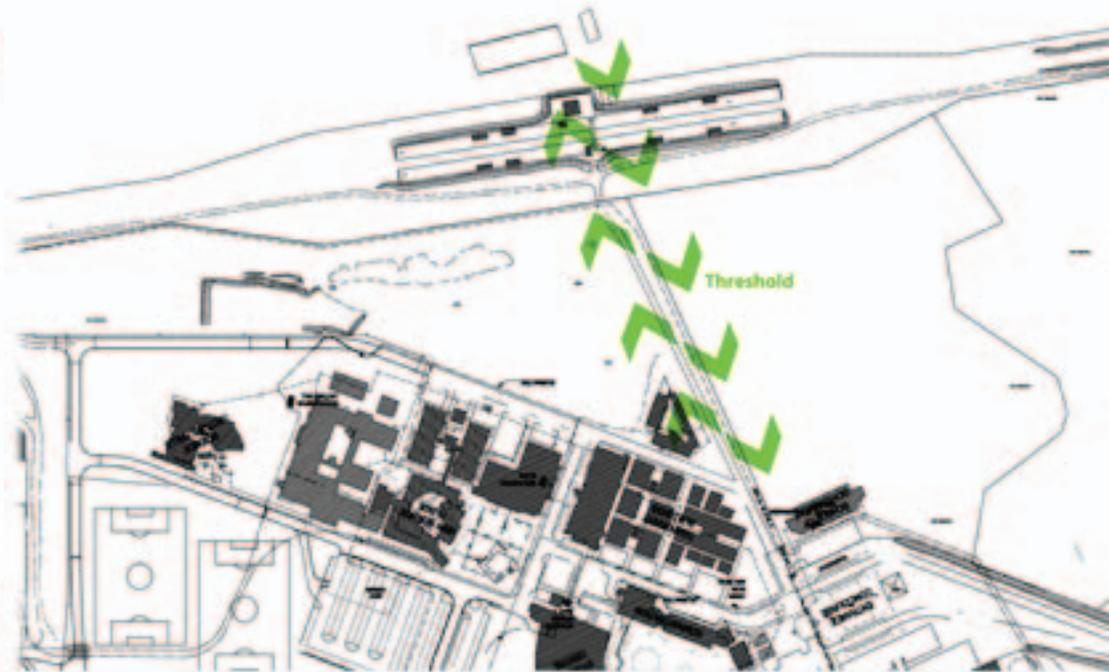
**University of the
Western Cape**
Site- entrance via train station

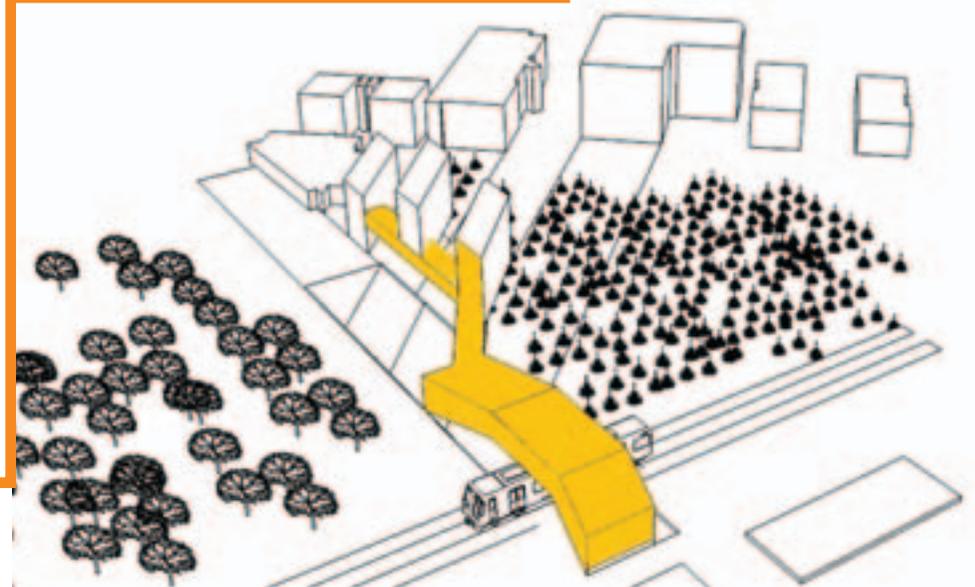
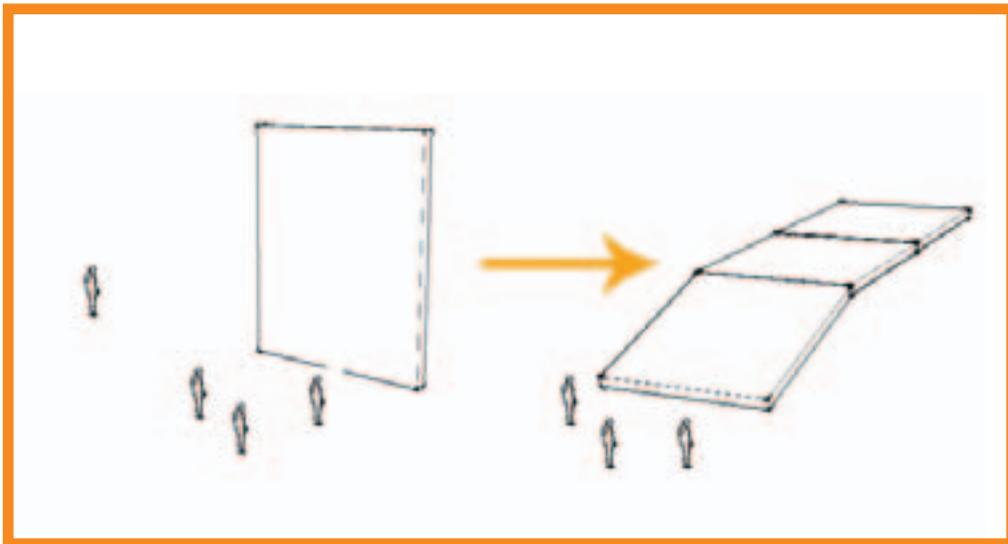
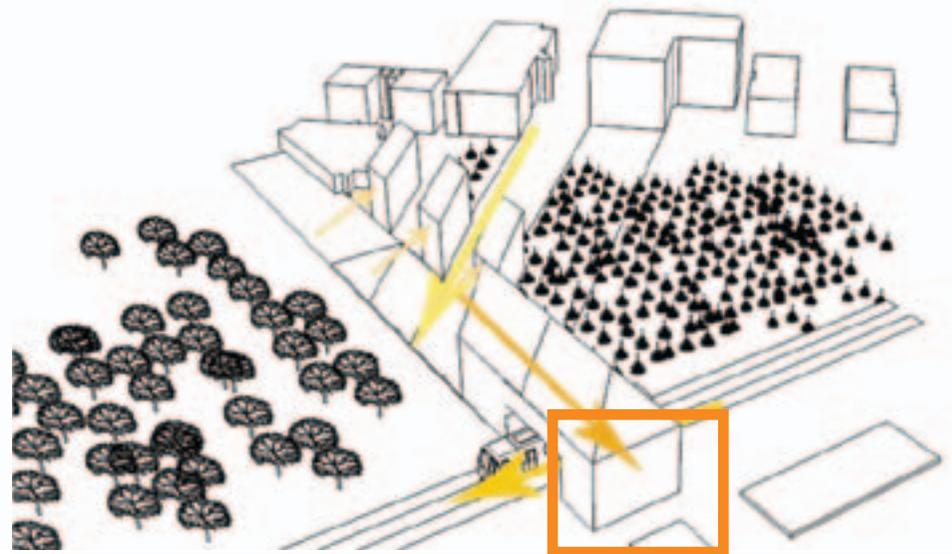
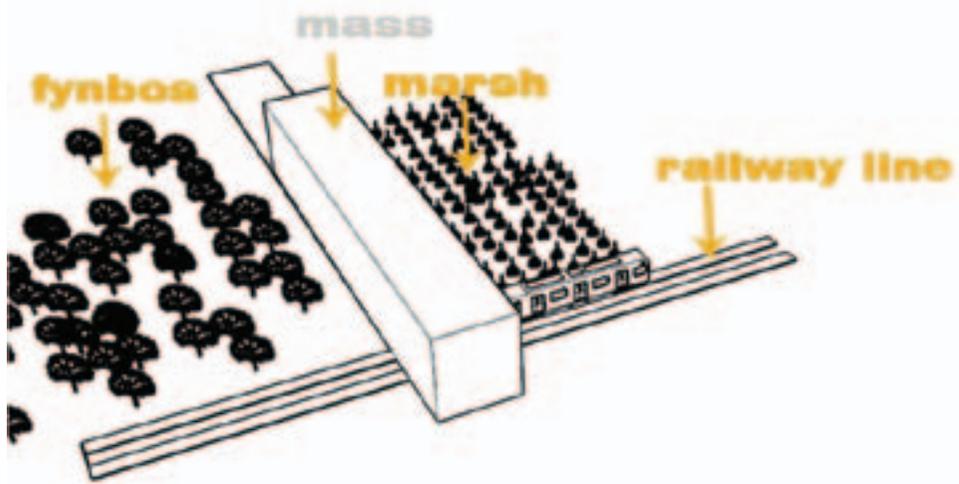


iversity of the
estern Cape



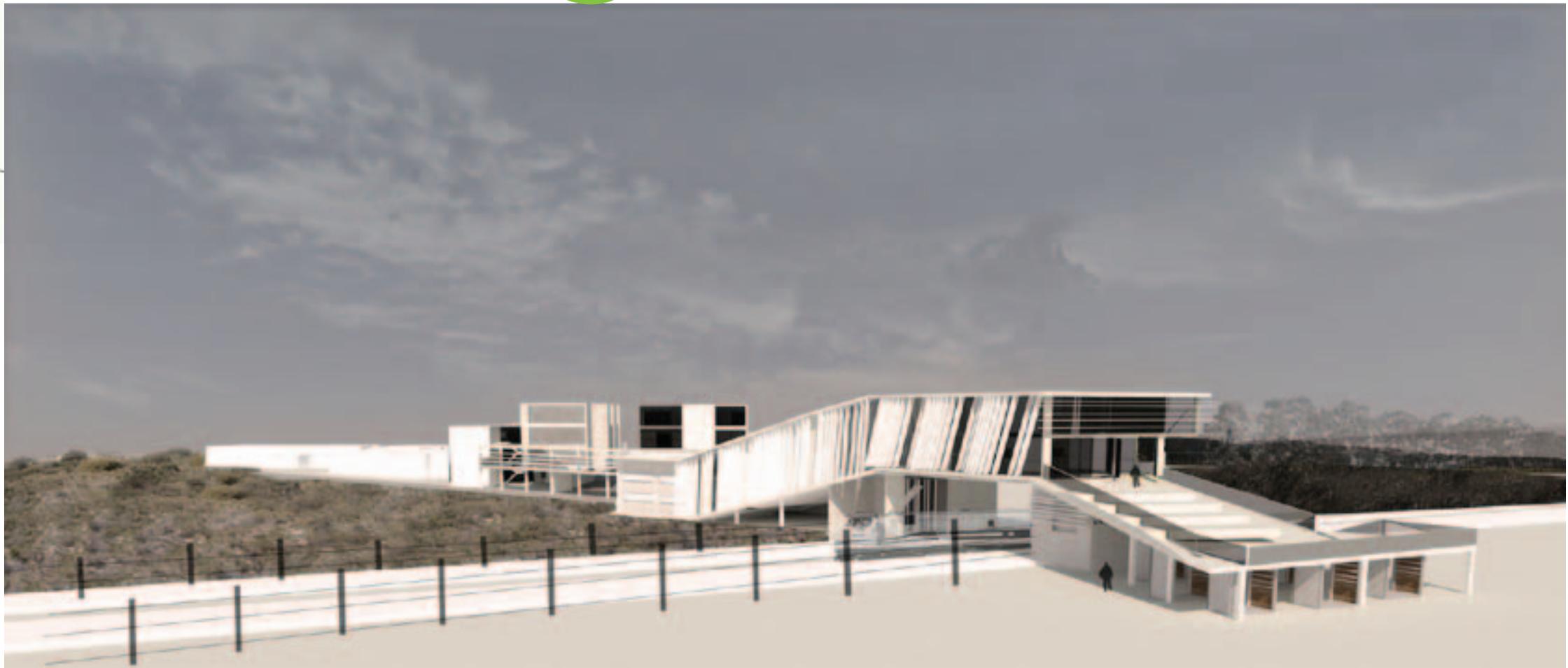
UWC
site

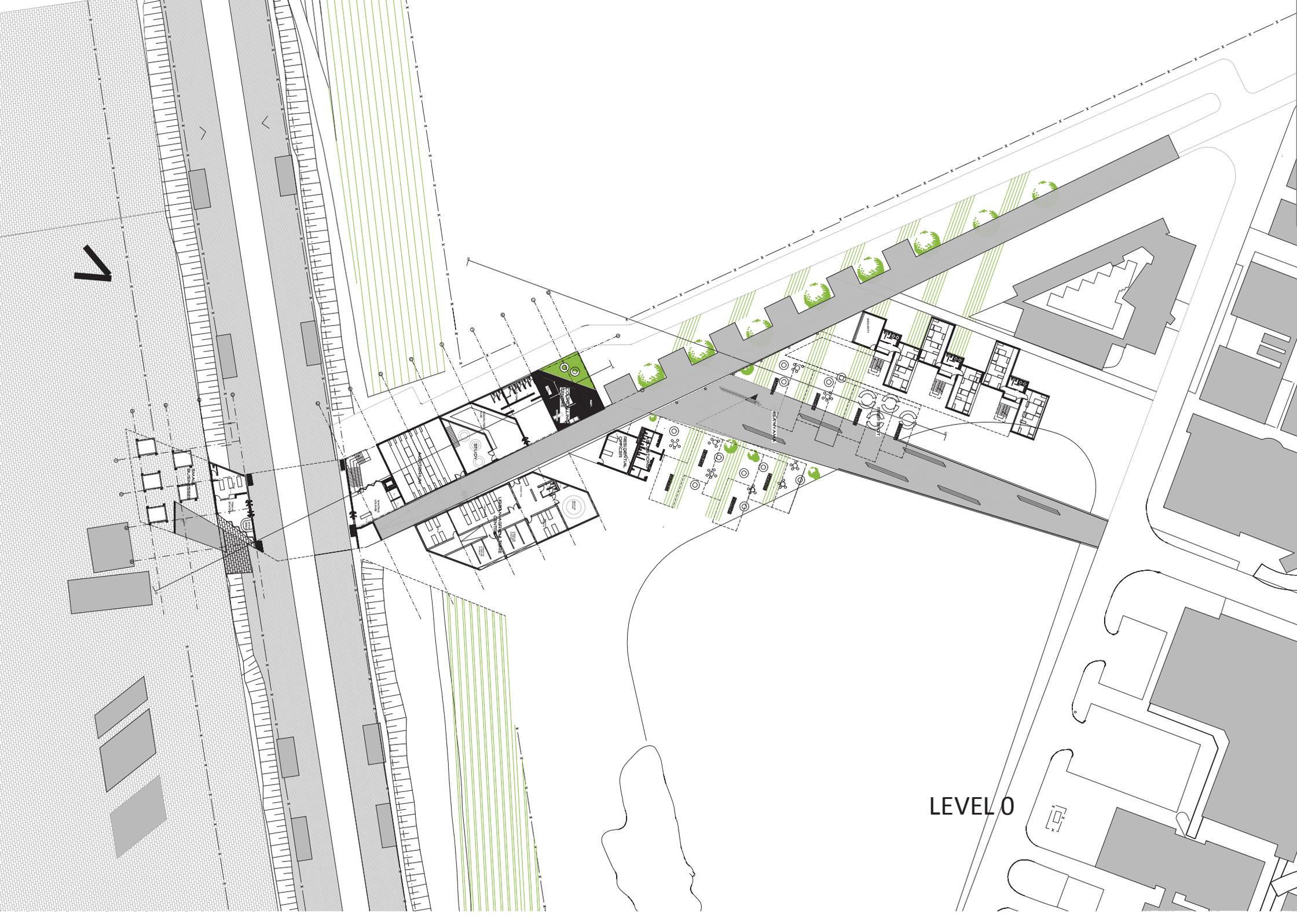




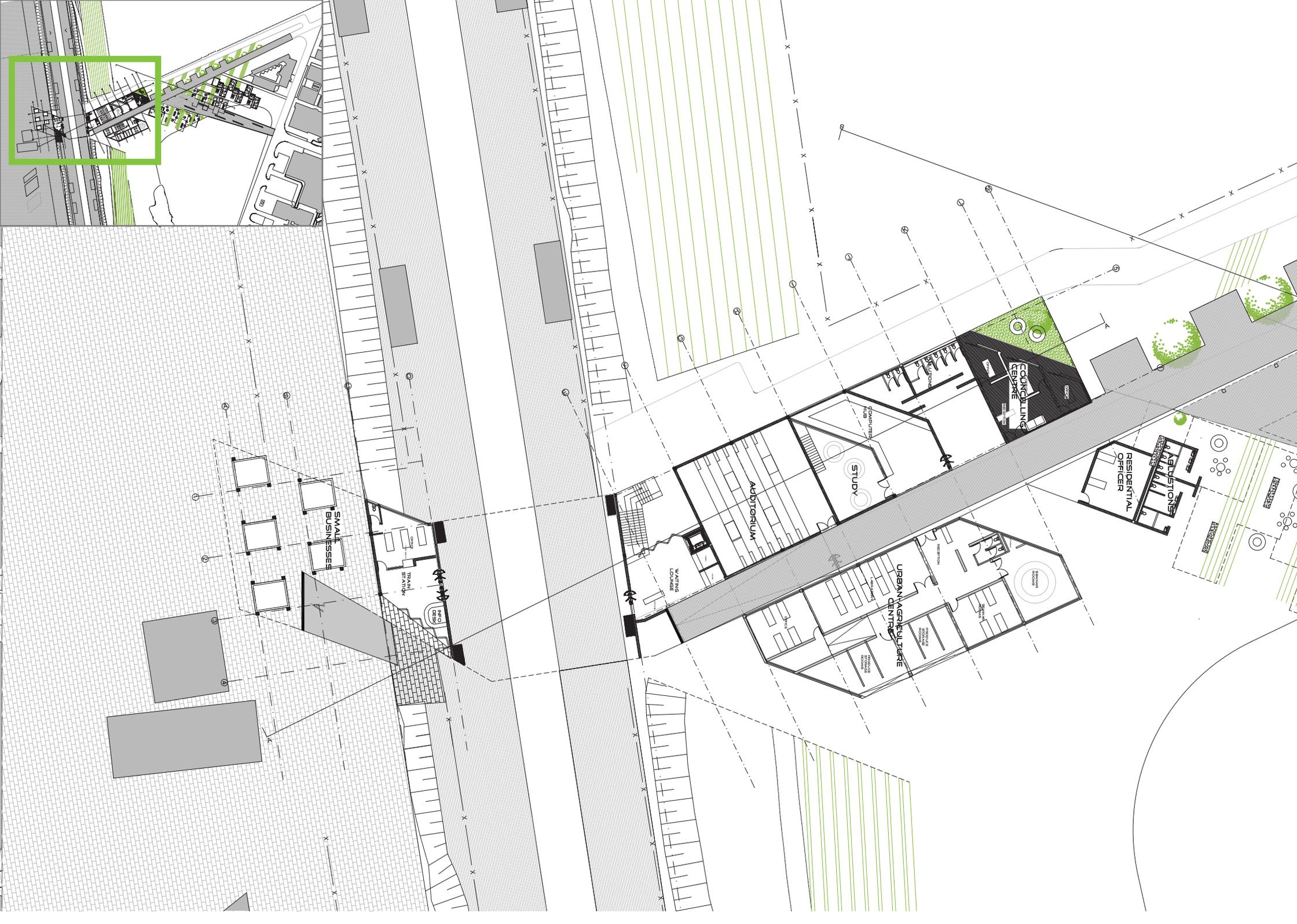


drawings

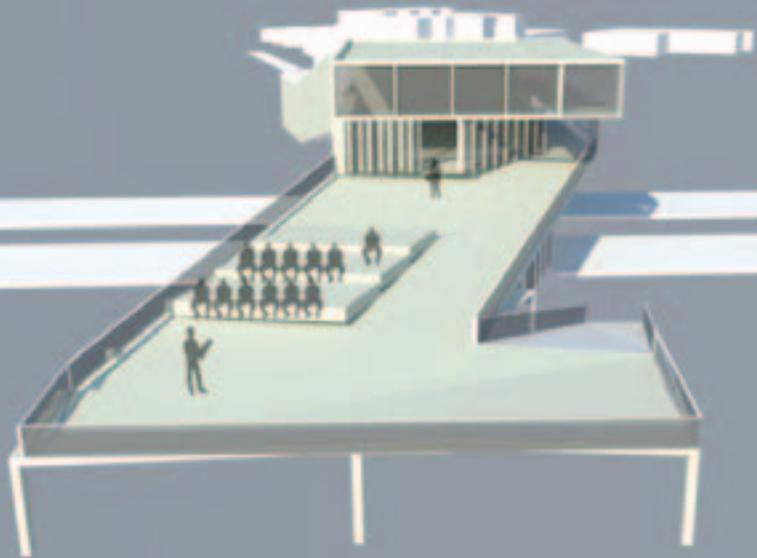




LEVEL 0



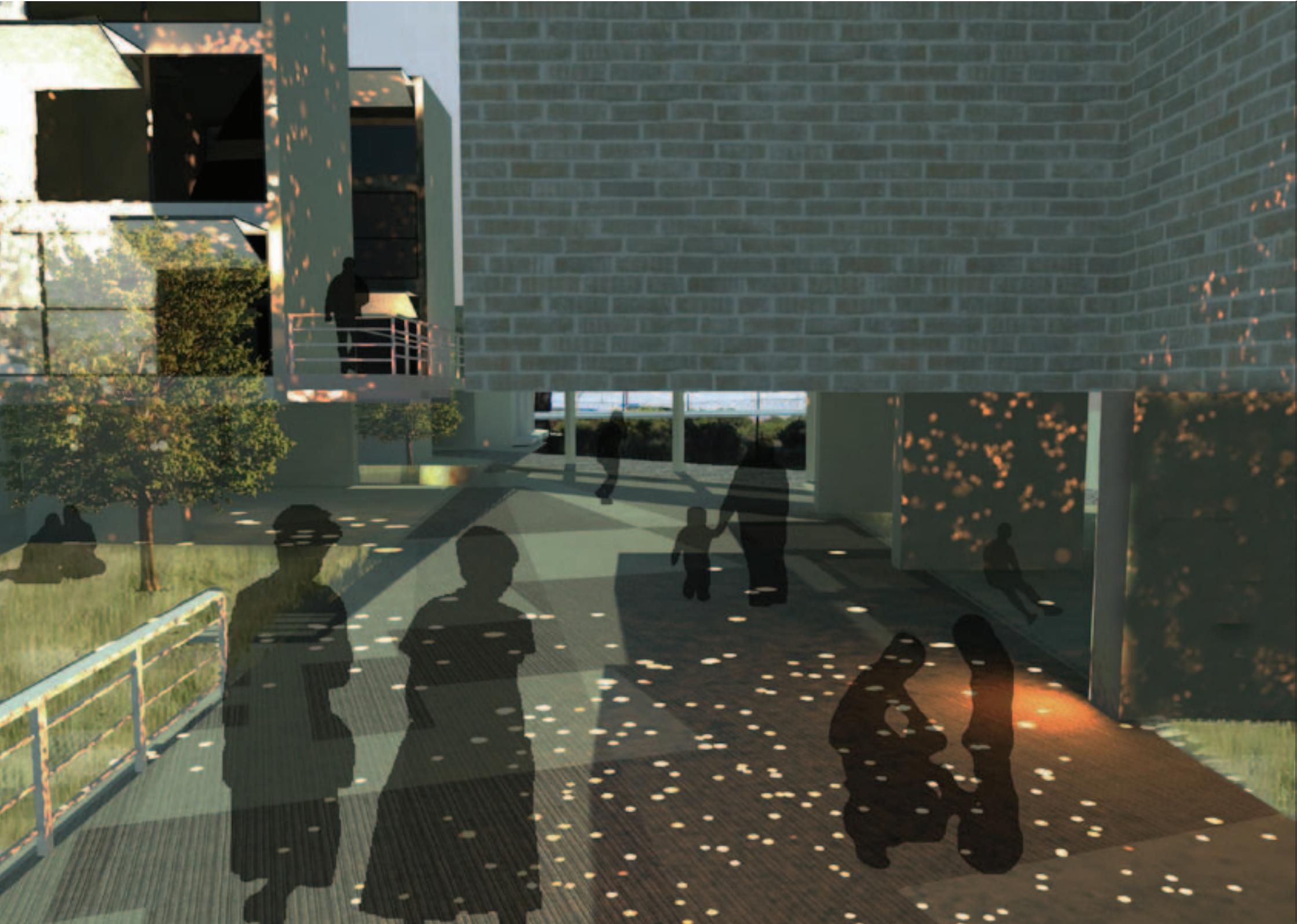








LEVEL 1



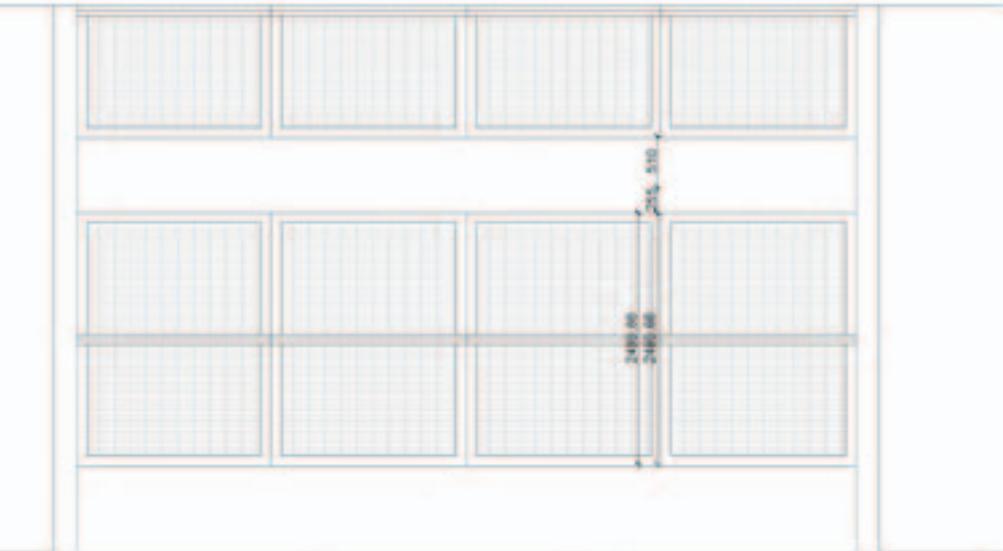


LEVEL 2

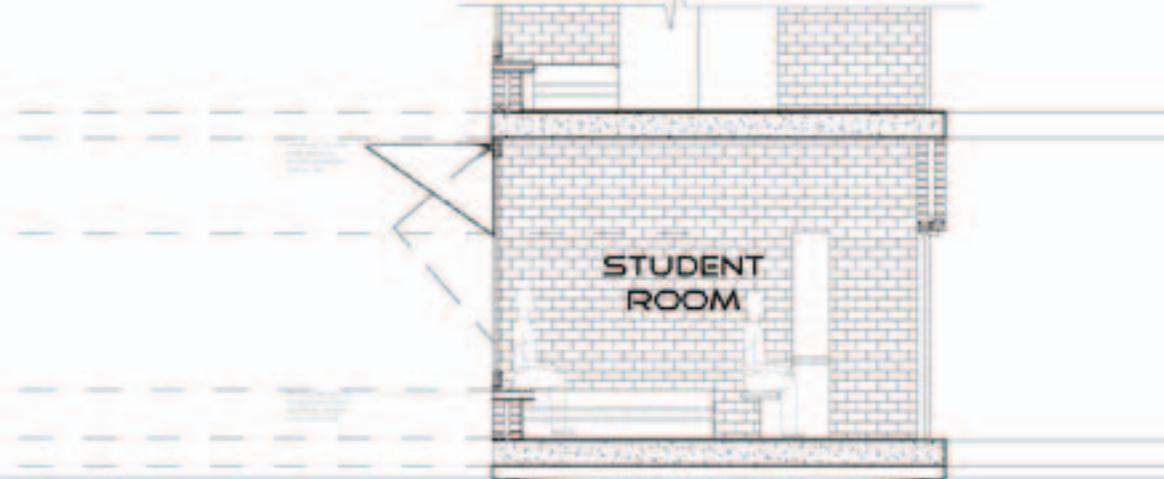


SHADOWS
SODAS

LEVEL 3



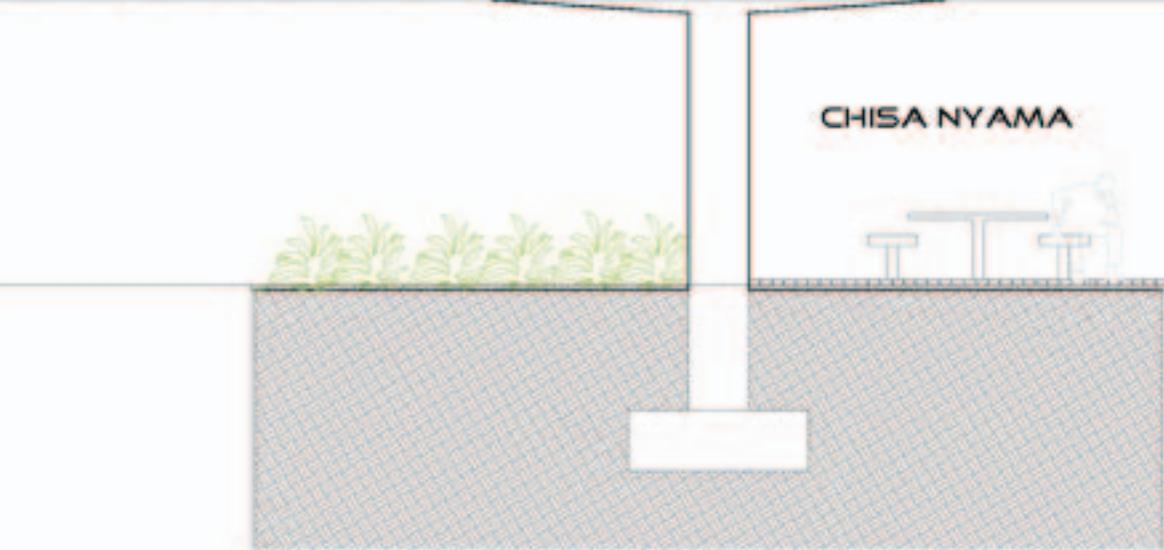
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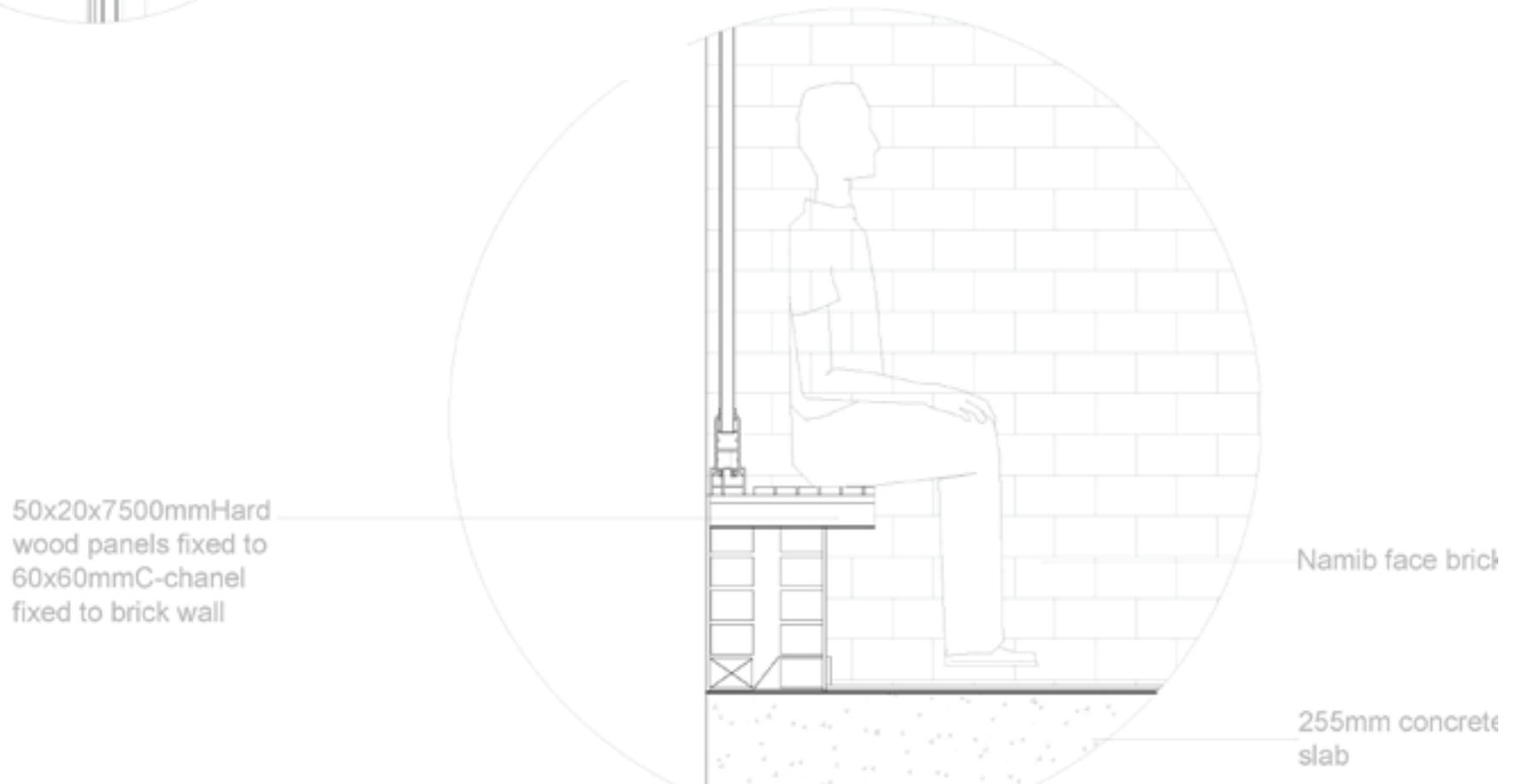
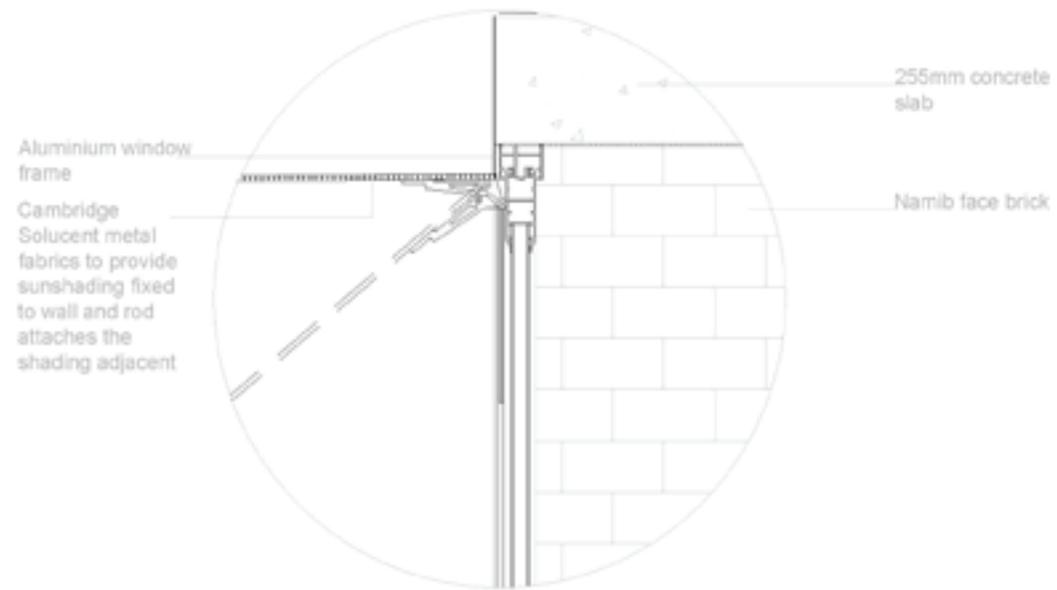
STUDENT ROOM



2000



CHISA NYAMA





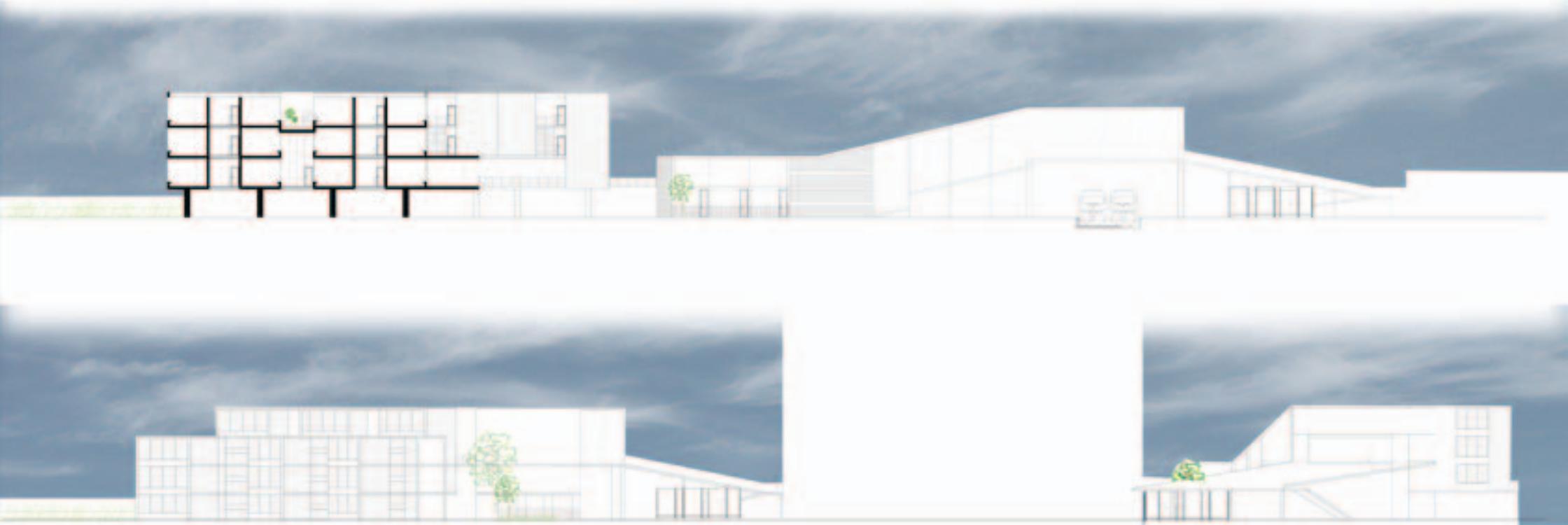
LEVEL 4

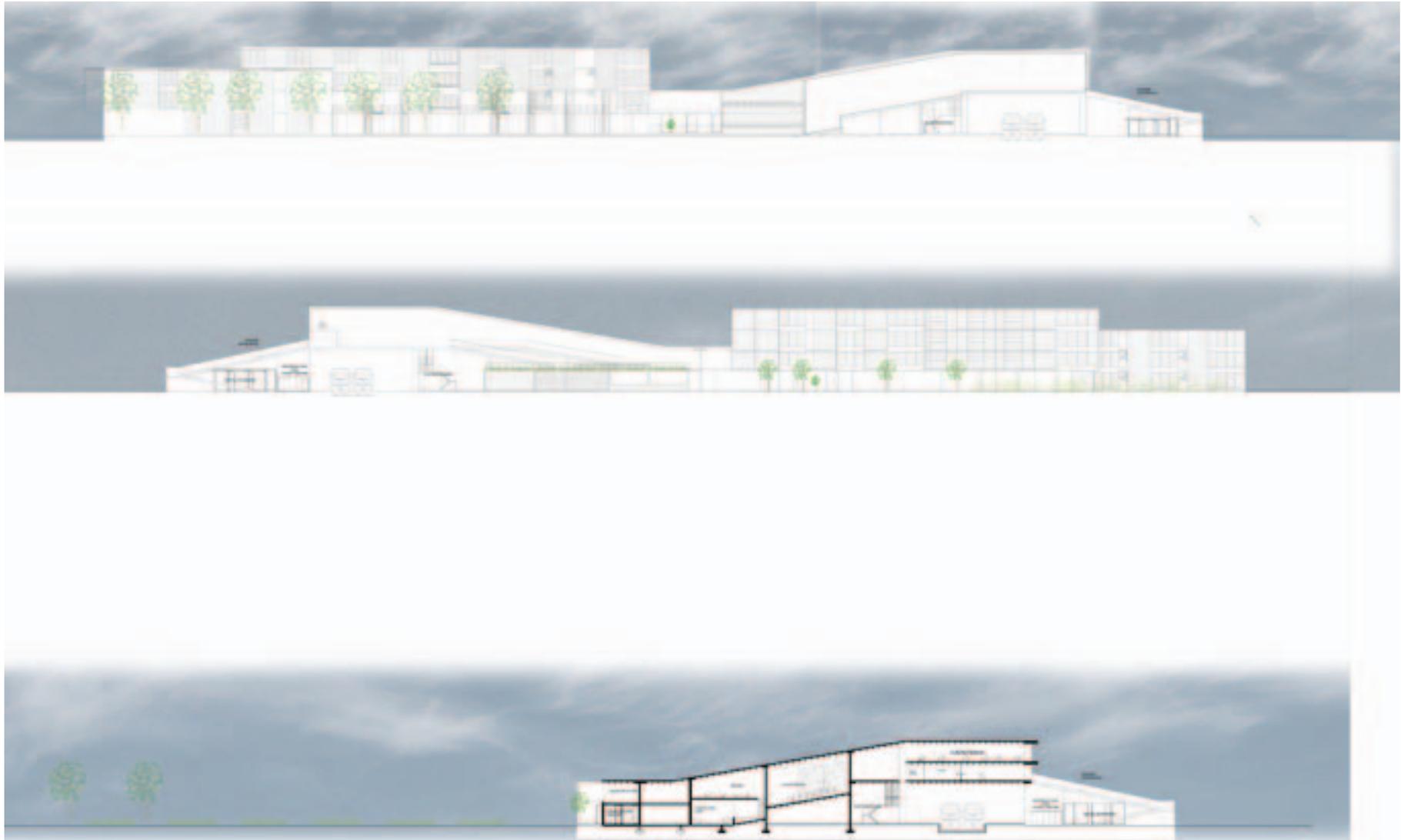


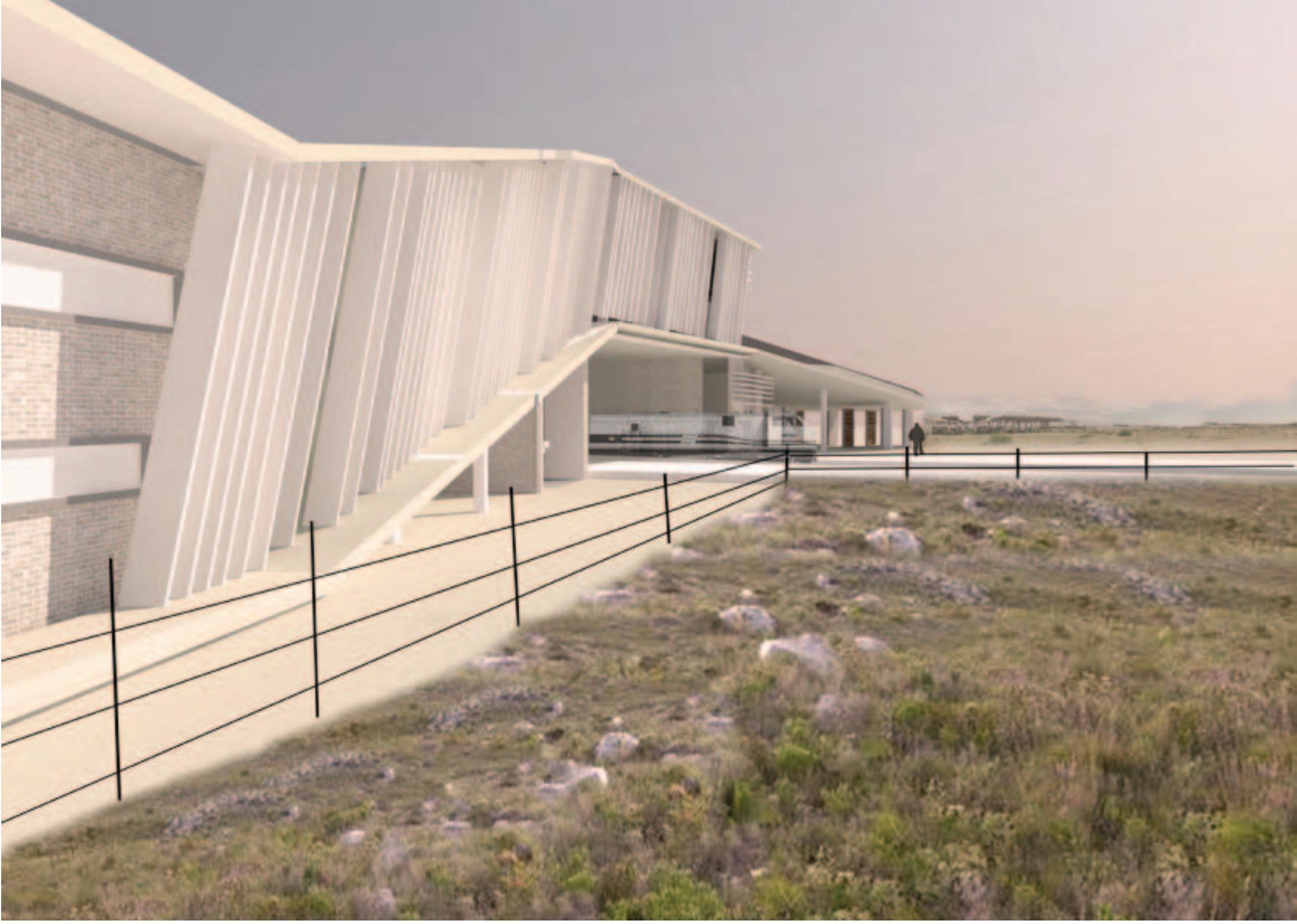
SCHOOL BUILDING

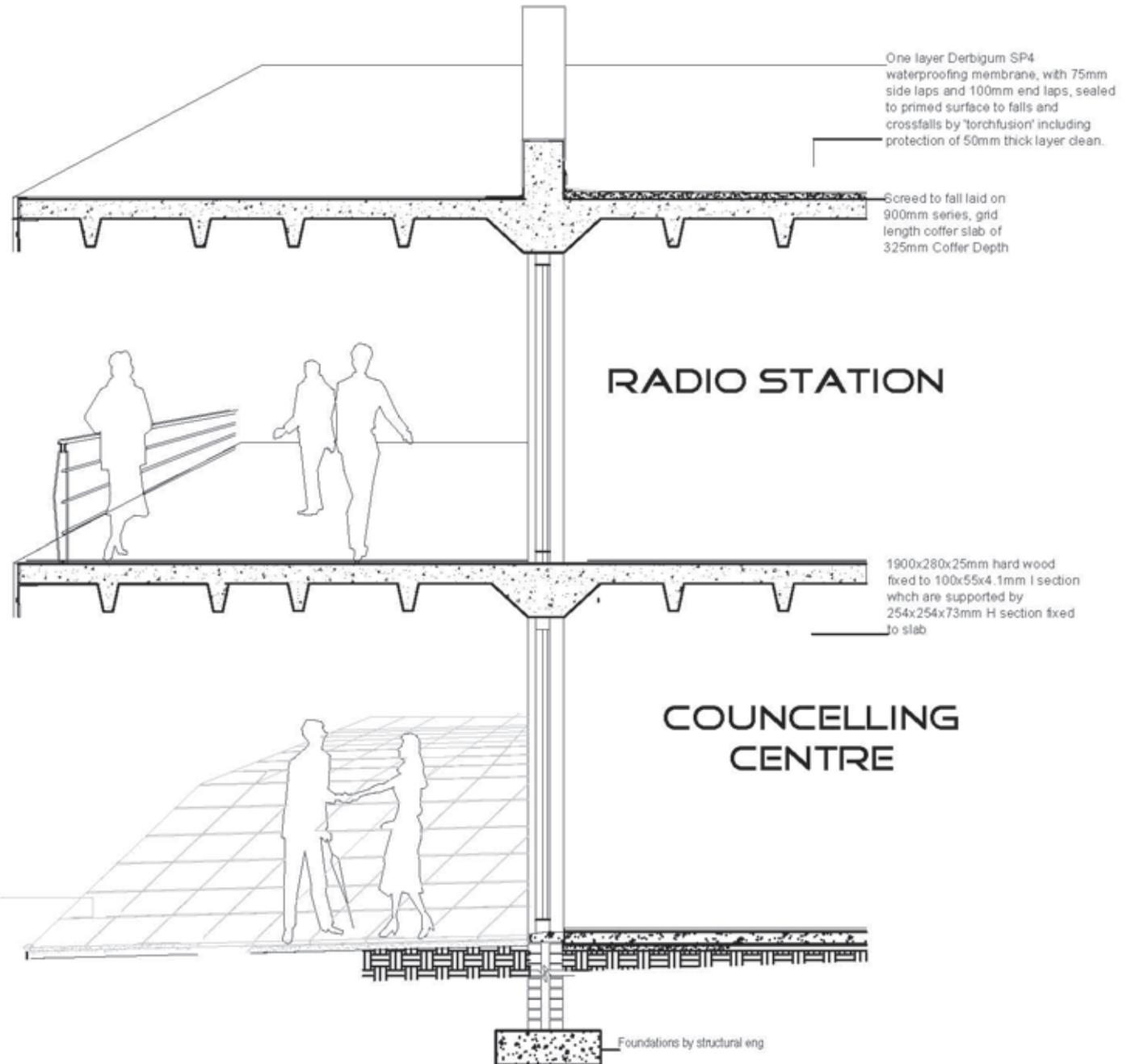
ESSENTIALS OF ARCHITECTURE
U. S. NATIONAL ARCHITECTURAL ACADEMY

ROOF LEVEL









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TRANSCULTURATION_____ a term used to describe the coexistence of different socio-cultural groups used to construct a univocal architectural narrative. It does not however limit architecture like architectural trends which tend to produce architectural hegemonic narratives that are detached from the sociocultural realities of the contexts where they exist thus avoiding engagement with the complex and fragmented nature of cultures. (Hernandez 2008)

Most developing countries as previously mentioned in the text are faced with an influx of rural migrants who fit into this term of transculturation by reflecting the context in which they find themselves in-between the rural and the urban. Their architecture in the cities exceeds that which is produced by architects and is therefore a representative example of the dynamic realities of the cities they are erected in.

