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## FRONT COVER DESIGN

The front cover image is a collage of a reproduction of a painting by James Ford, and various images of people of different cultures collected from the internet:

Cape Town city; what a wonderful place to be! This painting shows off the magic of the city for the citizens and visitors of the cape who are all out jaywalking and enjoying the pleasures of the city, swimming, dancing in the streets, listening to music, catching a train, cycling, sketching, mingling, seeing and being seen... This city is pedestrian friendly; encounters, excitement and spectacles are orchestrated by the city's infrastructure.

James Ford  
Oil on canvas, National Gallery Cape Town  
Painted in 1899, this painting illustrates the artist's view of Cape Town 1999.

## THANK YOU

Thank you to my mama and papa who have been 100% supportive of me and my work this year, I couldn't have done this much without them.

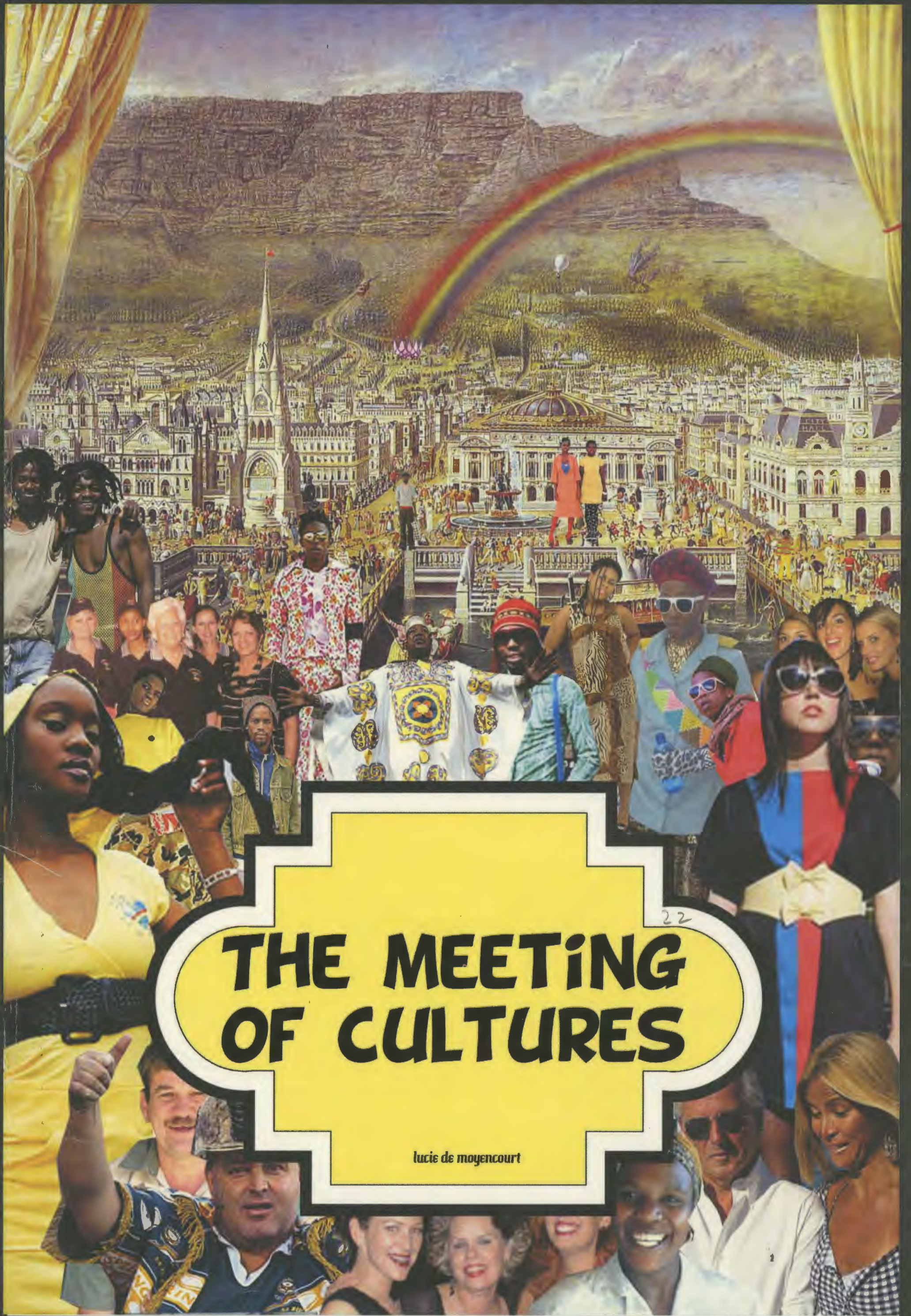
Thank you to my Tommy for making me keeping me updated with music, and making me laugh

Thank you to all of my friends, Alice, Ella, Chloe, Loulou, Caitlin, Nicole, Tremayne, Tatjana, Latisha and many many more for still being my friends after so much neglect!

Thank you to my classmates for all of the support and advice

And finally thank you to my lecturers and professors  
Alta Steenkamp  
Francis Carter  
Jo Noero  
Lucien le Grange

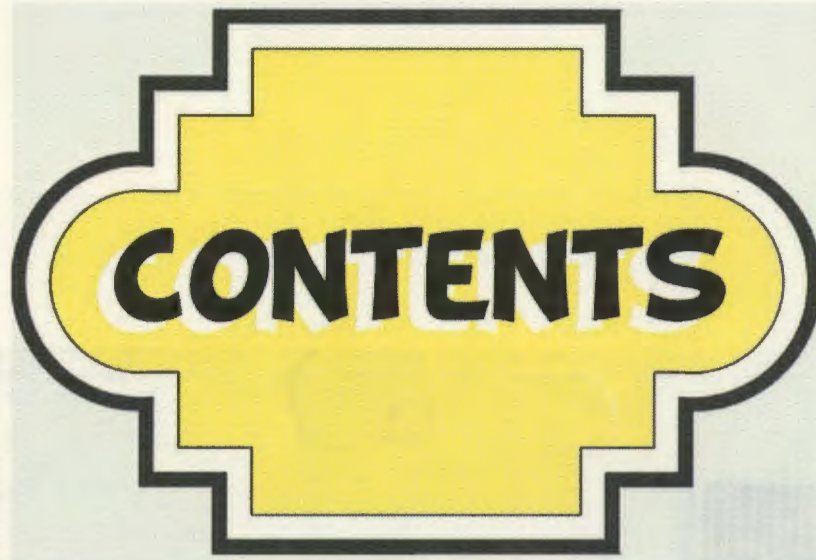
aswell as external consultants  
Gavin Lugte and Scott Johnson



22

# THE MEETING OF CULTURES

lucie de moyencourt



# CONTENTS

<b>(1) LOCATION, THEORETICAL FRAMEWORK.....</b>	<b>9</b>
<b>(2) INTERVIEWS.....</b>	<b>10</b>
<b>(3) THEORY OF POPULAR ARCHITECTURE PAPER:.....</b>	<b>14</b>
3.a Introduction.....	18
3.b Popular culture.....	20
3.c Concept carnival.....	22
3.d Popular architecture.....	25
3.e Original works.....	29
3.f Imitation works.....	37
3.g Conclusions.....	46
<b>(4) SITING:.....</b>	<b>48</b>
4.a Location, city.....	49
4.b Site analysis.....	52
4.c Site development planning.....	58
<b>(5) PROGRAMMING:.....</b>	<b>61</b>
5.a Food markets/ urban canteen .....	61
5.b Food market precedents.....	62
5.c Schedule of accomodation.....	68
<b>(6) FINDING APPROPRIATE FORM AND LANGUAGE.....</b>	<b>72</b>
<b>(7) WOVEN STRUCTURES:.....</b>	<b>83</b>
7.a Concepts.....	84
7.b Precedents in weaving in architecture:.....	88
- Non structural weaving	
- Allusions to weaving in the structure of the building	
- Structural weaving	
7.c Experiments in woven structures with critique from a structural engineer.....	100
7.d Conclusions.....	107
<b>(8) PROTEAS.....</b>	<b>114</b>
<b>(9) BIBLIOGRAPHY.....</b>	<b>124</b>

Your turn



# FINDING UBUNTU

**Linda Sakazi Thwala** urges black and white South Africans to feed their curiosity about each other's cultures and build togetherness.

It's been at least 14 years since the dawn of our new democratic dispensation; 14 years since we saw the birth of our so-called "rainbow nation". When Nelson Mandela walked out of prison after 27 years on 11 February 1990, black South Africans welcomed the newly formed democratic state after a long-fought battle for emancipation from the dark hands of apartheid.

Those who went into exile during this treacherous period suddenly realised that the wizard had waved the magical wand and the call for the great trek back to our Motherland was summoned to end white domination. They all came back to begin a new path for our nation.

But is our nation truly emancipated?

Taking a walk in the suburbs, one can sense the fear that still lingers in our country, in our streets, in our households, and in our hearts, particularly within the white community. In business and in pleasure, many white South Africans are still fearful of a black face. Fourteen years into our democracy the greater majority in our nation still has to reel in the unwilling minority into understanding the meaning of "togetherness".

We live in a country that is divided by the notion of our pigmentation more than anything else. There are those whites who are trapped in thinking that their skin colour is superior to that of a black person's; whites that will never hire an equally qualified black person to work in their companies, and will never pay an equally deserving salary to a black person, thus creating what I call "economic segregation".

In many of my conversations with my college peers, I am dumbfounded by the little knowledge my white fellow students have about black culture and living standards in the townships. Black teenagers, in contrast, know so much about their white counterparts' westernised living standards, culture and dialect through going the extra mile.

How many white people do you see walking around the township on a daily basis? How many black people do you see walking around the suburbs on a daily basis? For white people to understand their country as much as black people do, they'll have to be willing to merge with blacks on an equal footing without trepidation.

It is human nature to fear that which you do not know, however, knowledge breaches understanding and contentment, thus killing fear. If blacks leave the townships every day to support white businesses in the suburbs, why can't whites leave the suburbs to see what life is like in the townships?

White South Africans need to comprehend the danger of

self-isolation from their own country and the danger of the inability to know your fellow citizens' dialect and culture. And black South Africans must stop promoting "black inferiority". The spirit that united black people during the struggle is needed to expunge the fears that envelop the white man's mentality in this country. We must reach out to our communities and rebuild what is lost with pride. We must rebuild the essence of *ubuntu* (togetherness) and open our townships to everyone.

To bridge the great divide in our country, we as South Africans, need to overlook the colour of our skins and work together towards the betterment of our nation and future. We need to create a country that supports South Africans from every sphere. Patriotism means loving your country and your fellow citizens; acting through love to alleviate poverty in your fellow citizens' lives, and making sure that every person has their basic needs met. This must not be done only through curiosity, but through love for our fellow human beings. ■

Send your article with a recent head and shoulders picture of yourself to TRUE LOVE, 'Your Turn', PO Box 784696, Sandton 2146, and win a prize.



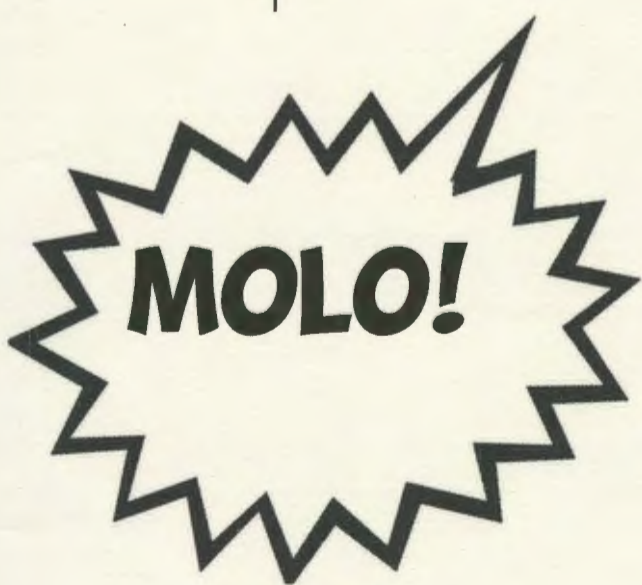
Long-wearing cosmetics such as REVLON ColorStay are a must in today's world! This month Linda Sakazi Thwala wins a hamper of Long-wearing ColorStay products, including ColorStay 12 Hour Eye Quads, ColorStay Pencils, ColorStay Velvet Matt Makeup, ColorStay Mineral Lipglaze, ColorStay Liquid Eyeliner and ColorStay Concealer. For more information, call 011 971 0833, or visit [www.revlon.co.za](http://www.revlon.co.za).



# THE MEETING OF CULTURES

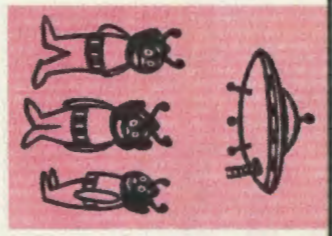
'WHAT IS THE CITY? BUT THE PEOPLE' WILLIAM SHAKSPEAR

*DESIGN OF A PLACE THAT  
FACILITATES CROSS CULTURAL  
INTERACTION IN THE CITY.*



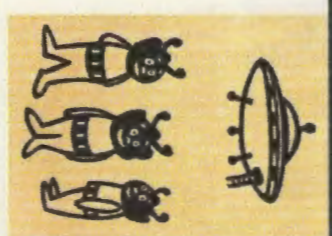


The Khoesan  
San  
Khoekhoe



We are from Portugal, Spain,  
England, Holland:  
we want your food, drink

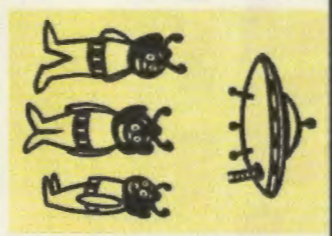
**1488 Explorers**  
Portuguese  
Spanish  
Dutch  
English  
Khoekhoe



We are from Holland:  
we want to establish a colony

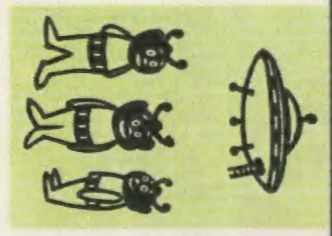
**1652 Settlement**  
Dutch  
Khoekhoe  
Slaves: Sulawesi (Indonesia)  
Angolans  
Benin  
Madagascar  
Mozambique  
India  
Ceylon

(Becomes Afrikaner population of the Cape)



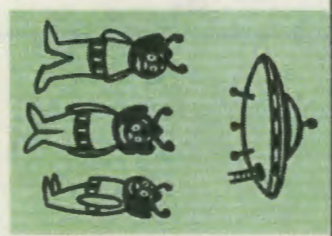
We are from England:  
we do not want the French to  
control this part

**1795 British era**  
British  
Afrikaner  
Bantu



We are from the homelands:  
we want jobs and money

**1948 Apartheid**  
Whites  
Blacks  
Colored



We are from Congo:  
we want your women and your jobs

**1994 + Rainbow Nation**  
South Africans  
Foreigners

YTTD 3M  
JASUTJUS 220RD 2ETATJUSM

**CAPE TIMELINE OF PEOPLE AND CULTURES**

original image reference: Murray B. (1998) Brent Murray, Cape Town, Bell Roberts Publication



## 1. LOCATION, THEORETICAL FRAMEWORK:

# AFROPOLITANISM

*Africa Remix exhibition, an Afropolitan attitude to design:*

A contemporary definition of the African identity is that of the Afropolitan by Achille Mbembe in his essay titled Afropolitanism:

“Awareness of the interweaving of the here and there, the presence of the elsewhere in the here and vice versa, the relativisation of primary roots and memberships and the way of embracing, with full knowledge of the facts, strangeness, foreignness and remoteness, the ability to recognize one’s face in that of a foreigner and make the most of the traces of remoteness in closeness, to domesticate the unfamiliar, to work with what seem to be opposites- it is this cultural, historical and aesthetic sensitivity that underlies the term ‘Afropolitan’”.

“Afropolitanism is a way of being in the world, refusing on principle any form of victim identity. It is a political and cultural stance in relation to the nation, to race, and issues of difference in general.”  
(Mbembe, A. Africa Remix, contemporary art of a continent, Johannesburg, Johannesburg art gallery, p. 26-29)

The reason why I like the concept of Afropolitanism is because it is an inclusive way of thinking about being african. It is positive and enables us to move forward and think of a united, uniquely South African future.

Achille Mbembe identifies Johannesburg as the centre of Afropolitanism; He claims that there is a new form of African modernity being developed in the city, ‘an ethic of tolerance is being created, likely to revive African aesthetic and cultural creativity, in the same way as Harlem or New Orleans did in the United States.’

Since the beginning of this project I have been trying to find an appropriate identity for contemporary Capetonian architecture. This involved delving into the questions of an African identity. What is African? What is not?, Who is African? Who is not? What does African mean? What does it look like? Pan Africanism?, African renaissance?, Afropolitanism?, Rainbow nation?

+1994) African nations took refuge in Pan African theories of nationalism. During this period identification merged with sameness; the question was not about asserting oneself individually but collectively as a continent. The idea of an African Renaissance was born. The continent has since slipped into a more localized identity quest, or in the case of the artist; a personal one...

New generations are looking for new ways of defining themselves. The issue is no longer about establishing a definition of post colonial Africa, but rather about defining the role of the African artist as an individual on the international stage. (Africa Remix p. 64)

This operation involves a permanent state of introspection and confrontation with contemporary, colonial and pre-colonial history. Contemporary African artists have, since the pan African model, been redefining their humanity, determining an aesthetic code and establishing a set of references which would make their work recognizable in the global arts world. Contemporary African artists are drawing themselves a new destiny, more in tune with what we have become.






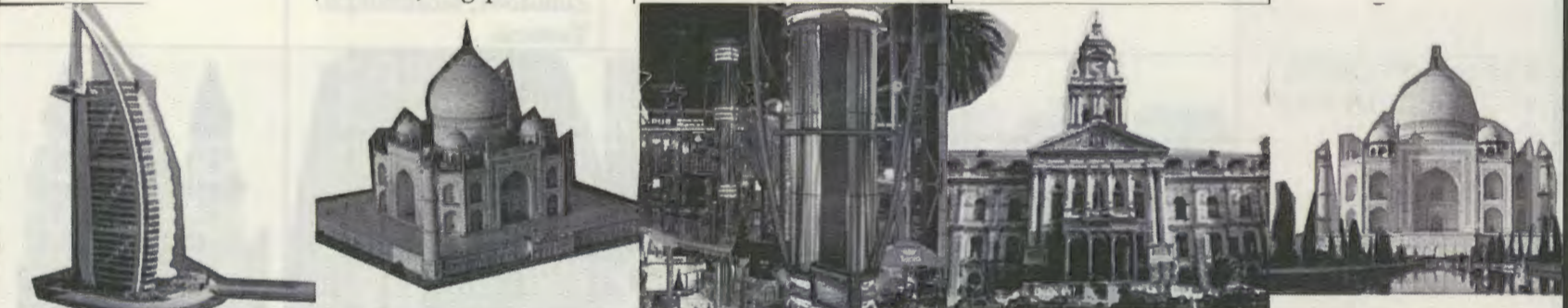
“the African artist has no choice but to accept the fact that in one way or another he or she will always be a foreigner. They are then left with the freedom to position themselves as ironic observers enjoyably deconstructing the clichés that world society has built on. They make themselves ethnologists. They play with the clichés and turn against others the weapons that had been used against them.”  
(Africa Remix p. 63)











How can architecture convey the message of afropolitanism?  
It is my belief that contemporary South African architecture has yet to explore the wonderful possibilities of new architectural identity which is indicative of our social transformation.










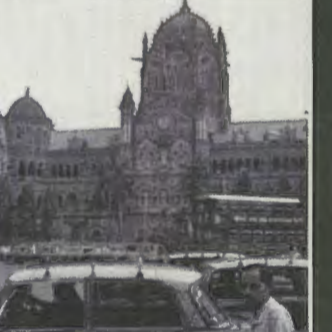
**“TODAY’S AFRICA IS THE FRUIT OF A HISTORY ALTERED BY OTHERS”**

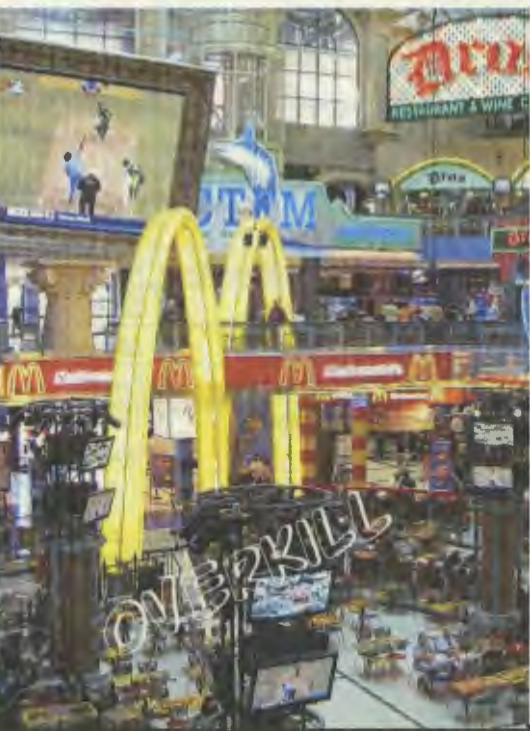
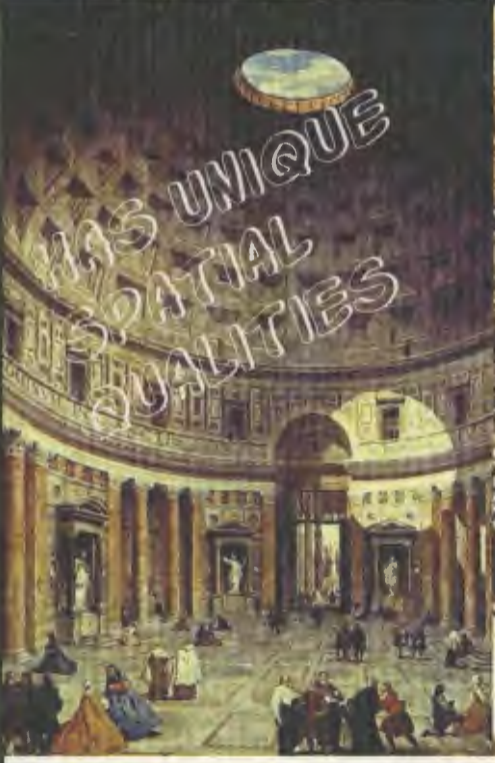
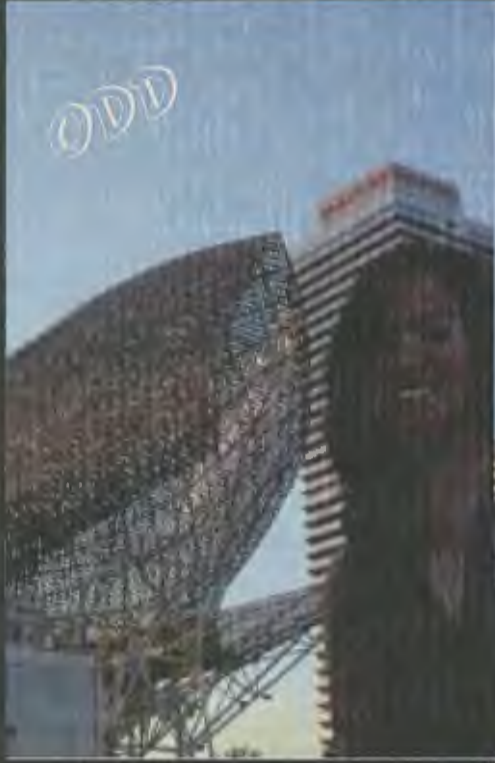
*(Africa remix- identity and history p.62)*



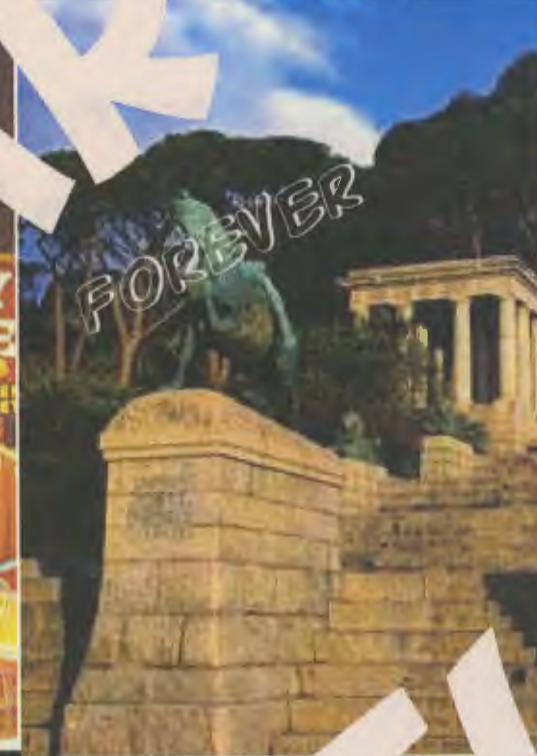
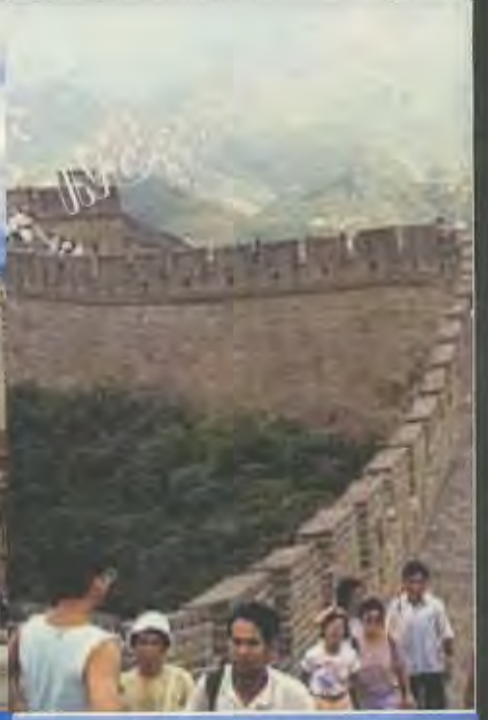
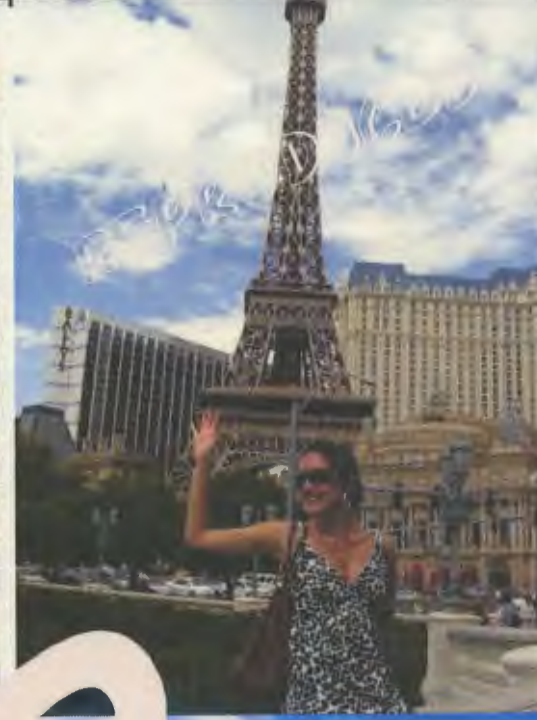
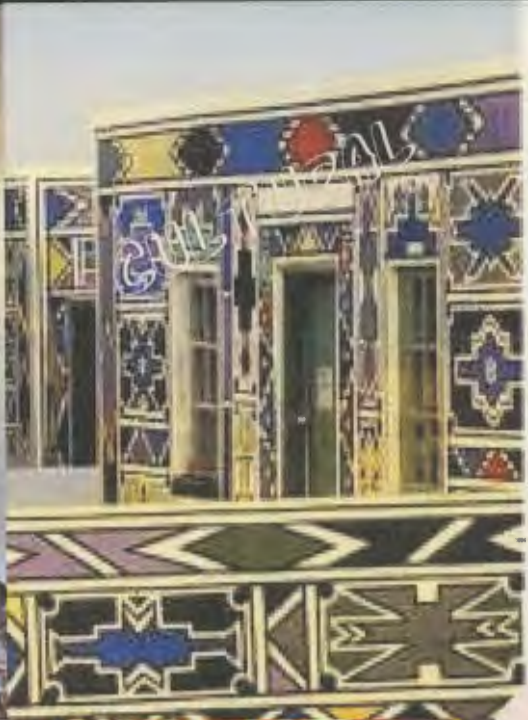
NAME	Terrence Swarts	Candice Nicholson	J.A. Stoffels	Daniel Petrie	John Coetzee
					
AGE	50	26	58	25	48
OCCUPATION	Printer	Promotions Campaign Manager	Traffic Warden	Research Engineer (Chemical – Bio-energy)	Technical Officer
EDUCATION	Std. 8	Bcomm	Std. 8	Bachelors degree in Chem. Eng. (UCT)	Technicon
INTERESTS	Religious Studies, Art Reading			Music, Travel, Sailing, Food, Hiking	Squash, Golf, Sports
HAVE YOU TRAVELED?			No	Yes	
CONTINENTS VISITED					India, Australia
COUNTRIES VISITED	RSA	Australia, India, West Indies, UK, Bazaruto, New Zealand, Singapore		A Lot!	Dubai
TOP 10 FAVOURITE BUILDINGS IN THE WORLD					
1	Burj Al Arab	Taj Mahal	Tyger Valley	Town Hall, CT	Taj Mahal
2	Palm Tree Islands	Burj Al Arab	Canal Walk	Notre Dame	Red Mosque, India
3	Burj Dubai	The Palace (Lost City)	Somerset Mall	Madame Zingara Circus of Dreams	Victory Tower
4	Century City - Contemporarily re-interpreting the old	Palm Jumeira	Promenade Mitchell's Plain	Luis Barragan's House, Mexico City	Mall of Emirates - modern
5	Grand West Casino	Opera House	Westridge	Mexican/Spanish Villa	Rialta building, Australia
6	St George's Cathedral	Guggenheim	CTICC	Traditional Xhosa Rondavels, Transkei	Burj Dubai
7	Sagrada Famillia		Golden Acre	Orpheum Cinema, Sydney, AU (Art Deco style big cinema)	Burj Al Arab - looks like a sail
8			Werdmuller Centre	Old English Banks 1900s	Green Point Stadium
9			Riverside Centre	Abbey Road Studios, London	CTICC
10			Fountain Centre	American diners	Waterfront
WHY DO YOU LOVE THE ABOVE NO. 1 FAVOURITE BUILDING?	Interesting, looks expensive, elaborate design	Majestic & spiritual, and the location		It's special, and I go there for special occasions, it has the feeling that something amazing could happen at any time	Beautiful, Unreal fantasy
NAME THE FIRST 5 ARCHITECTS THAT COME TO MIND					
1	Le Corbusier			Frank Gehry	Anya Miszewski
2	Stefan Antoni - expensive open spaces			Norman Foster	Rietvelt
3	Gaudi			Karen Smuts	
4				Renzo Pienno	
5				Etienne Berea	
WHAT BUILDING WOULD YOU MOST LIKE TO VISIT?	Sagrada Famillia, Gaudi	Taj Mahal		Blue Mosque/Haia Sofia, or Motown Records Detroit	St Petersburg Palaces
WHY WOULD YOU LIKE TO VISIT THIS BUILDING?	It looks beautiful in pictures			Have heard that Blue Mosque and Haia Sofia are really beautiful. Would love to feel the history of 20 years of my favourite music at Motown Records.	Beautiful Architecture

NAME	Lina Ntanyana	Skip Wright	Pascale Van Huyssteen	Tom de Moyencourt	William Melenephy
					
AGE	43	70	22	24	57
OCCUPATION	Domestic Worker	Production Manager	Field Guide	Student	Departmental Assistant
EDUCATION	Std.8	Matric	BSc Conservation Ecology, Stellenbosch	UCT Bus Sci Finance	Std. 8
INTERESTS	Music	Motorbike Racing, Internet, Live theatre	Nature, Art, Design, Dancing	Surfing, DJ'ing	Sports, Rugby, Soccer, Cricket
HAVE YOU TRAVELED?		Yes	Yes		
CONTINENTS VISITED		Europe/Africa	Europe, America, UK, Africa	5	
COUNTRIES VISITED	Eastern Cape	All of Europe	UK, France, Italy, Switzerland, Botswana, Zimbabwe, Mozambique, Tanzania	Many	SA only
TOP 10 FAVOURITE BUILDINGS IN THE WORLD					
1	Goodwood Casino	Berlin Opera House	Saint Chapel	St Paul's + Sistine Chapel	Waterfront
2	Waterfront	Artscape Cape Town	Musee D'Orsay	Versailles	TigerValley
3	Cavendish Square	Amsterdam State Building	Taj Mahal	Louvres	Canal Walk
4	England Church Nyanga	His Majesty Theatre, London	A Hundred Angels guest house	Mont St Michel	Grand West Casino
5		Hamlet Castle, Denmark Helsinborg	Singita Umbombo	Pantheon	Vegas Strip
6		Port Elizabeth City Hall	St Cyprian's Chapel	Duomo, Florence	Caesar's Palace
7		Monte Casino, JHB		Grand Palace, Bangkok	
8		Berlin Museum		Colosseum, Rome	
9				Bellagio, Vegas	
10				Tower of London	
				St Paul's + Sistine Chapel	
WHY DO YOU LOVE THE ABOVE NO. 1 FAVOURITE BUILDING?	Most Beautiful	Because I returned 4 times to see it, wow!!	The open feeling, the light feeling created by the stained glass windows	Opulence + Beauty + Significance	Look at people, boats
NAME THE FIRST 5 ARCHITECTS THAT COME TO MIND					
1		Nick Border	Gaudi	Herbert Baker	
2		Mizweski	Frank Gehry	Stefan Antoni	
3			Stephan Antony	Arthur Quinton	
4				Gaudi	
5				DHK	
WHAT BUILDING WOULD YOU MOST LIKE TO VISIT?	No interest	Convent Gardens	Haghia Sophia	Gaudis in Barcelona	Sun City
WHY WOULD YOU LIKE TO VISIT THIS BUILDING?		For all the hype I've heard about it!!	To see the amazing stone work, mosaic and spacial concepts	Out of the ordinary + Eccentric	Fun + relaxing holiday, like a show

NAME	Susan Bromley	Nicole Van Huyssteen	Patrick	Tatjana Meirelles	Tremayne Dudley Ward-Smith
					
AGE	51	25	59	25	25
OCCUPATION	Ballet Teacher	Advocate	Dept. Assistant	Advertising Researcher	Film Industry
EDUCATION	Teacher's Dip. In Ballet, Reg. Teacher of Royal Academy of Dance	Bcomm (Law), LLB, MA IR	None	BA Film and Media	BA Film, Documentary, TV, Archaeology
INTERESTS	Gardening, Art, Music	Travelling	Soccer	Film, Horses, Fashion, Nature	The great outdoors, photography, snorkeling, literature, film, people
HAVE YOU TRAVELED?			Only to Namibia		
CONTINENTS VISITED	Europe Africa Asia	5	No	4	Africa, Asia
COUNTRIES VISITED	France, England, Austria, Switzerland, Russia, Italy, Turkey, Spain, Holland, Belgium	Many	Namibia	Botswana, Mauritius, Italy, France, UK, Germany, Australia, New Zealand, Canada, Argentina	Africa, India, Maldives, Mauritius
TOP 10 FAVOURITE BUILDINGS IN THE WORLD					
1	Les Invalides, Paris	Notre Dame Cathedral, Paris	CTICC	Chrysler Building, NY	Victoria Station, Mumbai
2	Winter Palace, St Petersburg	St Basil Cathedral, Moscow	BP Centre	Duomo, Florence	Taj Mahal, Agra
3	Parc Guell, Barcelona	Sagrada Familia, Barcelona	Graca Michel Building UCT	Reichstag, Berlin	Great Zimbabwe
4	Groot Constantia	Louvre Palace, Paris	Athlone Stadium	Guggenheim, organic shapes covered in silver...	Eiffel Tower
5	Notre Dame de Paris	Petit Palais, Paris	Belmont Centre, Rondebosch	Koln's gothic cathedral	Sistine Chapel
6	Topkapi Palace, Istanbul	Grande Palais, Paris	Rustenberg Res. Flat, "	Empire State, NY	Leaning Tower of Pisa
7	Catherine Palace, outside St Petersburg	Stone Town Buildings, Zanzibar	Werdmuller Centre	Gaudi's unfinished cathedral	The Parthenon
8	Chateau d'Azay le Rideau, on the Loire	St Paul's Cathedral, London	Parow Centre	Holocaust Museum, Berlin	Hancock Building, Chicago
9	Rhodes Cottage, Muizenberg	Santiago de Compostela Cathedral	Sanlam Centre, Bellville	Old Mutual building, CT	Melrose Arch, JHB
10	Fontainebleau	Duomo, Firenze	Pentech Training College	Notre Dame	The Sagrade Building
WHY DO YOU LOVE THE ABOVE NO. 1 FAVOURITE BUILDING?	Harmonious, aesthetic design	Intricate details & stain glass windows		I love art deco, the building reminds me of an Esher drawing... and it has metal gargoyles on it!	Historical contrast of a colonial legacy within a framework of a city
NAME THE FIRST 5 ARCHITECTS THAT COME TO MIND					
1	Gaudi	Gaudi	Anthony Arch. CT	My dad!	Gaudi
2	Le Corbusier	Wynand Wilsenhach	Anya v.d. Merwe Misceski	Renzo Piano	Herbert Baker
3	Frank Lloyd Wright		Derek Hemstra Arch.	Zaiha Hadid	Etienne Bruwer
4	Renzo Piano		Revel Fox	Mario Suakai	Mr Eiffel
5			Mekena Makeka	Gaudi	
WHAT BUILDING WOULD YOU MOST LIKE TO VISIT?	Taj Mahal	Taj Mahal	Sydney Opera House	I'd love to see the Chrysler building or Empire State	Pompidou
WHY WOULD YOU LIKE TO VISIT THIS BUILDING?	I think it looks beautiful, like the white marble...	Going through an India phase (Shantaram & Slumdog)		I've never been to NY, and to see the skyline from the top of a historic skyscraper must be truly incredible	I've recently heard about its uniqueness in design, and that it's a building unafraid of publicizing its architectural and



LANDMARK



# POPULAR ARCHITECTURE



COMICAL



MONUMENTAL



POWERFUL



CUSTOM MADE



LOVED AND HATED



DESTINATION



MAGICAL



DREAMY

All image references on back page



## COMMON TERMS:

**Popular:** Appreciated by masses of people from all walks of life, not just by the 'cool', hip, now, trendy people.

**Culture:** The generating and circulating of meanings and pleasures within a social system.

**The people:** The people, the folk, the popular are the shifting set of relations that cross all social categories; thus different individuals may belong to different formations of people at different times, moving between these formations fluidly.

-By the 'people' I want to refer to people's feelings of collectivity rather than sociological factors such as class, race, gender, age...

**Popular architecture: Popular architectural design.** Popular architecture is architecture that is loved by masses of people from all walks of life and cultures.

A building might be popular because it has to accommodate a large amount of people (e.g.: a university building) but it is not in this case the design that makes the building popular, but the program. By popular architecture, I am referring to architecture and buildings that people love because of their presence and aesthetic in a space. An architecture, building or space that is created, wherein a general passer-by will feel moved by the work of architecture. Scale, craft, design, play, ingenuity, innovation, fantasy, exaggeration, and excess are some of the ingredients commonly found in architecture that attracts people, and that is popular.

### 'Carnival':

Carnival is a unanimous state of pleasure which can be experienced by all people no matter what their upbringing, education, or lack of education. This state of pleasure is usually attained where there is a group of people gathered together, as opposed to individual pleasure. In carnival people are exposed to the humorous aspect of a world which is unfinished, bright and positive. It is in this happy state of being that people can reconnect with the joys of living. In a carnival state or carnival space, one experiences pure freedom, elated revelry, boisterous behavior, the casting off of one's cares, and life in its most unbound form.

## OBJECTIVES, IMPORTANCE OF THE STUDY:

-Understanding the principles and theories, possibilities and limitations, of popular space and popular architecture

-Reaffirming architecture as the public art of society

-Identifying what architecture is popular; what kind of architecture excites and stimulates people?

-Making architecture (elitist art form) accessible and fun for people

-Pleasing the public

-Create a 'carnival' atmosphere whereby urban life, enjoyment of the city and streets, public debate, reconciliation, and unity can take place

## LIMITATIONS:

-This study is neither historical nor anthropological; it is a personal interpretation, concerned with popular architecture, as it relates to people, material and human impulse.

- As this is such a wide topic, I will be focusing on two case studies per chapter as illustrative examples of popular architecture. These examples are therefore not the only examples of such architecture

### 3.A. ABSTRACT

The concept for this paper and for my thesis comes from a personal desire to facilitate cross-cultural interaction in a space. I began by questioning whether architecture can bring together people from different backgrounds and cultures, and if so then what type of architecture does this? And how does it do this?

I believe the city is a psychological as well as physical reality. The city exists as a series of doubles; having official and hidden cultures, it is both a real place and a site of the imagination. Its elaborate network of streets, housing, public buildings, transport systems, parks, and shops is paralleled by complex attitudes, habits, customs, expectancies, hopes and popular culture that reside in us as urban subjects. (Chambers I. (1986) Popular culture, the metropolitan experience, USA: Methuen & Co, P. 183)

I believe that public architecture should represent and reflect popular culture in order to arouse and attract people together in a space. By doing so, the art and magic of architecture becomes accessible to the general populace.

Architecture is a public art whereby the creator of the work should think of designing for pleasing the people on the street as much as pleasing the client of the project.

A building that is able to communicate with people adds depth to people's lives and daily experience. I am interested in architecture which makes you fantasize, dream, marvel, act, jump in fountains, climb up walls of buildings, lose your inhibitions, and break taboos in society. A work of architecture thus becomes a stimulus for discussion, exchange and pleasure.

This study is my opportunity for developing a number of ideas about popular architecture as well as to express my own love of vibrant popular places in order to enable creative design for my architectural thesis. Through this theoretical investigation I hope to discover innovative ways of realizing my concepts of building for 'the people'; of giving the people what they would like to see in a public building.

I believe that fascinating structures can be made for the built environment by applying knowledge from popular culture.

...the most beautiful view of the city...  
 ...the most beautiful view of the city...  
 ...the most beautiful view of the city...

# AN INTRODUCTION TO TRAVEL

...the most beautiful view of the city...  
 ...the most beautiful view of the city...  
 ...the most beautiful view of the city...



enjoying

ARCHITECTURE

PICTURE

Image courtesy of back page

...the most beautiful view of the city...  
 ...the most beautiful view of the city...  
 ...the most beautiful view of the city...

Smiles



### 3.B.

## INTRODUCTION TO POPULAR CULTURE

Popular culture as opposed to 'official culture': 'Official culture, preserved in the art galleries, museums and university courses, demands cultivated tastes and a formerly imparted knowledge. It demands moments of attention that are separated from the run of daily life. Popular culture, meanwhile, mobilizes the tactile, the incidental, the transitory, the expandable, and the visceral. It does not involve an abstract aesthetic research amongst privileged objects of attention, but invokes mobile orders of sense, taste and desire; popular culture is not appropriated through the apparatus of contemplation. Walter Benjamin once put it: through 'distracted reception', the public is an examiner, but an absent minded one.' (Chambers I. (1986) Popular culture, the metropolitan experience, USA; Methuen & Co, p.12)

Following the social upheavals of the 1960s, popular culture has come to be taken more seriously as a terrain of academic enquiry and has also helped to change the outlooks of more established disciplines. Conceptual barriers between so-called high and low culture have broken down, accompanying an explosion in scholarly interest in popular culture, which encompasses such diverse media as comic books, television, and the Internet.

Re-evaluation in the 1970s and 1980s revealed significant problems with the traditional view of mass culture as degraded, and elite culture as uplifting. Divisions between high and low culture have been seen as political distinctions rather than defensible aesthetic or intellectual ones.

Popular culture has to be easily accessible to people and so often takes the form of the simplistic and reductive.

The above illustration from my journal shows the difference in lines, time, aesthetic, process... of drawing a face from a 'formal' and 'informal' approach.

Comics are often regarded as the quintessential 20th C pop art form. Comics are linked to mass literacy, the rise of the newspaper and publishing industries. The combination of words and pictures is easy to decode and is thus an easily accessible medium for the public.



painting art      comic :



De Moyencourt L. (2009) Moleskin sketch [drawing] (personal journal)

#### Image references:

-Google, Images; old book: <http://www.library.cornell.edu/preservation/bookarts/images/oldbook.gif>, accessed on the 12th September 09

-Google, Images; Garfield: <http://guyanachronicleonline.com/site/images/stories/garfield-the-cat-30th-anniversary.jpg>, accessed on the 12th September 09

-Google, Images; old marvel comics: <http://www.hellomuller.com/blog/wp-content/uploads/2007/05/marvels.jpg>, accessed on the 12th September 09

-Google, Images; Madam and eve: <http://thoughtmenagerie.files.wordpress.com/2006/04/zumacluedo.jpg>, accessed on the 12th September 09



Image reference: Google, Images; Roy Lichtenstein; <http://images.worldgallery.co.uk/prints/rw/lg/6/9/Roy-Lichtenstein-Whaam---B-6923.jpg>, accessed on the 12th September 09

The rise of Pop Art in America in the 1950's created (for the first time in history) a blurring in the distinctions between art, design, architecture and advertising. This blurring of boundaries illustrates the immediate and widespread attraction and appeal of popular culture.

Pop Art mocked high official culture by employing the loathed, the ignored, commercial iconography of popular culture. These previously loathed and ignored icons of popular culture; such as the Campbell soup tin, became sanctified artifacts, no longer the mere object of everyday consumption.

'The immediacy of popular icons in pop art does away with art history; the Campbell soup can and the Marilyn Monroe face, do not require the historical baggage of interpretation used to decide what is art and what is not' (Chambers I. (1986) *Popular culture, the metropolitan experience, USA*; Methuen & Co, P. 10) These reproduced objects are said to 'hide nothing' (Chambers I. (1986) *Popular culture, the metropolitan experience, USA*; Methuen & Co, P. 10), to have no ulterior motive or meaning; it is the flatness of the work which is its most penetrating declaration. How can architecture communicate so directly with people?

"I like boring things" Andy Warhol

**POPULAR CULTURE THUS REJECTS THE RESTRICTED WORLD OF 'OFFICIAL CULTURE', OFFERING A MORE DEMOCRATIC PROSPECT FOR APPROPRIATING AND TRANSFORMING EVERYDAY LIFE.**

People live through culture, not alongside it. The popular epistemology is knowledge of the everyday, based on the sensory, the immediate, the pleasurable and the concrete. Popular culture, like any other type of culture, is a process which is constantly being updated, reflecting above all else the immediate social situation of the people.

The people are thus the producers of popular culture - it bears the interests of the people, the folk, the masses - it is often the culture of the subordinated and disempowered.

'Popular culture is the art of 'making do'. The culture of everyday life which lies in the creative use of the resources that capitalism, politics, education, family provides' (Fiske J. (1989) *Understanding popular culture*, Boston; Unwin Hyman, P.27)



Image reference: Google, Images; Andy Warhol; <http://www.lonelycolours.com/images/warholcampbells-creenprint1968.jpg>, accessed on the 12th September 09

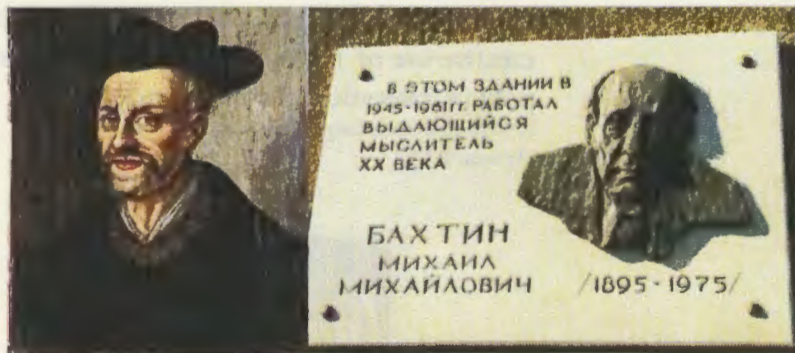
## 3.C. CONCEPT CARNIVAL

THE CARNIVAL CONSTRUCTS A 'SECOND WORLD', A WORLD WITHOUT RANK OR SOCIAL HIERARCHY OUTSIDE OF OFFICIALDOM. THE FUNCTION OF CARNIVAL IS TO ALLOW CREATIVE PLAYFUL FREEDOM, TO LIBERATE ONE FROM THE PREVAILING POINT OF VIEW OF THE WORLD, FROM CONVENTIONS AND THE ESTABLISHED TRUTHS, FROM CLICHES, AND FROM THE UNIVERSALLY ACCEPTED.

Philosophers Bakhtin and Rabelais use the notion of 'the carnival' to account for the differences between the life proposed by the disciplined social order and the repressed pleasures of the subordinate. 'Carnival' space is described as a space which maintains a vibrant and free intermingling of a variety of bodies which is relevant to my concept of bringing people together from different societies.

Carnival is a unanimous state of pleasure which can be experienced by all people no matter what their upbringing, education, or lack of education.... The notion of carnival offers a spatial and temporal envisioning of human existence in the world.

The theory explores bodily pleasure (eating, drinking, sex, dancing, singing, excreting...) in opposition to morality, discipline, and social control. The carnival is thus characterized by bad taste, laughter, offensiveness, unusual relationships and degradation. ( Fiske J. (1989) Understanding popular culture, Boston; Unwin Hyman, P.81)



From left to right photo references:

- 1) Google, Wikipedia; Francois Rabelais; [http://en.wikipedia.org/wiki/File:Francois\\_Rabelais\\_-\\_Portrait.jpg](http://en.wikipedia.org/wiki/File:Francois_Rabelais_-_Portrait.jpg), accessed on the 20th May 2009
- 2) Google, Wikipedia; Mikhail Bakhtin; <http://en.wikipedia.org/wiki/File:Bakhtin.jpg>, accessed on the 20th May 2009

Mikhail Bakhtin (1895-1975) wrote a dissertation on the French renaissance writer Francois Rabelais (1494-1553) called Rabelais and folk culture of the middle ages and renaissance. Due to controversial ideas in the dissertation at the time, Bakhtin's work was only published ten years later (in 1965). Bakhtin declares that Rabelais's work has been misread and misunderstood; he clarifies this work in his writings on Rabelais, whose work is a classic for renaissance and popular cultural studies.

Rabelais and Bakhtin are two very different characters. Rabelais, an epic poet whose name conjures up mountains of sausages and endless wine, was a familiar at the royal court at a time which became synonymous with that of cultural achievement and human progress.

Bakhtin on the other hand was a scholar, a citizen of a dark time of revolution in Russia, a place notorious for its cold and hunger. Instead of being at the center of power (like Rabelais), Bakhtin was its victim, a cast away, a sufferer of a chronic bone disease and an amputee. This confrontation of French novelist and Russian critic, rather than an attraction of opposites, signifies more the similarities between the two. They resemble each other in their love of jokes and deep tolerance, as well as their view of the world as slightly mad.

The early renaissance and Russian revolution were threshold ages; the end of one world and the birth of a new one. Each age created in its inhabitants an urgent awareness of radical change and a need for escapism.

**CARNIVAL CAN BE SEEN AS A WAY IN WHICH PEOPLE DEAL WITH THE PRESSURES AND RAPID CHANGES OF SOCIETY.**

Google; Images; the battle between carnival and lent; [http://pictopia.com/perl/get\\_image?provider\\_](http://pictopia.com/perl/get_image?provider_)



id=207&size=550x550\_mb&crp\_photo\_id=146755, accessed on the 19th May 2009

Carnival illustrates the ability to revel in the world's variety, to celebrate openness and its ever-renewed capacity to surprise. Carnival is associated with changing seasons, changing times and renewal. Such an emphasis on change and renewal is directly opposed to the 'official' emphasis on the past, the eternal, the absolutes, the unchangeable... People are exposed to the humorous aspect of a world which is unfinished, bright and positive. It is in this happy state of being that people can reconnect with the joys of living.

Bakhtin's point of view is such that he argues with the concepts of the individualistic biological body, and the private bourgeois individualistic life - which is born and dies - in favor of a concept of the body of all people. This communal concept of a body brings together the image of life and death as a continually renewing process of generation. Bakhtin argues that this is an important means of liberating human consciousness from a vertical hierarchical perception of the world to the possibility of a horizontal understanding of change.

The body principle: 'the materiality of life that underlies and precedes individuality, spirituality, ideology and society. It is the representation of the social at the level of materiality on which all are equal, which suspends the hierarchical rank and privilege that normally grants some classes power over others. The degradation of carnival is literally a bringing down of all to the equality of the body principle.' (Fiske J. (1989) *Understanding popular culture*, Boston: Unwin Hyman, P.83) A heightened sense of human collectivity is made possible by the unique sense of time and space that reigns in carnival, the individual feels that he is an indissoluble member of the people's mass body.



Above image: Google, images, carnival hall of mirrors, [http://hamri.stadtmicki.com/143/332128085\\_f573295242.jpg?v=0](http://hamri.stadtmicki.com/143/332128085_f573295242.jpg?v=0), accessed on the 10th May 2009

Bakhtin uses the term 'grotesque realism' (Morris P. (Editor)(1994) *The Bakhtin Reader: Selected writings of Bakhtin, Medvedev, Voloshinov, Great Britain; Edward Arnold*) to describe the various representations of the body at carnival (comical, grandiose, gargantuan, and exaggerated). However, even while the body is celebrated as the location of pleasure, it is also ridiculed and debased, crowned and de-crowned.

The word carnival derives from the Latin: *carnem levare* which means a 'removal' of 'flesh', or flesh rules, understood in both its alimentary and erotic meanings. The importance of the carnival lies in the unique sense of the world it embodies; "The Carnival releases the body for pleasure rather than harnessing it for work" (Morris P. (Editor)(1994) *The Bakhtin Reader: Selected writings of Bakhtin, Medvedev, Voloshinov, Great Britain; Edward Arnold*).

Carnival exists in conjunction and adjacent to 'normal' and 'real' life; one may jump between the two worlds.



An integral part of Cape Town's history and culture, and one of the most significant tourist attractions and events on the Cape Town calendar is the annual Tweede Nuwe Jaar. This day sees up to 13 000 minstrels from communities across Cape Town take to the streets of the city to strut their stuff, sing, dance, and entertain in colourful costumes of vivid colours. This carnival has been going for 60 years.

In present times we retain the need for myths and the necessity of experiencing pure freedom, elated revelry, boisterous behavior, casting off one's cares, and life in its most unbound form.

The next chapters will discuss an architecture that enables these feelings of escapism in people. Each chapter will use examples of works of architecture to illustrate how this state of 'carnival' is introduced and encouraged in people through the design of the work of architecture. In my opinion architecture that enables the happy state of carnival in people is a formula for popularity.

1. Google, Images, Cape Minstrels, <http://www.zoopy.com/data/media/1492/original.jpg>, accessed on the 20th September 09
2. Google, Images, Cape Minstrels, <http://www.fishbite.co.za/wp-content/uploads/2008/12/coons5-300x210.jpg>, accessed on the 20th September 09
3. Google, Images, Cape Minstrels, <http://www.zoopy.com/data/media/1492/original.jpg>, accessed on the 20th September 09



Image references from top to bottom:

### **3.D. INTRODUCTION TO POPULAR ARCHITECTURE**

People like to be amongst other people, they want to be where the 'vibe' is. People feel safe amongst other people and would therefore choose to relocate themselves to the most popular building or space.

Popular buildings induce an agglomeration and collision of people in the city. Collisions and agglomeration of people induce a state of carnival. People need to see each other and be seen; this type of exchange creates toleration, love, fellowship and enjoyment. Popular space is the space to show people what you want to show them. Being well dressed and showing this off is a huge part of the people's pride in South Africa and popular space provides the stage for this. Style is one of the most important elements in township life; if you dress nicely you feel cool, you feel like a normal citizen (not a previously disadvantaged one) and thus free to enjoy the pleasures of life.

Most architectural design is not popular; it does not attract, excite and stimulate the imagination of the people; nor need it. Autonomous buildings are important in the composition of the multilayered visual overload that is the city. Architecture thus serves a mainly functional role in our society. Popular buildings contrast with autonomous buildings as they (the popular buildings) command the attention of the public.

Popular architecture could also be called famous architecture; these are buildings one would want to be photographed against, for example. Having your photograph taken against a particular building is akin to asking for the buildings autograph, it is done to share the experience of the architecture at a later date. These buildings act as a stage set for people to act out their life fantasies and dreams, they are built to impress, to overwhelm, and to inspire.

**TO BE POPULAR;  
ARCHITECTURE HAS TO  
ELEVATE ITSELF FROM  
PERFORMING A PURELY  
FUNCTIONAL ROLE IN  
SOCIETY TO PERFORM-  
ING AN ADDITIONAL  
STIMULATING ROLE. THE  
ART OF ARCHITECTURE  
HAS TO SHINE OUT OF  
THE BUILDING SO THAT  
NO MERE PASSER BY  
CAN BE UNAFFECTED BY  
ITS PRESENCE.**

Architecture has the ability to show us the world from a different perspective, to open our imagination, the potential to be surreal, dreamlike, fantastical, and live out the concept of carnival. People can turn cultural commodities, objects, and architecture to their own interests and find pleasure in using them to make meanings of their social identities and social relations.

Everyday objects, places, space and view serve as images that can call forth a knowledge-feeling response. Through the use of images, knowledge, memory and feelings may be elicited from the filing cabinets of the human mind and experience.

'Art Objects (such as a work of architecture) are constituted differently from other objects in that its sense data may be selected, composed, arranged so that it arouses deep layers of awareness, affording insights into our personal identity, our communion with other men, as well as with nature.' (Greene H. (1976) *Mind and Image, an essay on art & architecture*, Lexington, Kentucky, USA, Kentucky University press)

Architecture thus has the power to produce a depressing, mediocre, or inspiring image onto the public. Architects can perform a critical function for society by pointing out new ways of doing things and inspiring people.

The great pyramids of ancient Egypt, the temples of ancient Greece, the churches of ancient Rome and medieval times are all examples of popular buildings of their time. Their popularity is directly related to their extravagances and innovations in architecture that sets them apart from normal everyday architecture.

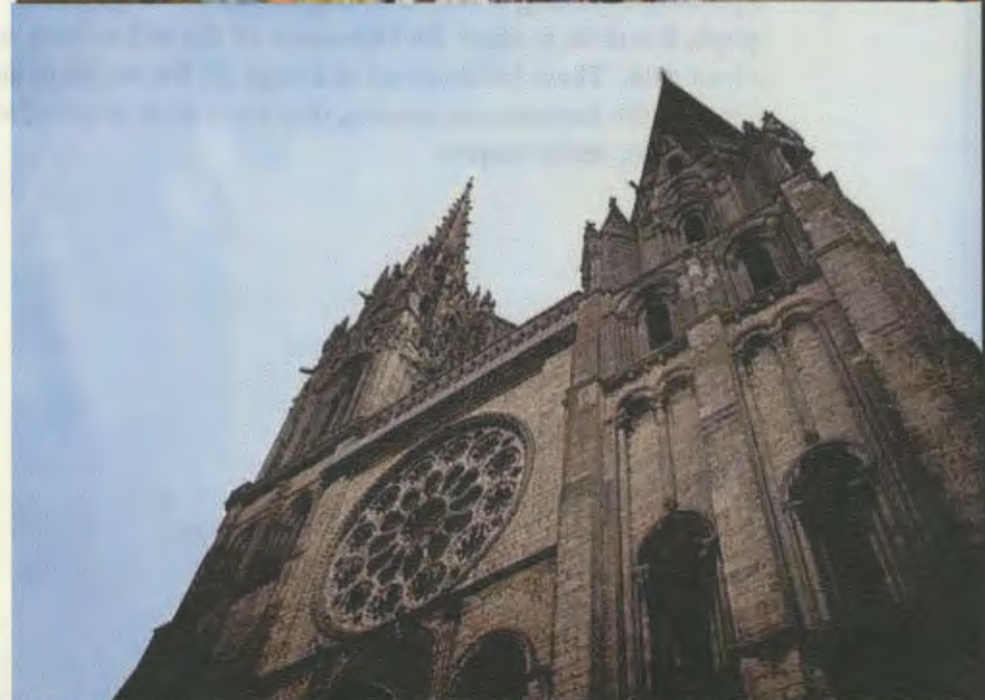
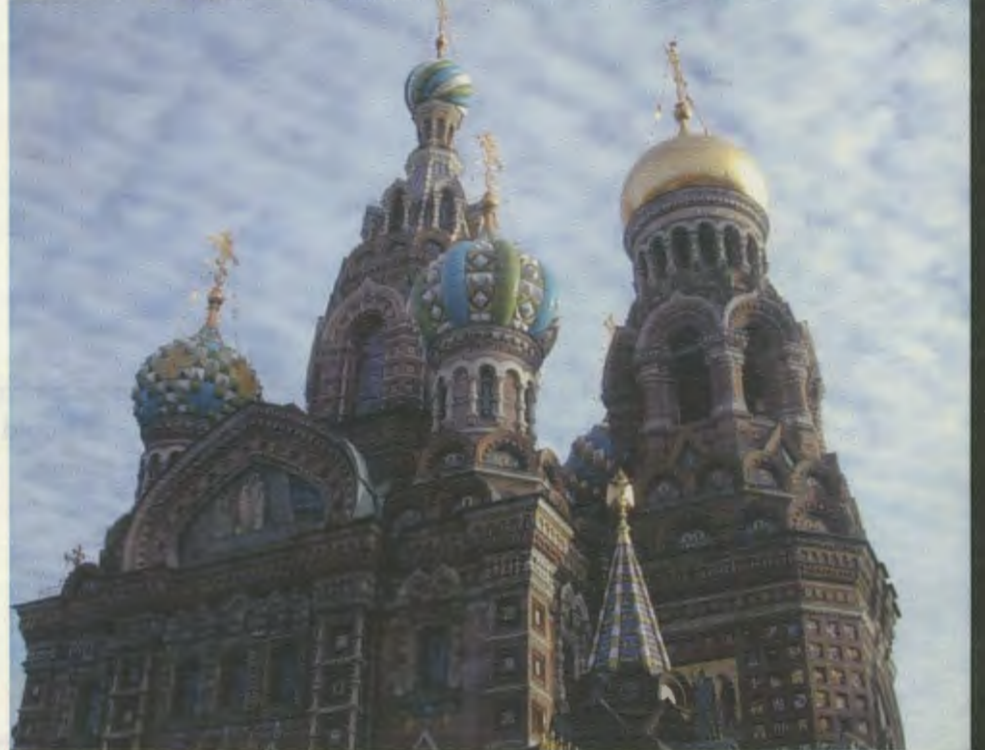
Chartres Cathedral in France, built in the 1140's is an example of a work of architecture that dazzled people at the time of its construction and still dazzles people today. It is built on a hill, and so can be seen and recognized from great distance, the tallest spire is 113 meters high. Peasants and pilgrims would have marveled at this building, having never experienced anything like it nor thought it could be possible for human hands to build such a work of architecture.

Nothing has changed; people still marvel at the Greek temples, the Egyptian Pyramids, Chartres Cathedral... these buildings will eternally be popular due to the sheer investment (people, skills, design, material...) in these large and extravagant works of architecture.

From left to right photo references:

- 1) Google, Images, Giza pyramids, <http://imagecache.all-posters.com/images/pic/NGSPOD/130036-FB-Tourists-View-the-Great-Sphinx-and-Pyramids-of-Giza-Posters.jpg>, accessed on the 9th May 2009
- 2) Google, Images, Acropolis, <http://img5.travelblog.org/Photos/64919/327722/t/2891854-Acropolis-Athens-2.jpg>, accessed on the 9th May 2009
- 3) Google, Images, Chartres, <http://www.zigurrat.nl/fotos/chartres.jpg>, accessed on the 9th May 2009

It is important to distinguish between the original and the imitation work in popular



architecture. The imitation work if excessive enough becomes original in its bad taste way (eg. Las Vegas examples)

One of the most common places for An example of today's popular architecture is the consumer palace or shopping mall. In the shopping mall, architectural entertainment has become compulsory as a formula for commercial success. People in our society want more than a regular shopping environment; they want to feel in some way elevated from real life, they want shopping to be an experience.

**THERE SEEMS TO BE NO CARE WHETHER SUCH AN EXPERIENCE IS AUTHENTIC OR NOT AS LONG AS IT IS ESCAPIST.**

In the shopping mall, from the very moment one passes by on the street (whether by foot or by car) there are architectural devices put in play to attract, impress, and lead customers into the centre.

The shopping centre complex usually presents itself (much like the cathedral) as an 'oasis' from the harsh 'real' environments outside of the mall complex; a refuge, a sanctuary. The architecture of the shopping mall intentionally induces people to 'role play' or to pretend, to leave behind what you know and release the body for pleasure. People feel a sense of inclusion and dignity being in these spaces that induces them to make purchases.

The architecture of such works is what I have

called imitating an original work (Chapter 5), as it usually involves the collage of multiple elements borrowed from 'original works of architecture' (chapter 4). These elements are generally purposefully reinterpreted incorrectly and with exaggeration for additional stimulating effect.

A less common example of popular architecture today is when large investment in the form of labor, design, innovation, decoration, or material is used to create an original work of architecture (Chapter 4). This type of architecture is what I call an original work.

Both the original and the imitation works of architecture give people the freedom to live out carnival life. Both have the same end result of pleasing the people and being popular attractions, although this is arrived at through different architectural means which are discussed further in the next chapters.

A building may be popular for its contemporary design but unless it is a wholly original work or an imitation of an original work (as previously described), the popularity of the building will fade with the seasons.

"Nothing is so dangerous as being too modern, one is apt to grow old fashioned quite suddenly" Oscar Wilde in the importance of being Earnest.

I am not interested in fashionable architecture but in works that are and will be eternally popular.





Image reference: Google, images, park Guell, [http://en.wikipedia.org/wiki/Park\\_Guell](http://en.wikipedia.org/wiki/Park_Guell), accessed on the 10th May 2009

### 3.E.

## ORIGINAL WORKS OF ARCHITECTURE

An original work of architecture is an unprecedented, innovative building. These buildings are iconic, landmark and monumental buildings of which there can only be one authentic example. There can only be one Eiffel tower, the one in Paris, the Eiffel tower in Las Vegas will forever be an imitation of the original work.

**ORIGINAL, IMAGINATIVE WORKS OF ARCHITECTURE ARE THUS ARCHETYPES; AN EXAGGERATED EXAMPLE FROM WHICH ONE CAN DERIVE LESSONS FOR THE TYPICAL.**

It is in these buildings that new and unique ideas in design and construction are pushed to the limits, therefore making extraordinary architecture.

An original work of architecture would also have been discussed and seen in the media before a subject has even visited the site. This generates a build up of excitement within the individual adding to the fun of the experience of the architecture.

Buildings such as these create an extravagant stage set onto which people may feel the need act out their opulent, extravagant fantasies. Upon walking past a special, monumental building, it is inevitable that the monumental work of architecture will have an exhilarating effect on the person.

This type of architecture is part of official culture but has been appropriated and popularized by the love of the masses. A work of architecture such as this described above becomes appropriated by people and is thus transformed into a product of popular culture.

### EXAMPLE 1: PARC GUELL BARCELONA BY ANTONI GAUDI 1914

Gaudi's architecture illustrates what architecture can become when it is emboldened and enriched by emotions and dreams. Gaudi seems to release architecture for pleasure and expression as opposed to harnessing it for function. The fusion of art, sculpture and architecture creates an out of the ordinary, dreamlike, bizarre and animalistic architecture, which carries a strong stamp of the maker's personality, style and vision. This composed, selected, arranged sense data allows the public a deeper, more personal engagement with the building.

Citing Salvador Dali: "No collective effort has managed to create a world of dreams as pure and disturbing as these art nouveau buildings, which by themselves constitute, on the very fringe of architecture, true realizations of solidified desires, in which the most violent and cruel automatism painfully betrays a hatred of reality and a need for refuge in an ideal world similar to those in a childhood neurosis" (Dali S. (1930) cited in Breton's Surrealist Situation of the object in Breton's Manifestoes of surrealism, p.261 from the book: Mical T. (editor)(2005) Surrealism and architecture, London; Routledge; Taylor Francis group, p.4)

Parc Guell; a recreational park for Barcelona's inhabitants is not what was originally planned for the site. Eusebi Guell, Gaudi's most ardent supporter and sponsor, had intended an exemplary suburban colony, a paradise of homes, a town of gardens; yet a park is what emerged to the benefit of all Barcelona and every tourist to the city. It is believed that Eusebi Guell got the idea for park Guell from 'the more organic romantic gardens of England and the garden movement, where the well-kept ambience nevertheless bears the stamp of natural vegetation'. (Zerbst R. (2002) Antoni Gaudi, the complete buildings, Tokyo, Taschen, p.141)

The undertaking of the building of the park can be seen as an extension of a sense of social commitment by both Gaudi and Guell. Much of Guell's attention was devoted to the ideas of social reform which were being explored in England at the time (early 1900). The concept for Parc Guell was to build a public park, open to be enjoyed by all of Barcelona. The perimeter wall is intended to give the visitors a sense of security within the park.

The recreational area of Parc Guell was an overnight success with the public who hailed the park 'a work of art' and 'a three dimensional monument'. (Zerbst R. (2002) Antoni Gaudi, the complete buildings, Tokyo, Taschen, p.143)

On the city side of the square is an endless curving bench offering seating for a large amount of people within the giant space. The bench is structured so that people, even when outdoors and in large numbers, can nevertheless form small intimate groups in which to exchange words. Gaudi is said to have gone to great lengths to make the bench ergonomically comfortable for the people visiting Parc Guell.

The popular bench is covered in colorful, abstract mosaics which simultaneously waterproofs the bench and keeps it hygienic for the public. Each mosaic pattern is unique, which offers the viewer the opportunity to engage more with the architecture by being able to choose his or her favourite place to sit, or be photographed next to his or her personal favourite mosaic etc.

Gaudi's Parc Guell's design has a sense of Moorish influence evident in much of his early work. Gaudi links this Moorish inspiration with his own language of forms thus creating a completely new style. The same is said to be true of Gaudi's Neo-Gothic and Art Nouveau style "borrowings" (Zerbst R. (2002) Antoni Gaudi, the complete buildings, Tokyo, Taschen, p.143). From the moment the gates of Parc Guell are in view the visitor is aware that he or she is going to enter a special, magical and unusual space. The design of the gates, entrances and park evoke curiosity and excitement in the viewer due to its unusual design.

### THE UNUSUALNESS OF THE ARCHITECTURE OF PARK GUELL IS TURNED INTO SOUVENIRS FOR PEOPLE TO TAKE HOME: THE ARCHITECTURE THEREBY BECOMES COMMODITIZED, MARKETED, AND ADVERTISED IN A SENSE.

The guardian of Parc Guell, the dragon lizard, can be bought all over Barcelona in fridge magnet, diary, candle, soap, or porcelain sculpture form all of which is a clear sign of the architecture's popularity.

From personal experience, Parc Guell is the best place in Barcelona for people watching, I would often find myself watching all of the different people enjoying and interacting with the weirdness of Parc Guell, by climbing up columns, stroking the benches, and posing for photographs just about everywhere in the Parc Guell complex.

From left to right photo references:  
1) An old photograph taken during the floral festival in Barcelona c. 1910 <http://www.gaudidesigner.com/data/file/257.jpg>, accessed on the 15th May 2009  
2) Photograph illustrating the popularity of Parc Guell in the present 2008 [http://www.tunliweb.no/Bilder\\_SM/\\_album\\_Barcelona/IMG\\_4536\\_1024pixel.jpg](http://www.tunliweb.no/Bilder_SM/_album_Barcelona/IMG_4536_1024pixel.jpg), accessed on the 15th May 2009  
3) Google; Images; Park Guel souvenirs; [http://lh5.ggpht.com/\\_TB4jdpVseo/RivA3evc2EI/AAAAAAAAAeg/bIX2iOUTMvw/DSC01614.JPG](http://lh5.ggpht.com/_TB4jdpVseo/RivA3evc2EI/AAAAAAAAAeg/bIX2iOUTMvw/DSC01614.JPG), accessed on the 9th May 2009  
4) Google; Images; Park Guel souvenirs; [http://www.gaudiclub.com/\\_imatges/lizards/details\\_drac1010.jpg](http://www.gaudiclub.com/_imatges/lizards/details_drac1010.jpg); accessed on the 9th May 2009

GAUDI PLANNED THE LARGE SQUARE AS A PLACE WHERE PEOPLE COULD MEET FOR FOLK FESTIVALS AND THEATRE PERFORMANCES.



photo references:

left: Google images: Pompidou centre; <http://www.artshole.co.uk/arts/artists/April%202006-%20India/Zoe%20Ellen%20Bryant/Pompidou-Centre-Poster.jpg> accessed on the 5th May 2009

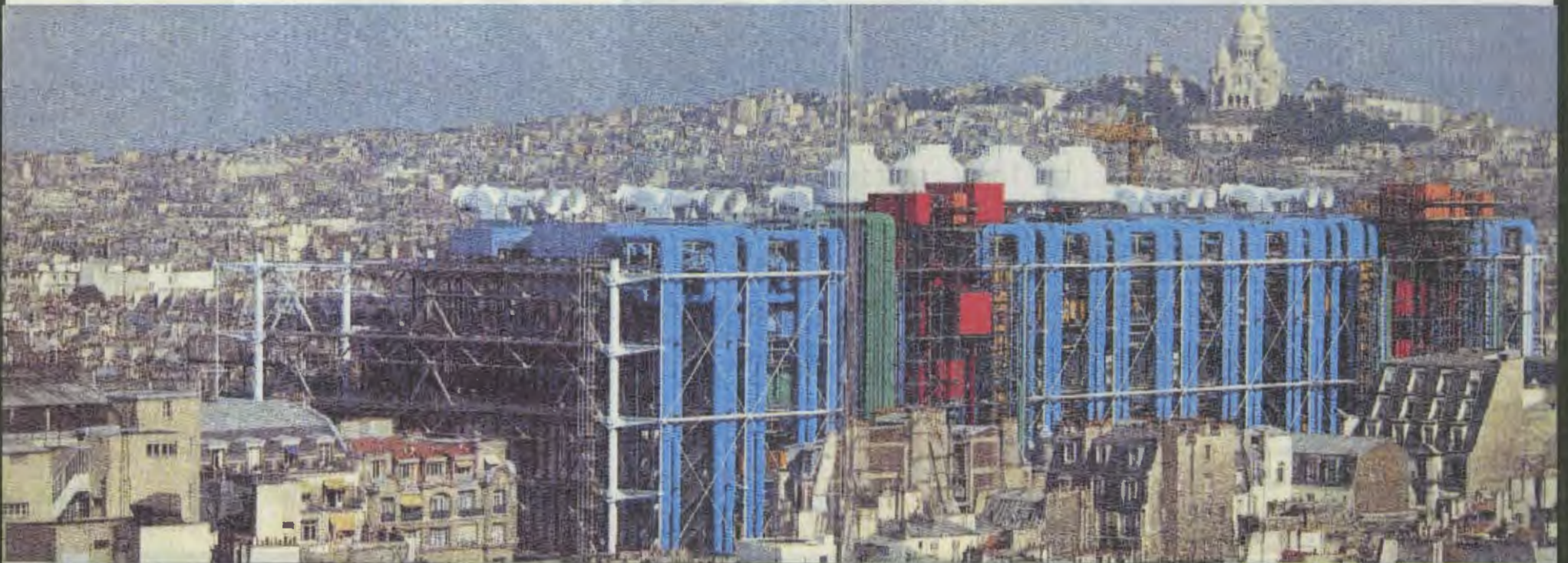
right: Google images; Pompidou centre; <http://www.tellthetruthtravel.com/images/Paris/Pompidou.jpg> accessed on the 5th May 2009

bellow

Zaknic I. (1983) Le centre Pompidou, California; Richard Schuettge p. 26



**'COME AND SEE THE LIGHTS  
AT THE END  
OF THE TUNNEL'**



**EXAMPLE 2:  
THE POMPIDOU CENTRE  
BY RENZO PIANO AND RICHARD ROGERS;  
PARIS;  
1977**

The Pompidou Centre in Paris is an example of an interactive cultural building. My interest in the Pompidou centre comes from my feeling that the building's composition, planning and aesthetic have created a unique presence in the city. It has re-animated the space around it into an inclusive, vibrant, and extremely popular place of social and cultural exchange in Paris. It has become a place to hang, sit, watch, wait, and meet...

Whether you like the Pompidou centre or not, you will not forget its glass facade, its external stairs and the red, blue and green pipes on the rear facade. The building sits in complete contrast to its surroundings as can be observed in the images below; a 'high-tech' work in a classical Parisian area. As a passer by, it is impossible to not notice a difference and unusualness in the design of the Pompidou Centre. The building is such an attraction to people that the surrounding social spaces



The group experimented with models to explore the building's form and how it would fit into the surrounding urban context.

become an equal attraction to people in terms of seeing and being seen.

The Pompidou centre was completed in 1977. It is in the centre of Paris within one kilometer of Notre Dame, the Louvre, and the medieval quarter; which is not only the oldest part of Paris but also the most densely populated.

"It is my belief that exciting things happen when a variety of overlapping activities designed for all people; the old and the young, the blue and white collar, the local inhabitant and the visitor, different activities for different occasions meet in a flexible environment, opening up the possibility of interaction outside the confines of institutional limits. When this takes place; deprived areas welcome dynamic places for those who live, work and visit; places where all can participate, rather than less or more beautiful ghettos." (Richard Rogers (1969) Barbie Campbell Cole and Ruth Elias Rogers, ed. Richard Rogers + Partners. p11.) (Richard Rogers architect of the Pompidou Centre)

At the time of the architectural competition for the project, the area was in a state of crisis; the neighboring Les Halles, Paris's principal food market for generations, was in the process of being demolished, to be replaced by a large commercial shopping centre development and major public transport interchange... The program for the competition included a million square foot cultural centre which was to consist of four major specialist activities: a museum of modern art, a reference library, a centre for industrial design and a centre for music and acoustic research. Areas for office administration, book shops, restaurants, cinemas, children's activities and car parking were also to be included.

The architects Renzo Piano and Richard Rogers created a building which is full of light, light weight, flexible, has low energy, and most importantly that is legible; whereby you can read how the building is put together. The design concept was to free up the internal spaces of the building for maximum flexibility by building the ducts and conveyance systems (stairs, elevators etc.) on the outside.

ment; an avant-garde, apolitical architectural group formed in the 1960s. Archigram was based at the Architectural Association in London.

The pamphlet Archigram I was printed in 1961 to proclaim their ideas. This manifesto showed a commitment to a 'high tech', light weight, infra-structural approach that was focused towards survival technology.

It was a futurist, anti-heroic and a pro-consumerist movement, drawing inspiration from technology in order to create a new reality that was solely expressed through hypothetical projects.

The main members of the group were Peter Cook, Warren Chalk, Ron Herron, Dennis Crompton, Michael Webb and David Greene.

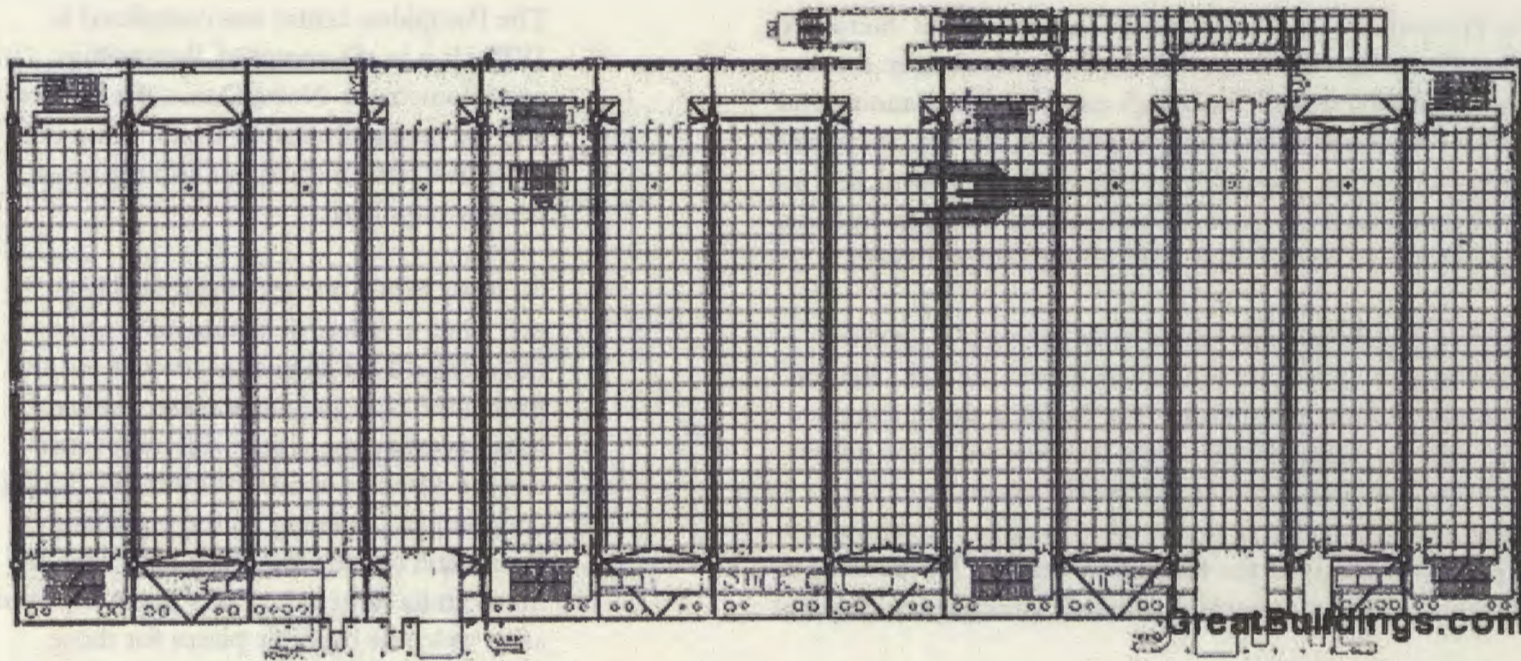


Image reference:  
above: google; images; Pompidou centre; <http://www.essential-architecture.com/PA/005B.jpg>, accessed on the 22nd May 2009

right: Google, images, archigram, <http://www.we-make-money-not-art.com/yyyy/archigram.jpg>, accessed on the 27th May 2009

far right: Zaknic I. (1983) Le centre Pompidou, California: Richard Schuettge p. 26

**THIS BUILDING IS SO INNOVATIVE A NEW NAME HAD TO BE COMPOSED TO DESCRIBE ITS STYLE: THE POMPIDOU HAS BEEN LABELED AS BEING HIGH-TECH MODERN, STRUCTURAL EXPRESSIONIST.**

The Pompidou centre is associated with the Archigram move-



The group experimented with modular technology, mobility through the environment, space capsules and mass-consumer imagery. Archigram thus accepts the technology and premises of a consumer society.

**ACCORDING TO ARCHIGRAM, AS WITH POP ARTISTS; AN IMMEDIACY OF COMMUNICATION AND FEELING FOR LIFE IS MORE IMPORTANT THAN ANY DOCTRINE OR SYSTEM. IMAGINATION REIGNS OVER LOGIC**

In an exhibition called the 'Living City', the Archigram group demonstrated the immediacy of consumer products. They collected images from any part of the city; the accepted pop iconography of spacemen, robots, superman... and presented them in such a way that was new to architecture. The city was not seen as architecture (hardware) but as people and their 'situations' (software).

The New York Times wrote that the Pompidou Centre has 'turned the architecture world upside down'. ( Pogtebin R. (2007) British Architect Wins 2007 Pritzker Prize . New York Times online newspaper: [http://www.nytimes.com/2007/03/28/arts/design/28cnd-pritzker.html?\\_r=1&hp](http://www.nytimes.com/2007/03/28/arts/design/28cnd-pritzker.html?_r=1&hp), published on the 28th March 2007) The Pompidou centre exposes its services, piping, circulation devices... on the outside turning an element of architecture which is usually concealed within the building into the main features of the elevations.

The Pompidou centre can hence be understood as a 'naked building', hiding nothing, revealing everything and thus fascinating the observer. In essence it is a seductive architectural strip tease.

The Pompidou centre created a controversial stir amongst all Parisians; its machine aesthetic which was at first hated, has subsequently been pronounced the city's most popular building . (Zaknic I. (1983) *Le centre Pompidou*, California; Richard Schuettge p. 26)

The architects' commitment to flexible floor plans that respond to the ever changing demands of the users, the integration of public and private spaces, the interest in architectural clarity and transparency as well as a fascination with machine like aesthetic has resulted in this highly original and imaginative work which challenges the general passer by.

To me the important thing is that it initiates feelings from people. The building goes beyond the call of duty of being functional, into the realm of an artwork and it demonstrates an alternative to the elitist, institutional museum.



CASTLE LAS VEGAS



CASTLE BAVARIA



From left to right photo references:  
1) Hawtrey J. (2008) castle [photograph] (Jaqueline Hawtrey's private collection)  
2) Google Images: Real Fairytale castles; [http://1.bp.blogspot.com/\\_iKcZ3tCmyo/R6tkUxBlFVI/AAAAAAAAAE-o/bPjfd7wO8tU/s1600-h/Ludwig%27s+castle.jpg](http://1.bp.blogspot.com/_iKcZ3tCmyo/R6tkUxBlFVI/AAAAAAAAAE-o/bPjfd7wO8tU/s1600-h/Ludwig%27s+castle.jpg) accessed on the 18th May 2009

### 3.F.

## IMITATING AN ORIGINAL WORK

An Imitation of an original work of architecture is a type of architecture that borrows elements from original works of architecture in order to achieve popularity. These works of architecture are thus impersonators; a product of consumer culture.

It is in these buildings that ideas in design and construction are collaged, re-hashed, stretched, fluffed, and elaborated on therefore making extraordinary, surreal architecture which is very popular.

Buildings such as these create a seemingly luscious and extravagant stage set onto which people may feel the need act out their opulent, extravagant fantasies. These buildings are large, landmark buildings.

This type of architecture is part of consumer culture; the architecture is directed at pleasing and exiting the commonplace. A work of architecture such as this described above is created as a product of popular culture; it is the direct result of the commonplace influencing architecture. In this elaborate stage set, one will find all of the necessary props and décor that simulate carnival lifestyle.

This simulation has the capability to induce real feelings of wonder and excitement at the architecture.

**ONE CAN FORGET THAT ONE LIVES IN A SHACK WHEN ONE IS MARVELING AT THE GRAND WEST FOUNTAINS AND LIGHTS.**

Unfortunately being a product of consumer culture this state of excitement is intentionally produced for commercial persuasion. The free and boundless carnival state is actually a carefully directed, controlled, emotion, leading you to make purchases. In these conditions one is capable of spending much more than one had originally intended due to the exhilarating effects of the space.



from top to bottom

-Hawtrej J. (2008)trevi [photograph] (Jaqueline Hawtrej's private collection)

-[http://nature.wallpaperme.com/3287-2/Trevi+Fountain\\_+Rome\\_+Italy.jpg](http://nature.wallpaperme.com/3287-2/Trevi+Fountain_+Rome_+Italy.jpg)

-Hawtrej J. (2008) pyramid [photograph] (Jaqueline Hawtrej's private collection)

-[http://realadventures.com/listingimages/1128/1128435/m\\_1128435b.jpg](http://realadventures.com/listingimages/1128/1128435/m_1128435b.jpg)

# ESCAPE

Learning from the commonplace is nothing neither new nor revolutionary; 'fine art often follows folk art'. (Venturi R., Scott Brown D., Izenour S.(1972) Learning from Las Vegas, London; the MIT Press, P.1)

According to Robert Venturi early modernist architects appropriated the existing and conventional architectural language of industrial buildings without much adaptation (le Corbusier and his steamships).

"There is a perversity in the learning process: we look backward at history and tradition to go forward; we can also look downwards to go upwards" (Venturi R., Scott Brown D., Izenour S.(1972) Learning from Las Vegas, London; the MIT Press, P.1) For example in pop art; the common soup can is made uncommon it becomes an expensive work of art which hangs in a gallery.

"For the architect or urban designer, comparisons of Las Vegas with other of the world's pleasure zones- with Marienbad, the Alhambra, Xanadu, and Disneyland, for instance suggests that essential to the imagery of pleasure-zone architecture are lightness, the quality of being an oasis in a perhaps hostile context, heightened symbolism, and the ability to engulf the visitor in a new role- for three days. He may imagine himself a centurion at Caesars Palace, a ranger at the frontier, or a jet set playboy at the Riviera rather than a salesman from Des Moines, Iowa, or an architect from Haddonfield, New Jersey." (Venturi R., Scott Brown D., Izenour S.(1972) Learning from Las Vegas, London; the MIT Press, P.58)



Image right: Google, Images, Disneyland, <http://www.wordartsolutions.com/Disneyland2005/Disneyland-Homecoming2005%20213.JPG> accessed on the 20th July 09

# PLEASURE ZONES

## CHARACTERISTICS

### LIGHT ARCHITECTURE

icy and diminutive  
Yamashiki modern

### IN A HOSTILE CONTEXT, THE OASIS

desert  
ocean  
parking lots  
fortifications

### SYMBOLIC ARCHITECTURE AND GARDENS

late periods  
erotic  
exotic  
Romantic etc.

### ROLE PLAYING

ostentatious resort hotels of Maris  
Lapetus  
Versailles

MIAMI BEACH

MARIENBAD

ATLANTIC CITY

XANADU

SHOPPING CENTER

BATH

ALHAMBRA

DISNEYLAND

PERSIAN GARDEN

WORLDS FAIR

HADRIAN'S VILLA

LAS VEGAS

MIAMI BEACH

MARIENBAD

ATLANTIC CITY

XANADU

SHOPPING CENTER

BATH

ALHAMBRA

DISNEYLAND

PERSIAN GARDEN

WORLDS FAIR

HADRIAN'S VILLA

LAS VEGAS

MIAMI BEACH

## SPACE · SCALE · SPEED · SYMBOL

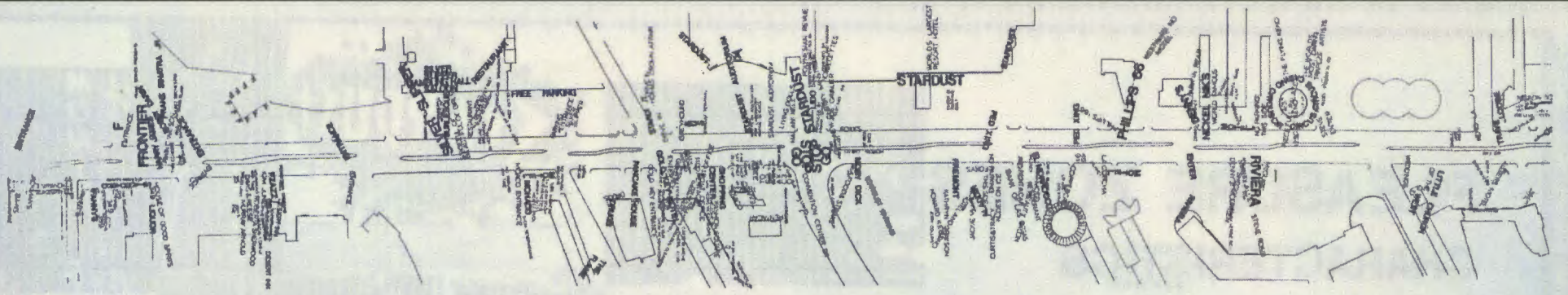


photo references

Above: Venturi R., Scott Brown D., Izenour S.(1972) Learning from Las Vegas, London; the MIT Press., P.63

From left to right photo references:

- 1) Hawtrey J. (2008) Salute from 'Paris' [photograph] (Jaqueline Hawtrey's private collection)
- 2) Hawtrey J. (2008) Tall roller coaster [photograph] (Jaqueline Hawtrey's private collection)
- 3) Hawtrey J. (2008) Shopping [photograph] (Jaqueline Hawtrey's private collection)



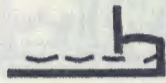
# DIRECTIONAL SPACE

**SPACE - SCALE**  
section 1 in.: 50 ft.

**SPEED**

**SYMBOL**  
sign-symbol-bldg. ratio

EASTERN BAZAAR



3 M.P.H.



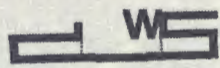
MEDIEVAL STREET



3 M.P.H.



MAIN STREET

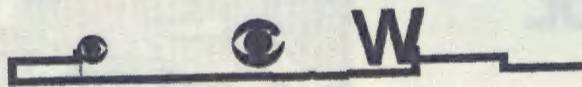


3 M.P.H.  
20 M.P.H.

W



COMMERCIAL STRIP



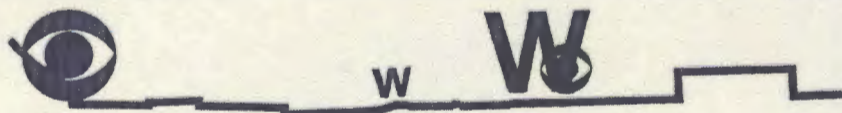
35 M.P.H.



W



THE STRIP



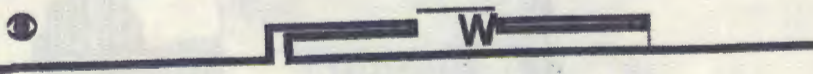
35 M.P.H.



W



SHOPPING CENTER



3 M.P.H.  
50 M.P.H.



W



## SPACE - SCALE - SPEED - SYMBOL

Learning from Las Vegas introduces the concept of the symbol in space, before the form in space. Venturi analyses the Communication system of Las Vegas architecture.

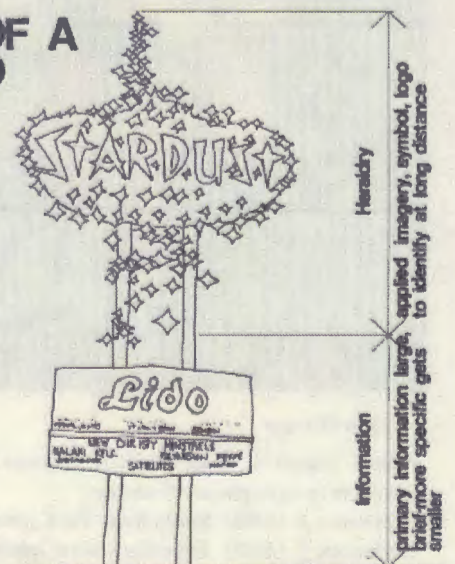
Venturi claims that in Las Vegas the sign for the casino is more important than the building. He remarks that this is reflected in the proprietor's budget: the sign at the front is the showpiece whilst the building is a modest necessity. In Las Vegas, he concludes, the architecture is what is cheap, the communication is what is expensive.

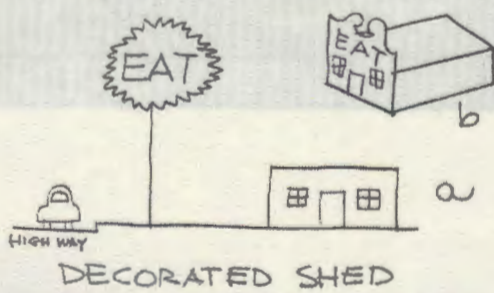
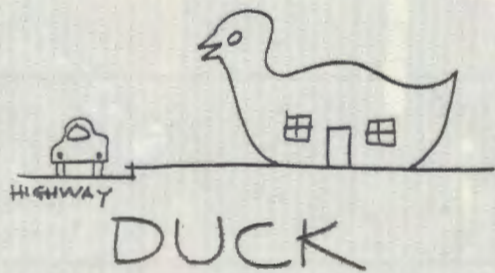
all pictures on this page reference:

Venturi R., Scott Brown D., Izenour S. (1972) Learning from Las Vegas, London; the MIT Press, P.64

127. Physiognomy of a typical casino sign

### PHYSIOGNOMY OF A TYPICAL CASINO SIGN





## EXAMPLE 1: LAS VEGAS TYPOLOGIES

In his book 'Learning from Las Vegas', Robert Venturi analyses the apparent chaos of Las Vegas in an attempt to define a design philosophy for an ordinary and inclusive popular modern architecture using traditional signs and imagery. Venturi ignores the political and social aspects of Las Vegas. Instead, the critique of his work is that far from being popular, the study represented more 'games by architects for architects'. (Hellman L. (2001) Architecture A-Z, London; Wiley-Academy, P.153)

Las Vegas is America's entertainment capital; a town of excess, bad taste, laughter, offensiveness, and degradation; a concrete form of carnival that is loved by people.

In Las Vegas, communication is said to triumph over space. The scale of the city is derived from the speed of the highway which is why the buildings, hotels etc are spaced out. A passer-by in a car thereby has the time to register all of the signage and forms, lights, fountains etc. This is a new scale of landscape (the scale of communication and attraction).

Venturi concludes that there are two main typologies employed by building designers in Vegas in order to attract and command attention from the public in Las Vegas:

1) The 'duck': 'where the architectural systems of space, structure, and program are submerged and distorted by an overall symbolic form' (Venturi R., Scott Brown D., Izenour S.(1972) Learning from Las Vegas, London; the MIT Press., P.64) . In the duck the building itself is the sign and the attraction. These types of buildings are completely inflexible.

2) The 'decorated shed': 'where systems of space and structure are directly at the service of the program, and ornament is applied independently of them.' (Venturi R., Scott Brown D., Izenour S.(1972) Learning from Las Vegas, London; the MIT Press., P.64)

From top to bottom photo references:  
- Google images; long island duck: [http://photos.doublem.us/d/10031-2/IMG\\_3554.JPG](http://photos.doublem.us/d/10031-2/IMG_3554.JPG) accessed on 5th May 2009

-Venturi R., Scott Brown D., Izenour S.(1972) Learning from Las Vegas, London;



'CARNIVAL DOES NOT KNOW THE FOOTLIGHTS, IN A SENSE THAT IT DOES NOT ACKNOWLEDGE ANY DISTINCTION BETWEEN ACTORS AND SPECTATORS. CARNIVAL IS NOT A SPECTACLE SEEN BY THE PEOPLE; THEY LIVE IN IT AND EVERYONE PARTICIPATES BECAUSE ITS VERY IDEA EMBRACES ALL PEOPLE.' BAKHTIN

Fiske J. (1989) *Understanding popular culture*, Boston; Unwin Hyman P.86

photo reference:  
 Above: De Moyencourt L, (2009) Canal walk food court [photograph] (Lucie de Moyencourt's own collection)

## EXAMPLE 2: CANAL WALK, CENTURY CITY, CAPE TOWN

Canal Walk is a large shopping centre situated within the Century city precinct located on the N1 highway, midway between Cape Town CBD and Bellville CBD. Canal Walk is the first and only super regional shopping centre, the second largest shopping precinct in Africa, and a veritable 'cathedral of consumerism'.

There are more than 400 shops, more than 6000 parking bays, and 60 restaurants and cafes within Canal Walk. The centre is open from 9am to 9pm everyday. Canal walk is not only a shopping destination, but also an entertainment and leisure experience. The centre boasts the most technologically advanced promotions court in South Africa, providing a venue for a range of live entertainment and promotional activities. Idols finalists Jason and Sasha-Lee performed and signed autographs to a massive crowd of shoppers and spectators in this venue on Thursday 30th April 2009.

Canal Walk mall is an extremely popular building; with over 1.7 million shoppers per month on average, and more than 2.3 million people counted in December 2008 according to a 2008 survey. Canal Walk has been voted the most successful retail stop 5 years running.



Above. Google images; Canal Walk; <http://upload.wikimedia.org/wikipedia/commons/9/92/Canal-Walk-Shopping.jpg> accessed on the 5th May 2009

Customer attractions include Rantanga Junction theme park, linked to the mall via a boat trip along the man-made canal, the MTN science centre for children which houses over two hundred and eighty science-related exhibits, Nu Metro's 17 cinema complex, Place of Play, a children's play park, Wonderland; a family entertainment centre, as well as Century City's award winning wetlands and eco-tourism attraction; Intaka Island, spanning sixteen hectares.

A central feature of the mall is the bewitching Food Court and Skywalk Emporium hosting twenty-five fast food stands. (featured in the photograph on the right) The food court is connected to the grand promotional court (discussed above). On any weekend this area is jam packed with families and people from all over the Cape metropolitan area.

Canal Walk operates its own TV station called CWTv which is displayed on two giant screens in the food court and thirty-two plasma screens throughout the mall. Another attraction is The Piazza, an open-air fine-dining destination overlooking the man-made canal and residential developments of Century City.



Above: the 'Piazza' at Canal Walk, Google, images, canal walk Cape Town, [http://upload.wikimedia.org/wikipedia/commons/1/1e/Canal\\_walk\\_cpt.jpg](http://upload.wikimedia.org/wikipedia/commons/1/1e/Canal_walk_cpt.jpg), accessed on the 10th May 2009

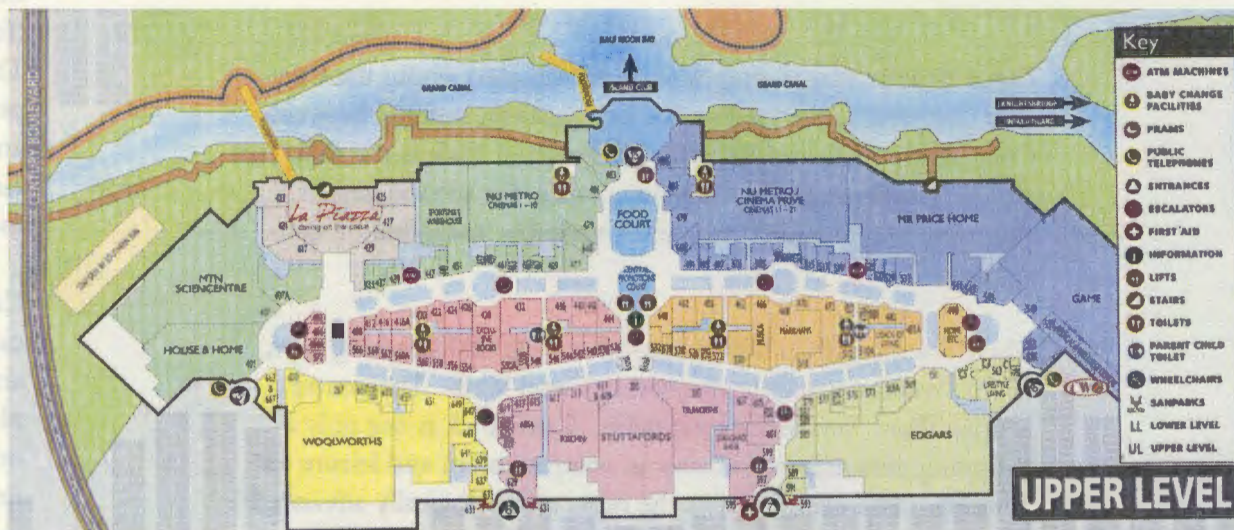
According to Wortherspoon, the developers of the Canal Walk project, the concept of the mall is to "create an environment which subliminally feeds into customers minds." (Wotherspoon, B. (2009) Retail Architecture and Canal Walk Centre, Personal interview conducted by Limor Shklaz in Cape Town [09/04/2009])

Following this concept, the architects sought to design a fantasy world - a world free from reality to give customers the opportunity to enter a different and dated era, and seek the pleasures of retail therapy in a safe and secure environment.

The initial planning of the mall proposed a number of internal water features connected to the canals; this proved to be a costly and impractical element, and was later repealed. The interior canals would have further added to the customer 'wow' factor upon visiting the centre, as well as contributed to the pure escapist strategies employed by the centre to please the public.

All of the design decisions made for Canal Walk were made with the intention of pleasing the customer, making the customer comfortable, exciting the customer at every turn so that customers will have a pleasant experience at Canal Walk and hence visit the centre again and be tempted to spend money. The basic layout of the mall is a figure of 8, encouraging users to travel in a circular continuous route (Refer to the light blue blocks on plan indicating the footpath below)

Upper level plan of Canal Walk from group work project paper submitted for the UCT course: CON4042F – Advanced Property Studies B, Subject supervisor: Dave Owen; Group Members: Kate Hogarth, Craig Martin, Sally Mispion, Limor Shklaz, Jessica Stevens, Noel Verrinder (2009) A Canal Walk Case Study. P.60



In Addition, accessibility to Canal Walk has been cleverly thought out. With designated drop off and pick-up zones for coaches, scheduled shuttle buses, minibus taxis, Golden Arrow Buses, and private on-site parking for private vehicles, Canal Walk has been made open and accessible to as many people as possible from all surrounding suburbs.

A visit to Canal Walk will reveal countless examples of copied architectural elements from Classical architecture. The image below shows a clear copy of such architecture in which Roman columns line a roofed walkway. This scene is heavily reminiscent of Renaissance, Florentine or Venetian architecture. This style has been coined 'Cape Venetian'.

Two dominant themes were integrated in the design and aesthetics of the mall - the south wing is themed according to the Classical era, whereas the north wing is inspired by the Victorian era. An African sub-theme was incorporated in the arts and crafts market, 'Afri-Bizarre' (See right), which serves as a link on the lower level between the two major channels of the mall

Much controversy and debate concerning the design and style of the mall surfaced, particularly among the local architectural fraternity as the result of the strong references to Western and European themes in the mall's aesthetics. This was regarded by many as a symbol of colonial rule. In light of South Africa's newly borne democracy and reconciliation, the style of the mall was seen to be in contradiction to the ideals of equality and freedom from oppressive rule. Nonetheless, critics cannot deny the great retailing success and achievement that Canal Walk has enjoyed since its inception. The people love the design and spaces of Canal Walk and Century City.



Images from group work project paper submitted for the UCT course: CON4042F – Advanced Property Studies B, Subject supervisor: Dave Owen; Group Members: Kate Hogarth, Craig Martin, Sally Mispion, Limor Shklaz, Jessica Stevens, Noel Verrinder (2009) A Canal Walk Case Study. P.118



An interesting fact to note is that Cavendish Square Mall, a competing regional mall located in Claremont Cape Town, undergoes a comprehensive refurbishment of its contemporary interiors every ten or so years in order to keep up and be popular.

In the case of Canal Walk, the adopted 'Classical' and historical theme, circumvents the need for regular revamping and renovation, resulting in considerable cost saving for the mall. Canal Walk can hence be classified under the aforementioned 'duck' category whereas Cavendish Square would be categorised as a 'decorated shed'.



At Canal Walk' there is a need to 'keep the finger on the pulse' and ensure that a fresh and exciting image of Canal Walk is maintained. In order to achieve this, renewal of interest in the centre is kept up by the expansion thereof. The expansion is currently underway on the N1 Highway side of the mall; 16 000m<sup>2</sup> additional retail space will soon be added to the existing 130 000m<sup>2</sup> shopping space in the form of 6 'retail pods'. These 'pods' will house lifestyle megastores that are too large to fit within the centre itself:

- Pod 1: Golf megastore,
- Pod 2: New look Hi-Fi Corporation,
- Pod 3: @Home lifestyle and furniture store,
- Pod 4: Cape Union Mart 'Flagship adventure centre',
- Pod 5: Sports Direct,
- Pod 6: One stop bridal shop; Bride & Co.

These stores are guaranteed to increase customer attraction to Century City.

For all its unpolitically correctness, in terms of the European themes in the building, as well as capitalist concepts such as using every trick in the book to entice people to spend money in the centre,



**THERE IS NO MORE DEMOCRATIC, MULTI CULTURAL AND CARNIVAL SPACE TO BE FOUND THAN THE CANAL WALK FOOD HALL ON A WEEKEND. THIS SPACE WITH ITS CONFUSION OF 32 FLAT SCREENS TV'S, CORINTHIAN COLUMNS AND AFRI-BIZAR ARCHITECTURE IS A SUCCESSFUL BUILT EXAMPLE THAT ENCOURAGES INTEGRATION.**

from top to bottom photo references:  
 - De Moyencourt L, (2009) Cavendish square shed [photograph] (Lucie de Moyencourt's own collection)  
 - De Moyencourt L, (2009) Cavendish square corridor [photograph] (Lucie de Moyencourt's own collection)  
 - De Moyencourt L, (2009) Cavendish square food hall [photograph] (Lucie de Moyencourt's own collection)

### 3.G. CONCLUSIONS

I feel empowered by this paper and the research undertaken to go forth and design a place that induces a collision of people in a space as well as to give pleasure to people. The following are a series of observations and findings I have made through the process of this research:

The interviews:

90% of the architecture that these interviewee's have stated as good, interesting, exciting, worthy of praise, have been examples of extremely popular and famous buildings. A few names and buildings seem to be a recurring answer for architecture that is worthy of praise; with Antoni Gaudi as the most popular architect (from the limited 15 interviews), and the Taj Mahal as the most popular building. Most of the buildings cited in these interviews have been examples of decadent, escapist and surreal works from both the original and imitation categories.

It also became clear to me that people were answering the questions with works of architecture that they liked simply because they are popular (the people being more of an attraction than the architecture). It is therefore not necessarily the architecture which acts as the magnet for people in space but the fact that there are lots of people there.

From asking basic questions such as what is your favorite building to people who are not used to thinking or talking about buildings I have realized how little general interest there is in the art of architecture. Architecture generally goes unnoticed in the populace, as a background to activities. People often think about and make lists of their favorite movies, music, items of clothing... But a list of favorite buildings was

challenging to most of the people I asked. The answers are thus sometimes the only examples the interviewee could think of; and not the result of any deep or long thinking on the subject.

In most cases, the buildings that came to mind first as favorite building were examples which I would categorize under the original work label. These first choice buildings were the most elaborate and extravagant palaces and cathedrals from around the world. Upon asking people what local buildings they responded to, the answers were almost always from the imitating an original imaginative work category such as Grand West Casino, Century City...

As previously stated; I am not interested in fashionable architecture but in the works that are and will be eternally popular. The way I see it is that a work of architecture, to be eternally popular has to be either incredibly flexible to accommodate the revamps and updating (the malls) or impossibly unchangeable (Gaudi's park Guell, Pompidou Centre...)

Architecture in South Africa needs to claim its place in popular culture. We need original, imaginative works in South Africa to stimulate people. It is important to recognize the influence of architecture in our lives, as well as its potential for creating popular, democratic spaces which unite people and encourages reconciliation in a social environment.



I end my paper with the belief that there is no right and wrong way to go about being popular; the imitation and the original works of architecture are equally good in that they attract people to them. In our attempts to bring people together in the post 1994 society, there are more important agenda's than whether the architecture is authentic. Popular architecture and space is the space of democracy and dignity. However if there is the choice I believe that building an original work is always better than building an imitation. The original will always be more special than the imitation as it is an unprecedented work.

I have decided that I will design an original work rather than an imitation due to the program that I have chosen.

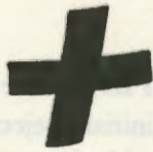
My design should have a wow factor. As Oscar Wilde says 'nothing succeeds like excess'. The design has to be impressive, imaginative, bold, and communicative. The design should, as with the Pompidou Centre, contrast with its context in order to make a clear bold statement; I am here! Notice me! Come see what is inside! The building, however garish, can simultaneously be sophisticated and beautiful.

This can be created with a mix of overwhelming structural and sculptural elements or by applying unabashed surface decoration to the building in a convincing and beautiful way. There should be a strong element of the surreal, the escapist, the fantasy world in this building, in order to create a state of carnival in people whereby they feel at ease, elated with a heightened sense stimulus

I also realise that original works are often initially rejected and hated by the public (as with the case of the Eiffel Tower and the Pompidou Centre) Conviction in my concept and design is thus extremely important in order not to be discouraged nor settle on a 'safer' 'subtler' option. For this reason I have spent a lot of time working on the concept of the building, finding an appropriate language and form which conveys all of what has been said in this paper.

I look forward to the design process!

Lucie de Moyencourt



- The city is easily accessible
- The city has the most public attractions
- The city is a meeting place, being the major work centre for all cultures
- The city is free, anyone can enjoy the sites of the city from the streets
- The holds dreams and aspirations of a better life

- People do not use the city for leisure purposes apart from lunch breaks and tourism. On a weekend one would find most city streets barren. Shopping occurs at the major leisure nodes; V&A Waterfront, Century City etc.

- There is no post apartheid landmark cultural public building in the city that reflects or reinforces the idea of societal change.

- Most of the examples of contemporary urban Cape architecture only tell a story of globalisation and the latest trends in private enterprise.

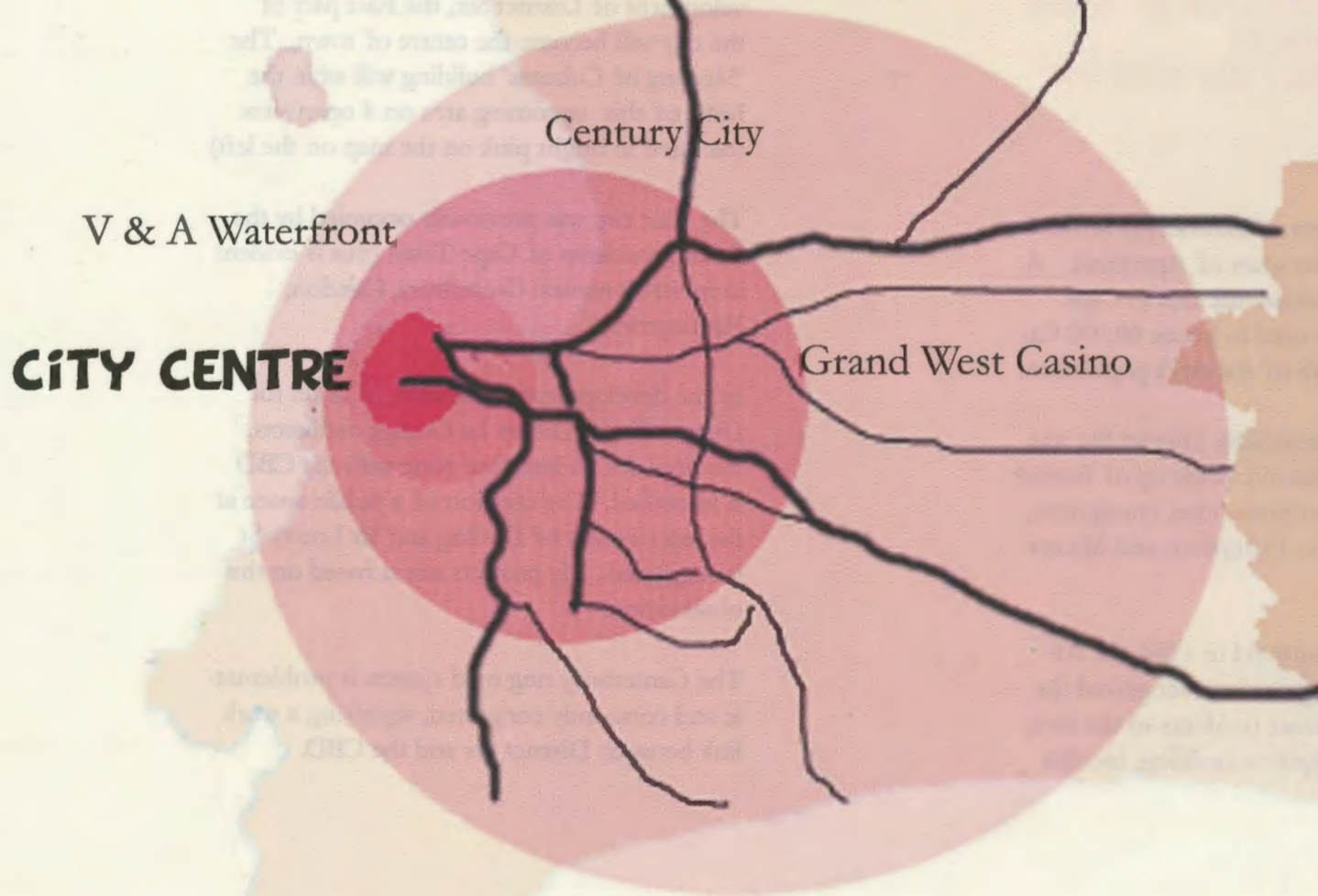
- New buildings in the city are being commissioned to cater for the rich of the city and not for the poor and marginalised majority of its population.

The city attracts people from all walks of life. The streets, pavements and squares belong to everybody. It is in these public places in the city that chance meetings and exchange occurs.

The city centre is where urban services agglomerate: restaurants, cafes, theatres, shops, hotels, nightclubs and entertainment all want to be located in the position where the most people are, the centre.

The unique topography of the Cape; the mountains and the sea provide a magical setting for the city's CBD. Cape Town is a relatively small, walkable, rich and beautiful city. Variety, choice and integration happens when there is concentrated centralised activity as in the city centre. In the case of Cape Town, however, large leisure establishments and developments such as the Grand West Casino, Century City and the V&A Waterfront, have chosen to locate themselves on the outskirts of the city centre. On a weekend one may find these establishments full of people enjoying themselves, eating in restaurants and being entertained, whereas the streets of the city

# ALL ROADS LEAD TO THE CITY CENTER, THE HEART OF CAPE TOWN



centre are by comparison dead of activity.

Good access to the city centre is fundamental; with the upgrade of public transport facilities such as the Cape Town train station, and new BRT and IRT planned systems; the number of pedestrians in the city will rise and so the need for public space and pedestrian-friendly streets. With public space comes public entertainment.

I feel that it is time that Cape Town city centre has a large building that contributes to leisure in the city thus facilitating cross cultural meetings in a pleasant, positive environment.

**A UNIQUE, NEW, PROUDLY SOUTH AFRICAN POPULAR BUILDING IN THE CITY CENTRE WILL CHALLENGE THE URBAN VISITOR TO TAKE A FRESH LOOK AT THE CITY AND THE SOUTH AFRICAN SOCIAL LANDSCAPE.**

# EAST CITY

MY SITE SITS ON THE BOUNDARY OF THE HISTORICAL AREA OF DISTRICT SIX, AND THE CITY CENTRE OF CAPE TOWN. MY INTERVENTION IS THUS A LANDMARK CONNECTOR OF THESE TWO AREAS WHILST SIMULTANEOUSLY DEFINING AN EDGE.

The un-development of District Six is one of the worst leftover scars of Apartheid. A former inner-city residential area in Cape Town, District Six used to house 60,000 Capetonians, one tenth of the city's population.

Before the forced removals, District Six was a lively urban community made up of former slaves, artisans, merchants, other immigrants, of Indians, Africans, Europeans and Malays decent.

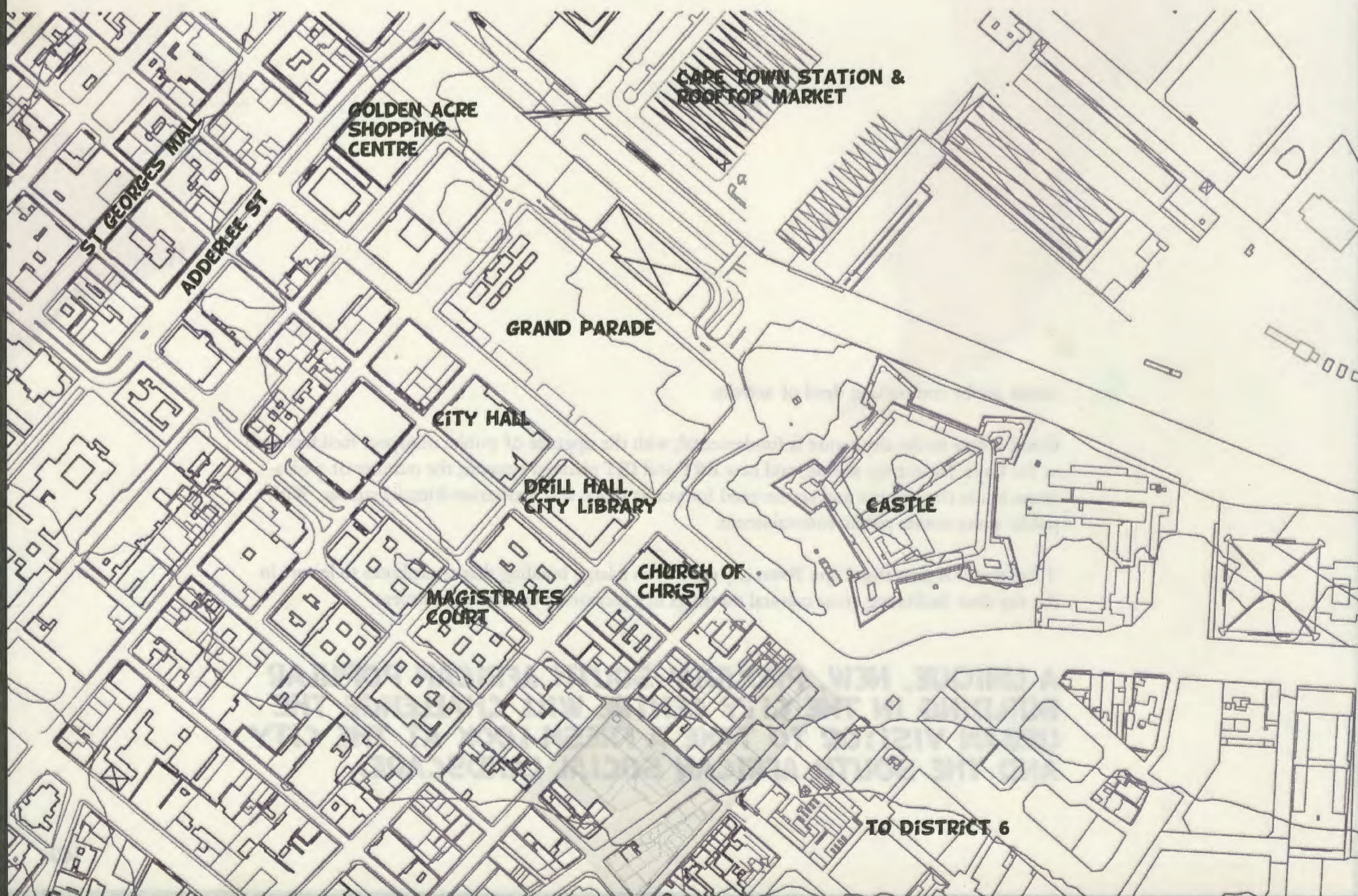
Since the fall of apartheid in 1994, the African National Congress has recognized the older claims of former residents to the area, and pledged to support rebuilding, but this

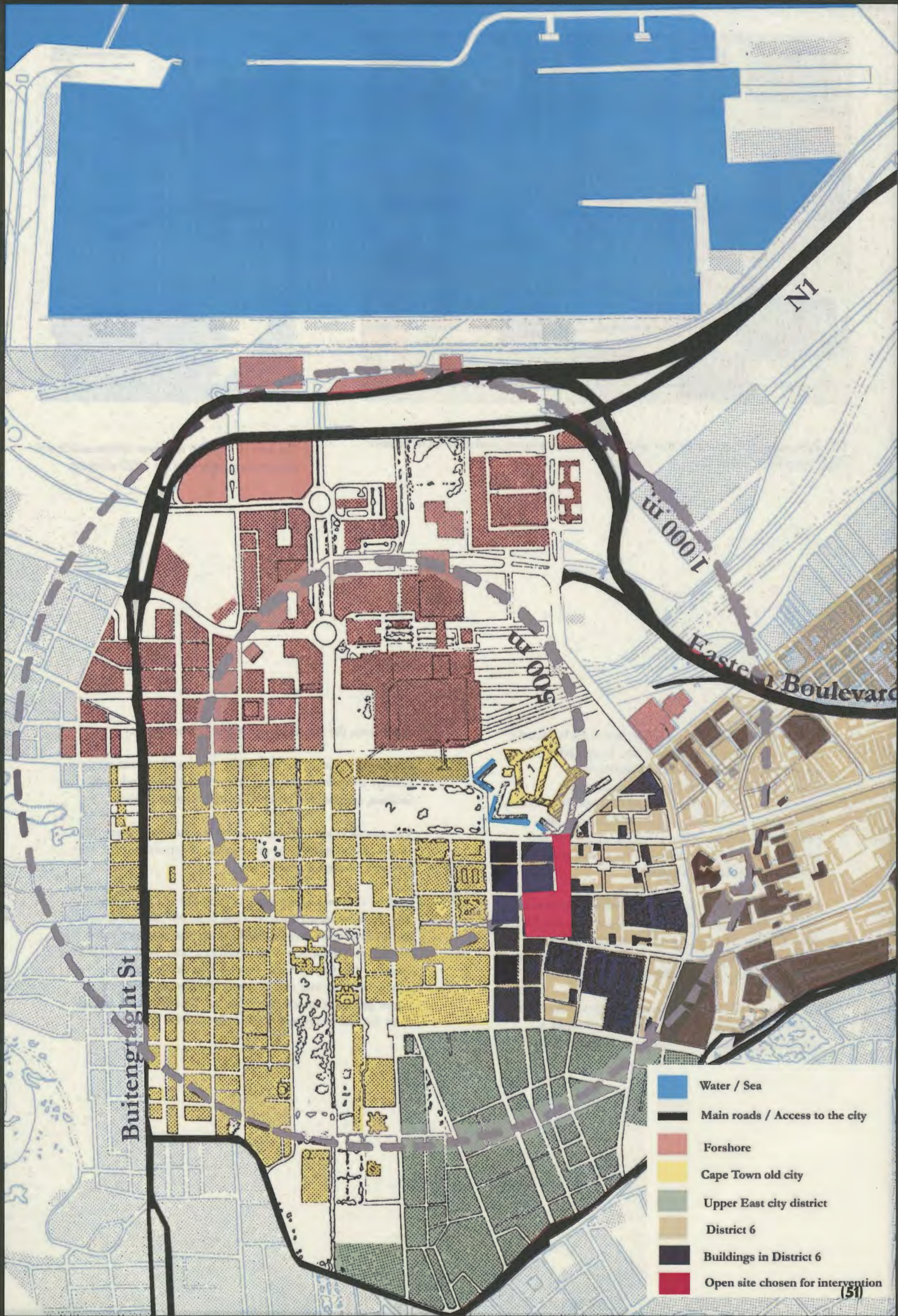
is a slow and complex process. I believe that when District Six is developed, the East city centre will experience a major development boost due to the increased amount of people in the neighbourhood. With the dense development of District Six, the East part of the city will become the centre of town. The 'Meeting of Cultures' building will sit in the heart of this upcoming area on 4 open sites (pictured in bright pink on the map on the left)

The East city was previously occupied by the British residents of Cape Town (this is evident in its street names: Canterbury, Caledon, Harrington...)

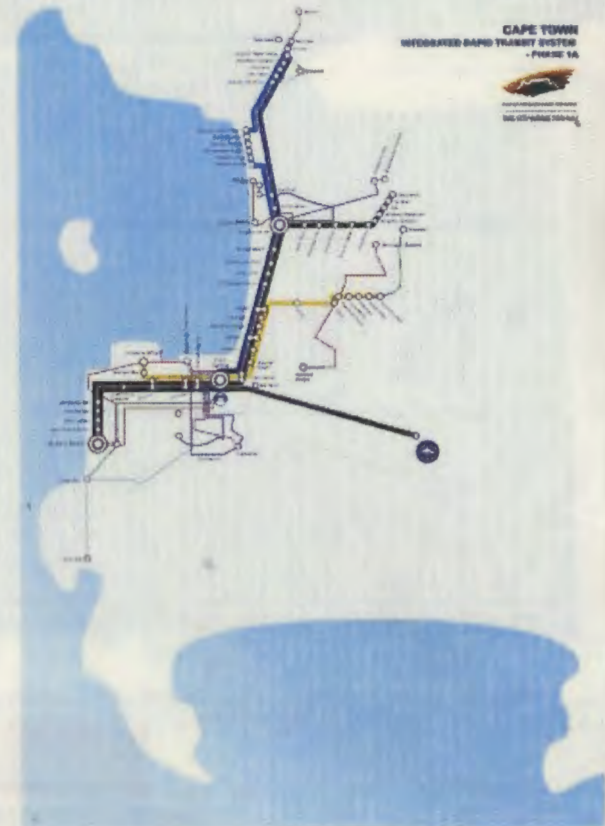
In the development framework of 2005 for District Six by Lucien Le Grange architects, the need for an interface zone with the CBD is identified. The creation of a public space at the intersection of Darling and Sir Lowry St is suggested. My projects site is based on this observation.

The Canterbury ring road system is problematic and constantly congested, signifying a weak link between District Six and the CBD.





- Water / Sea
- Main roads / Access to the city
- Forshore
- Cape Town old city
- Upper East city district
- District 6
- Buildings in District 6
- Open site chosen for intervention



The above image illustrates the new and exciting developments, orchestrated by creative Cape Town for the East City.

The new IRT public transport system which will bring more people into the CBD everyday.

Darling St, Longmarket St and Caledon St are historically important roads which cross my site. Longmarket St connects my site with Signal Hill and District Six. Approximately half of Longmarket St has been pedestrianised with the area around the Cape Town library having public landscaping and street furniture. My intervention can take better advantage of historic and existing connections between districts as well as activate the old Hanover St activity corridor.

The East city is currently frequented mainly for its cultural buildings: the Castle, the District Six Museum, and the Cape Town Library. The Buitenkant Street edge facilitates commuter pedestrian routes from the station and transport interchange from Mill St and beyond.

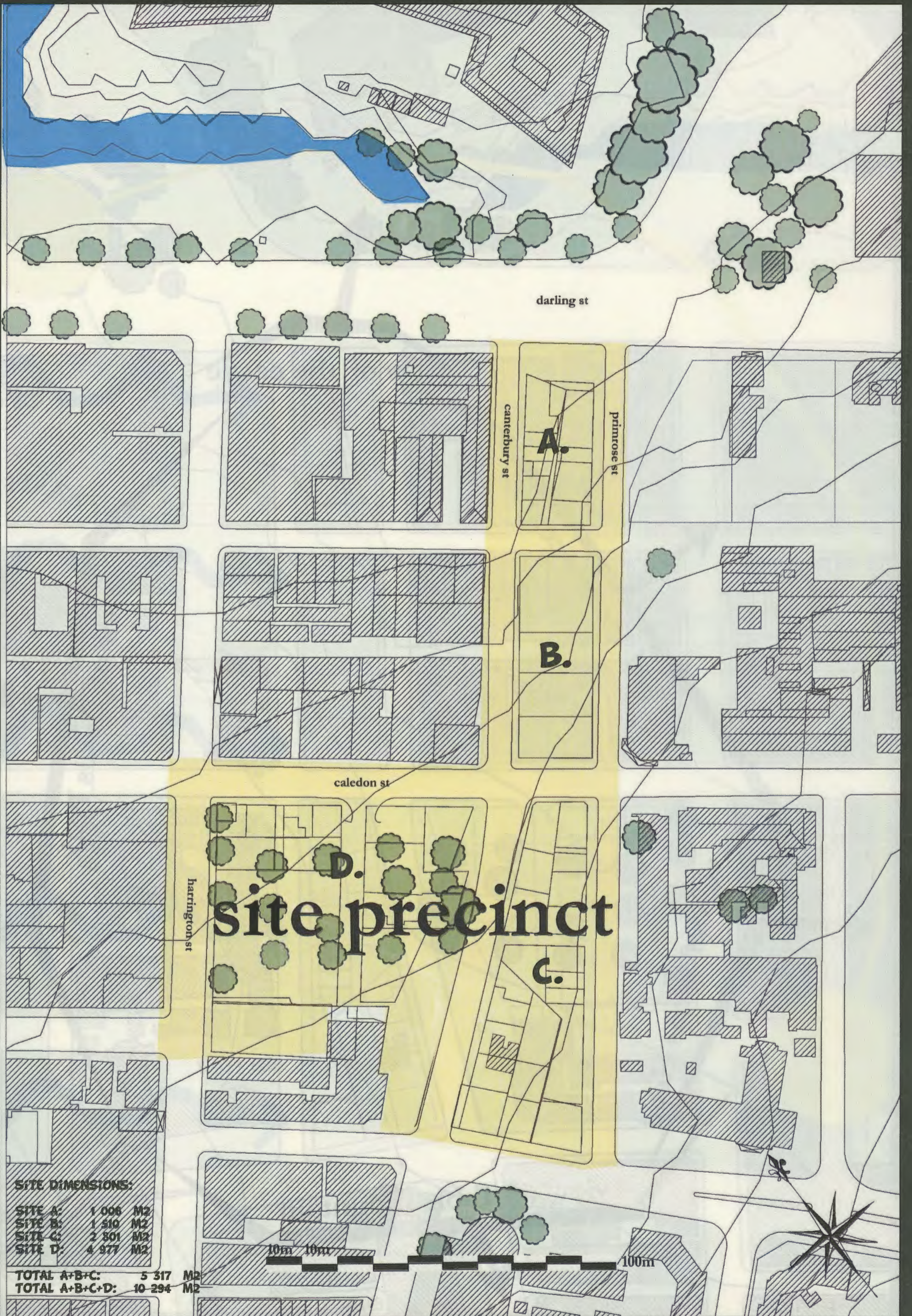
The demographic composition of visitors to the area is made up of an eclectic population of commuters, a notable amount of students living in adjacent rented

apartments, the homeless, street vendors and artists.

Existing activities in the immediate context of my site are the heritage attractions, dull commercial activity, light industrial facilities, a restaurant, bottle store and recently a bakery.

The area lacks entertainment, eating and gathering space. The streets are too narrow for the amount of cars making the environment hostile for pedestrians.

All four chosen sites are owned by the city of Cape Town. They have remained open sites due to an old plan to enlarge the roads to make way for traffic. This plan has since fallen through as Tenant St was identified as a better option for this scheme. The City of Cape Town is thus converting the zoning of these sites to a C2 zone. This means that a mixed use or general commercial building of 7 storeys, 4.5m setback from the 2nd storey, and 100% bulk coverage is allowed.

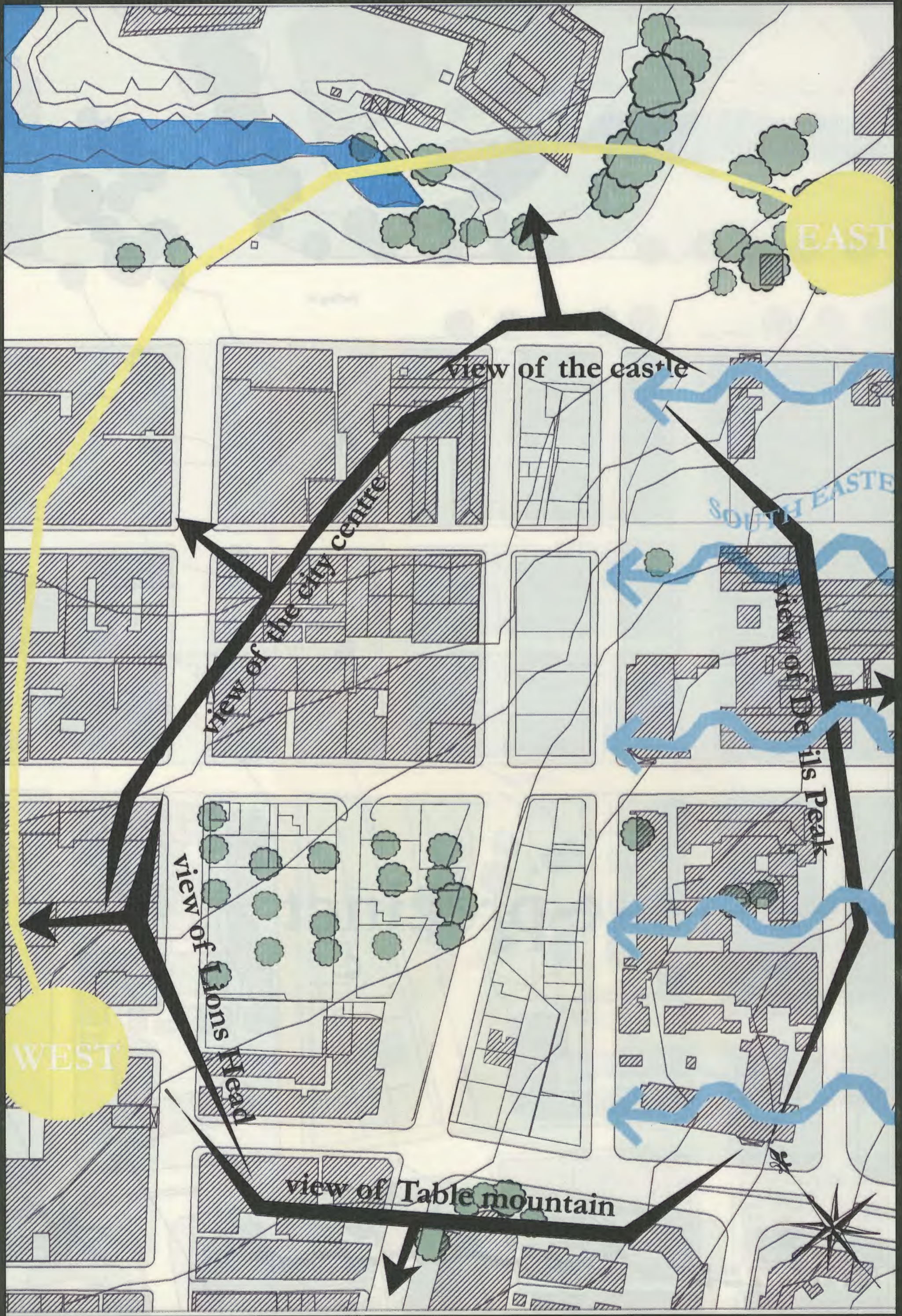


**SITE DIMENSIONS:**

SITE A:	1 006	M2
SITE B:	1 510	M2
SITE C:	2 801	M2
SITE D:	4 977	M2

TOTAL A+B+C: 5 317 M2  
 TOTAL A+B+C+D: 10 294 M2





EAST

view of the castle

view of the city centre

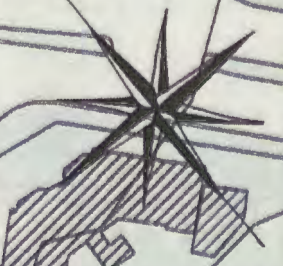
SOUTH EAST

view of Devils Peak

view of Lions Head

WEST

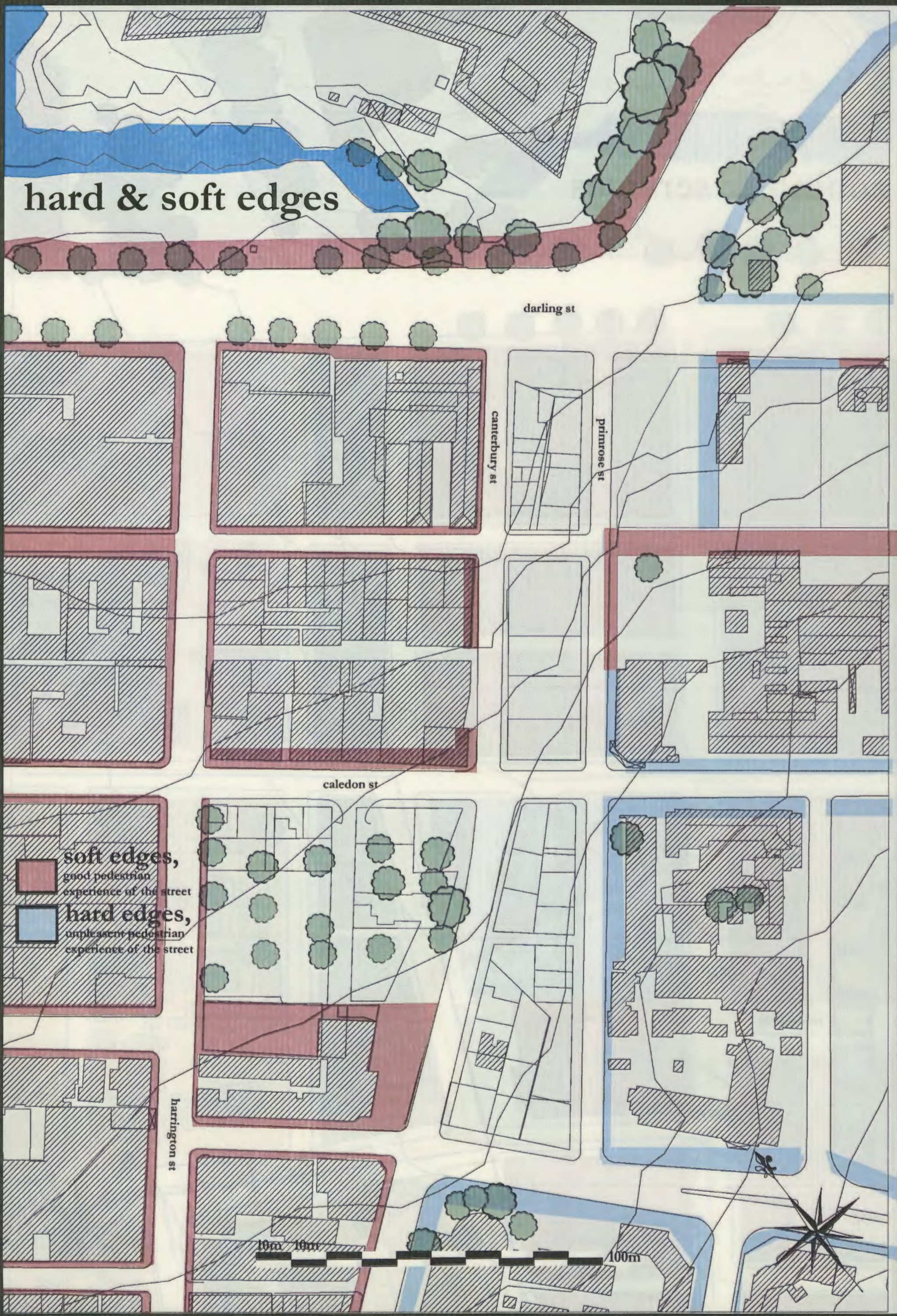
view of Table mountain



# zoning & services



# hard & soft edges



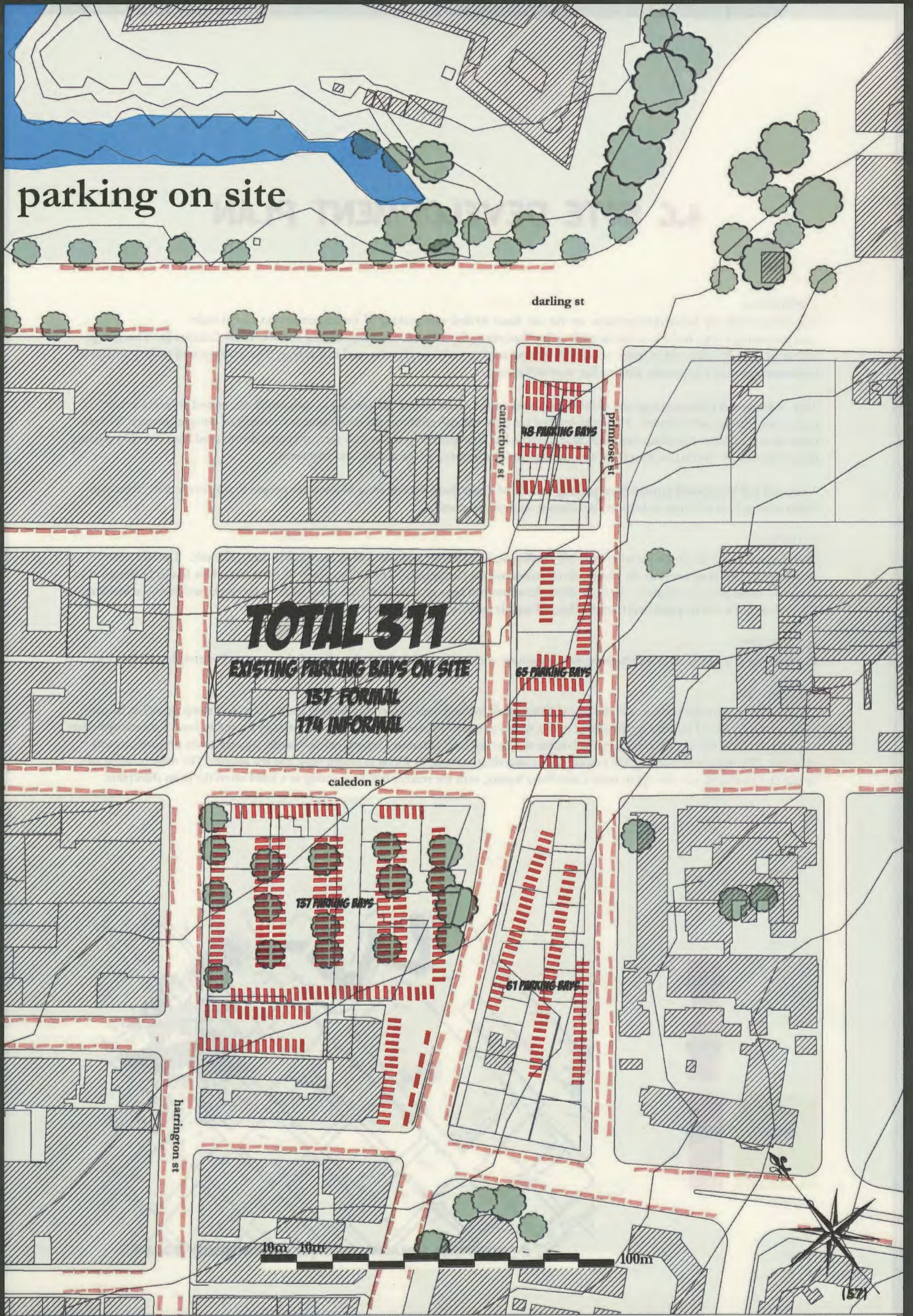
**soft edges,**  
good pedestrian  
experience of the street

**hard edges,**  
unpleasant pedestrian  
experience of the street

10m 10m

100m

parking on site



## 4.C SITE DEVELOPMENT PLAN

### 1. PARKING:

It is obvious that any future development on this site needs to deal with parking of motor vehicles on a large scale.

I am proposing a large multi-levelled car park under Canterbury Square with one ramp leading down to it off Caledon St. This garage will replace the 314 bays taken away on valuable ground level to make way for the market building. The underground parking will be 5 levels underground and provide parking for over 600 cars.

This underground parking garage will alleviate the stress on the roads around the site due to congestion etc, as well as create a more pedestrian-friendly environment. The multi-levelled car park will also reinforce the development's concept of being a gateway. The site currently sits on what city urban designers have identified as an important gateway into the city centre, due to road sizes etc. The parking garage thus marks the end of your drive into the city, and the beginning of your walk, and vice versa.

There will still be exposed ground floor parking on half of Canterbury Square, so as to allow for people to play music from their cars whilst waiting for their meat to braai at the adjacent outdoor braai stalls.

### 2. ACCESS:

Main pedestrian access to the site will occur off Darling St, Longmarket and Caledon St. on the Northern, city side. The two main facades of the building are thus the Darling St elevation and the Canterbury St elevation. Each of these elevations has to be designed so as to command people's attention. Each of these elevations will have its own forecourt space so as to announce and view the building. These forecourts will be protected from the South Easterly wind by the market building.

### 3. GATEWAY:

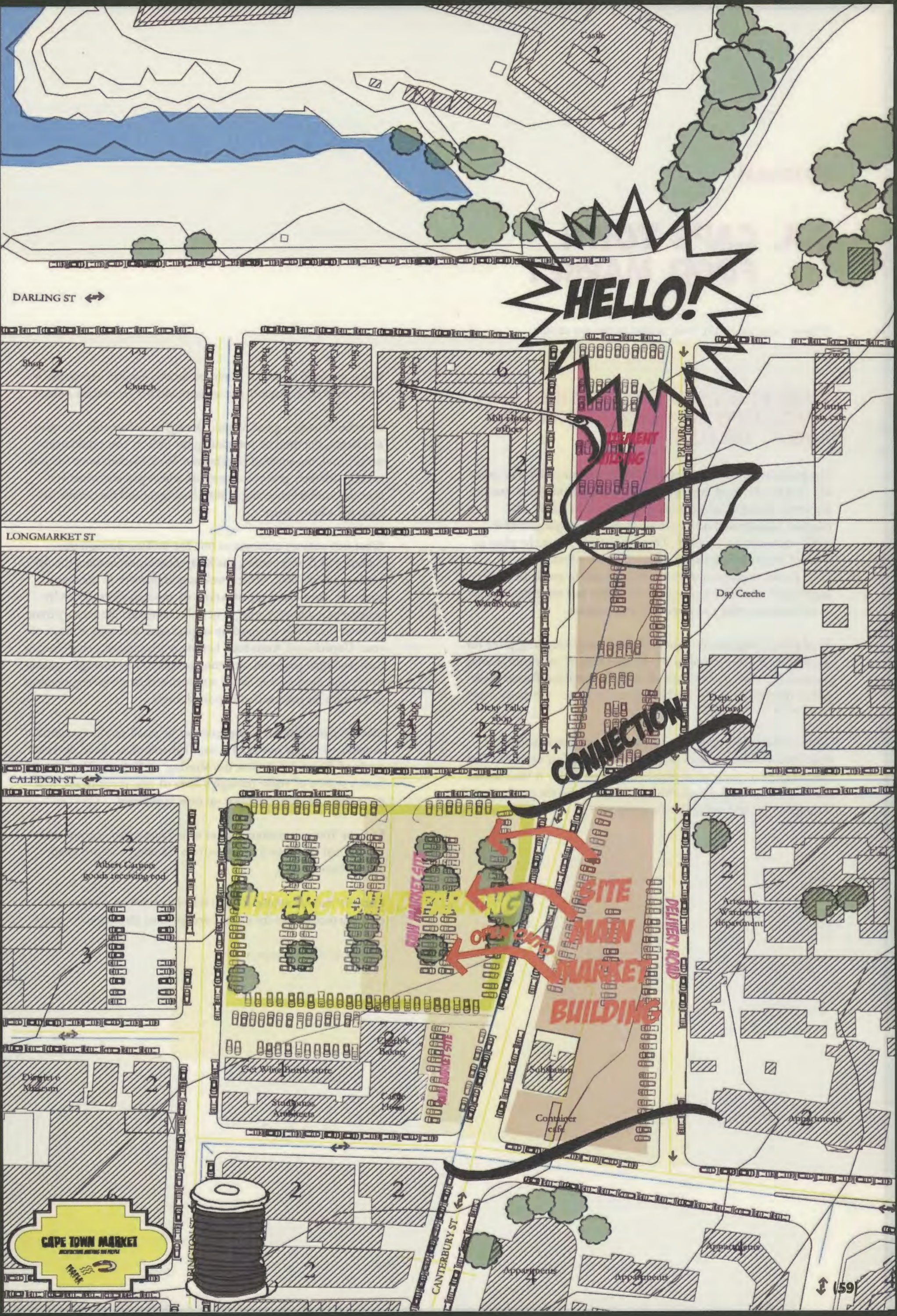
The building is to act as a gateway building simultaneously connecting and defining the edge of the areas of District Six and the city.

### 4. BUILDING:

The best views from my site occur at the top of Primrose St looking over Canterbury Square, Lion's Head and rump as well as the city centre. I have decided to place my buildings on the three open sites between Primrose and Canterbury St, and to leave Canterbury Square as a square. The building I am proposing will define the last side of Canterbury Square, enhancing the square's lovely proportions and character. The proposed building will respect the surrounding context, by fitting in height-wise into the square. The main building will be the one that looks out and opens onto Canterbury Square, with the smaller buildings acting as a build-up to the main showpiece.



A FANTASTICAL LANDMARK BUILDING ON CANTERBURY SQUARE



**HELLO!**

**CONNECTION**

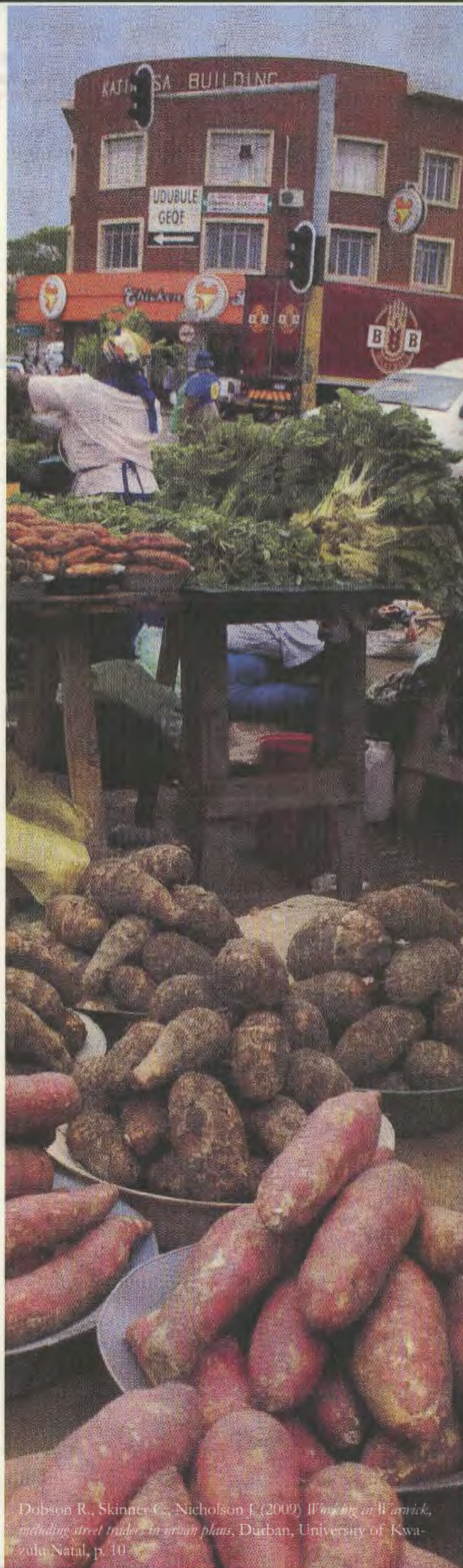
**UNDERGROUND PARKING**

**MENT BUILDING**  
**MAIN MARKET BUILDING**

**CAPE TOWN MARKET**  
INSPIRING ARTISTS ON PEOPLE

Table of existing markets in and around Cape Town.  
 Currently there is no daily food market in the city centre.  
 Comparatively with the city of Johannesburg, Pretoria and Durban,  
 I personally find Cape Town city to have less 'street vibe', due to lack  
 of street traders lining the streets in continuous markets.

City centre:		
1. Green Market Square market	tourist mementos	daily 9-5
2. Cape Town Station rooftop market	miscellaneous	daily 9-6
3. Parade market	fabric & miscellaneous	daily 9-5
4. Adderlee St flower market	flowers	daily 9-10
5. Church St market	antiques and collectables	daily 9-5
Greater Cape Town:		
6. Green Point market	tourist mementos & miscellaneous	weekends 9-3
7. Salt River market	fruit and vegetables	daily 9-5
8. Biscuit mill market Woodstock	food, cloths	Saturdays only 9-2
9. Tokai market	farmers market; food	Saturdays only 9-2
10. Kalk Bay market	fresh fish	daily during daylight hours
11. Milnerton market	car boot sale & miscellaneous	Saturdays, Sundays and public holidays, 8-2



Dobson R., Skinner C., Nicholson J. (2009) *Working in Warwick, including street traders in urban plans*, Durban, University of Kwa-zulu Natal, p. 10

## 5.B. MARKET PRECEDENT COMPARING SIZES & AGENDA'S

1. La Boqueria, Barcelona
2. Santa Caterina, Barcelona
3. Crystal Palace, London
4. Warwick Junction, Durban
5. Biscuit Mill market, Cape Town
6. Ampitheatre, V&@ waterfront, Cape Town



### 1. LA BOQUERIA MARKET BARCELONA

**DESCRIPTION:** Over the years, La Boqueria has become the most emblematic indoor market in Barcelona. The structure, the situation, and the salesmen turn it into an obligated must-see for all the tourists who visit the city. This market is entwined with the city's history, with local families and their popular traditions and celebrations.

**NO. OF STALLS** 264

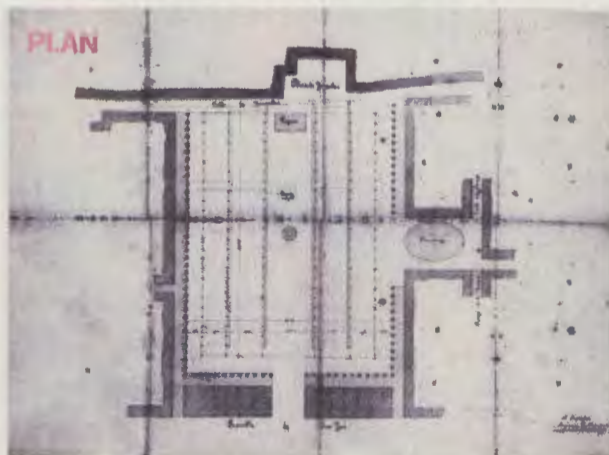
**SIZE** 67m x 88m

**EATING ON THE PREMISES** happens at counters at stalls along the perimeter of the market.

**THINGS I LIKE ABOUT THIS MARKET:** The present salesmen at the market are mostly third or fourth generation salesmen at the market. The produce is abundant and varies greatly: seafood, tinned food; butchery, eggs, fruits and vegetables, herbs, delicatessen, breads and pastries, restaurants, frozen items, artisan products, farmers' shops, wine... This market is all about people! One sees people of all shapes, sizes, backgrounds at this market; it is extremely popular and loved.

**REFERENCE:**

<http://www.boqueria.info/Eng/index.php>



Google Image; plan la boqueria; <http://www.boqueria.info/Eng/index.php>, accessed on the 10th September 09



**ENTRANCE**



Google Image; la boqueria stalls; <http://www.norbiton.com/ukdave/barcelona/08marketA.jpg>, accessed on the 10th September 09



Google Image; la boqueria stalls; <http://www.norbiton.com/ukdave/barcelona/08marketA.jpg>, accessed on the 10th September 09

## 2. SANTA CATERINA MARKET, BARCELONA

**DESCRIPTION:** This popular market in Barcelona was designed by EMBT. It is located in the old part of Barcelona the Barri Gothic. The market is a catalyst for the regeneration of a neighbourhood within the Barri Gothic. It is a reinvention of the typical market typology. This market has a magical undulating roof. This colourful structure is bizarre and unreal, and acts as a drawcard for people in the area to enter the market and look around.

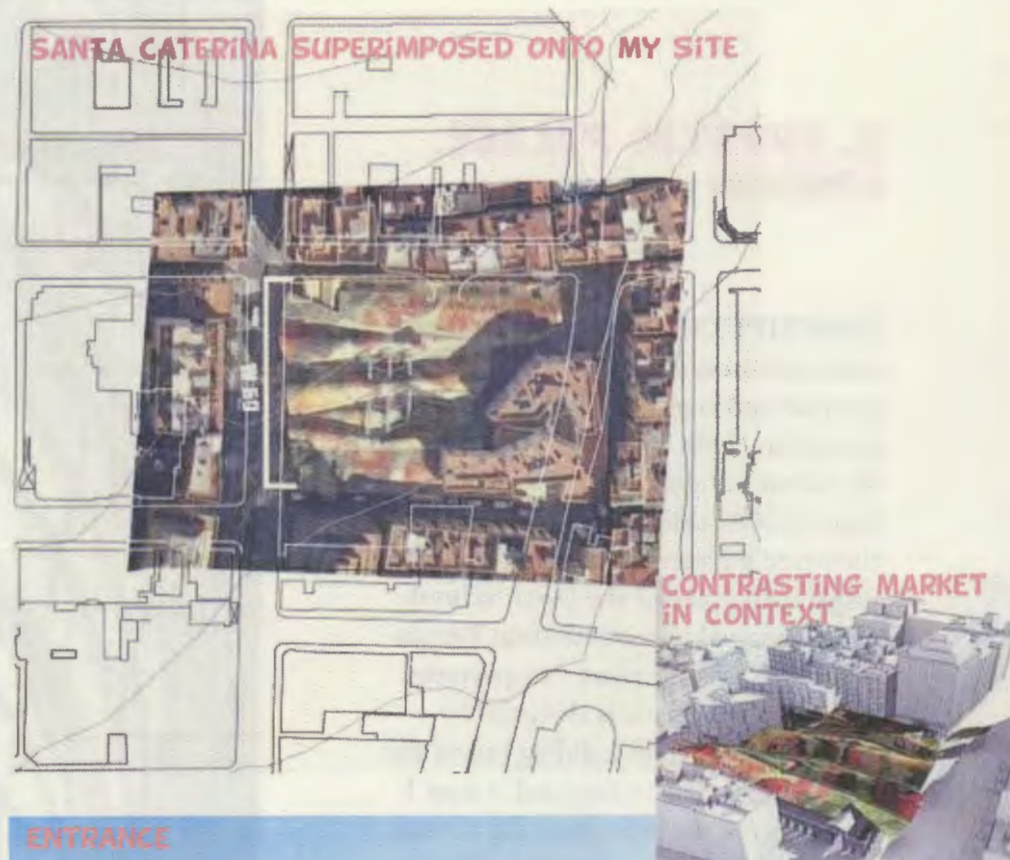
**NO OF STALLS:** +50

**SIZE:** 69m x 100m

**HEIGHT:**

**THINGS I LIKE ABOUT THIS MARKET:** The architecture of this market is a spectacle, a marvel of structural engineering and design. One cannot ignore it as one is walking past (or in its precinct) it carries a strong instantly recognizable identity. During my two month stay in Barcelona's Barri Gothic, I noticed this market's ability to draw crowds of people into an otherwise derelict neighbourhood. These are qualities which I would want for my project, the meeting of cultures.

Finally the lack of precedent for this project at the time of its construction. The market carried with it the risk of many unforeseen problems, because its design is essentially an experimental structure. Uniquely fabricated elements and much specialist input was necessary in order to realise EMBT's vision.



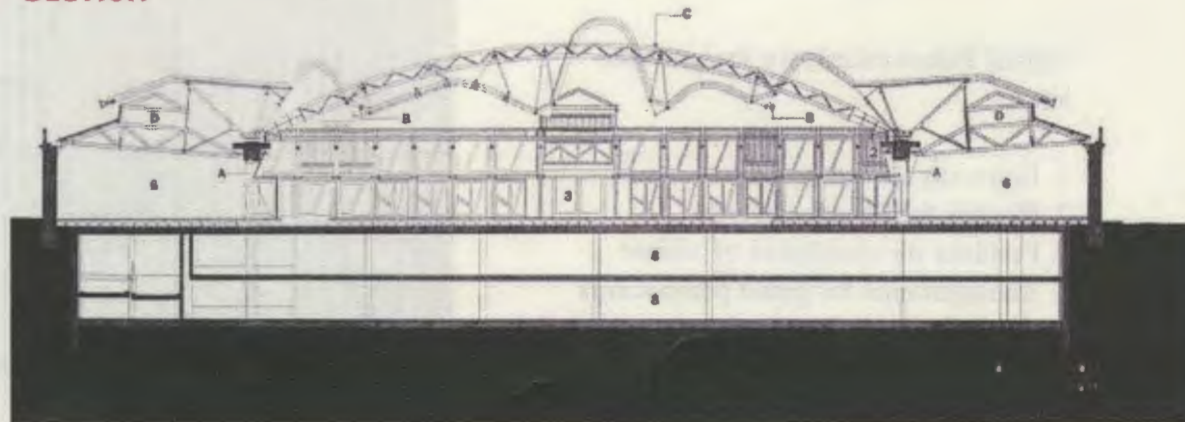
Google Image; Santa caterina market; [http://conciierge.typepad.com/photos/uncategorized/060918\\_barcelona.jpg](http://conciierge.typepad.com/photos/uncategorized/060918_barcelona.jpg), accessed on the 10th September 09



Google Image; Santa caterina interior; [http://farm4.static.flickr.com/3109/2706585639\\_54507801b2.jpg?v=0](http://farm4.static.flickr.com/3109/2706585639_54507801b2.jpg?v=0), accessed on the 10th September 09



### SECTION



### 3. CRYSTAL PALACE, LONDON

**DESCRIPTION:** The Crystal Palace was a cast-iron and glass extremely popular building which was originally erected in Hyde Park, London, to house the Great Exhibition of 1851. More than 14,000 exhibitors from around the world gathered in the Palace to display examples of the latest technology developed in the Industrial Revolution. This was the place for spectacle. The Crystal Palace was designed by Joseph Paxton. This building boasts the first public toilets in England, it cost 1 penny to use the lavatory at the Crystal Palace (including a shoeshine). This is where the expression 'to spend a penny' originates.

**SIZE:** 92 000m<sup>2</sup> ground floor

**HEIGHT:** 33m high with crystal fountain of 8m height

**NO. OF STALLS:** 100 000

**NO. ENTRANCE & EXITS:** 3 entrances, many exits

**THINGS I LIKE ABOUT THIS BUILDING:** The crystal palace had magical, allusive, surreal and functional qualities. The concept of spectacle and the promenade were core to this building. The purpose of this large building was for people to gather for no purpose whatsoever other than to gaze. All internal walls were omitted in the design of the Crystal Palace other than those needed to form the stalls 'allowing the eye to range at liberty, and to appreciate the extent and the vista';

Paxton J., Fox C. (1994) Crystal Palace, architecture in detail, Phaidon, London

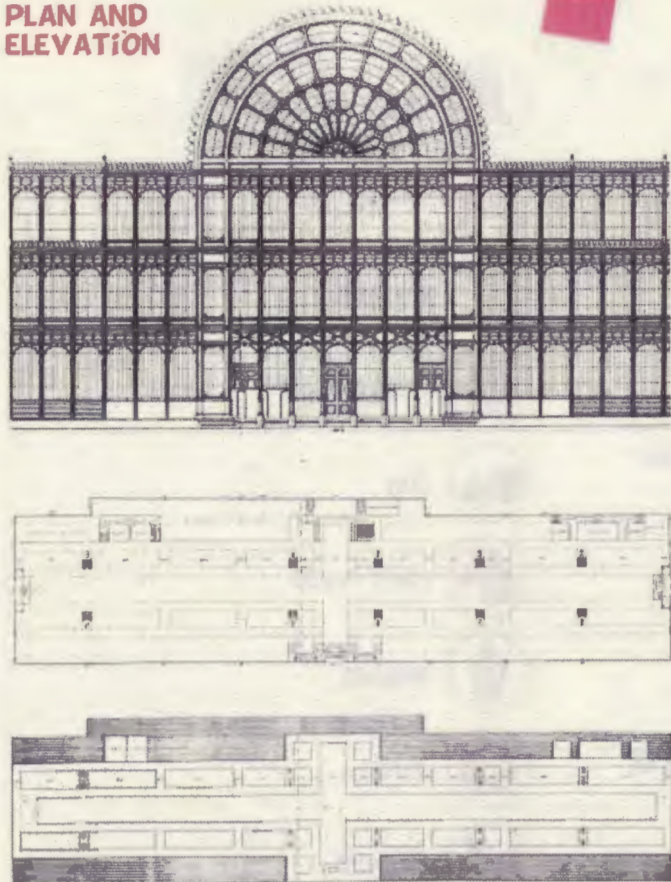
Crystal Palace criteria for design excellence:

1. Economy of construction
2. Flexible facilities for display
3. Facilities for circulation of visitor
4. Arrangements for grand perspectives
5. Centralization of supervision
6. Some striking features

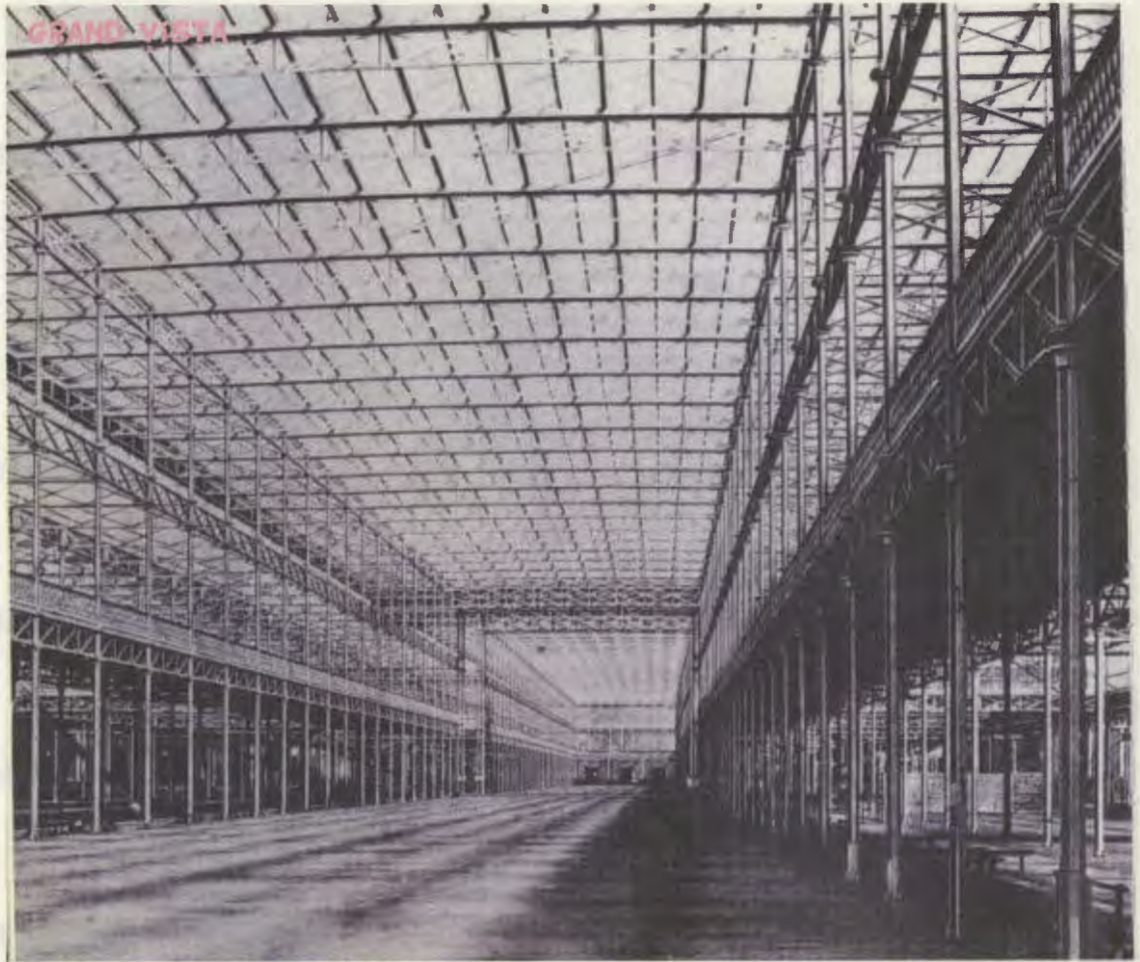
this is the best way to be design for flexibility in order to exhibit goods.



**PLAN AND ELEVATION**



**GRAND VISTA**



Both images: Paxton J., Fox C. (1994) Crystal Palace, architecture in detail, Phaidon, London, p. 22 and 58

**4. WARWICK JUNCTION, DURBAN**

**DESCRIPTION:** Warwick Junction is a central node in Durban through which all commuters to the city pass. It is at Warwick Junction that taxis, buses, trains, markets, shops, city, township all collide and coexist.

Warwick Junction serves a particular segment of commuters, primarily those living in rural, township or informal settlements.

The area is comprised of fast food outlets of a different nature to those of the commercial sector; bovine head sellers, mealie cookers, and vendors of thick sandwiches with meat or fish all available as packaged snacks for the busy urban visitor.

From Google Earth, Warwick Junction looks like a patchwork of unrelated elements; unfinished bridges, sheds, streets, raised walkways... These spaces provide a rich variety of trading spaces. Warwick Junction is the place where the rural and the urban meet, it is in a sense an African bazaar.

**NO. OF STALLS:** +/- 12 000 traders each earning between R1000-R8000/month

all images on the left Benjamin G. (2009) Warwick Junction visit, Architecture tour 09 (private collection)



## 4. WARWICK JUNCTION, DURBAN (CONT.)

**THINGS I LIKE ABOUT THIS BUILDING:** Warwick Junction is a cultural meeting pot! a veritable African meeting of cultures.

Walking through Warwick Junction is thrilling! One encompasses so many different cultural activities and objects, it is fascinating.

The authorities of Warwick Junctions work with the informal traders by doing workshops, and listening to their needs. They encourage and facilitate informal trade in a system (organised chaos)

This Warwick Junction case study has given me insight into the management and running of an informal market. The book *Working in Warwick* by Richard Dobson, Caroline Skinner and Jillian Nicholson (Dobson R. Skinner C. Nicholson J. (2009) *Working in Warwick, including street traders in urban plans*, Durban, School of development studies, University of Kwazulu-Natal) has been very helpful with the design of my stalls, the system from starter to more established traders, as well as interviewing street traders from the different sectors of Warwick from the traditional healers to the cardboard collectors.

- |  |   |  |
|--|---|--|
|    | <b>1</b><br>The Project Centre              |  barbering              |
|    | <b>2</b><br>Fresh Produce                   |  sewing                 |
|    | <b>3</b><br>The Bovine Head Market          |  clothing               |
|    | <b>4</b><br>Mixed trading strip             |  fresh produce          |
|    | <b>5</b><br>The Early Morning Market        |  clay                   |
|   | <b>6</b><br>The Music Bridge                |  cows' heads            |
|  | <b>7</b><br>The Traditional Medicine Market |  mealies                |
|  | <b>8</b><br>The Brook Street Market         |  music                  |
|  |   |  chickens               |
|  |   |  shoe repairs          |
|  |   |  traditional medicine |
|  |   |  beads                |
|  |   |  taxis and buses      |



both images on this page: Dobson R., Skinner C., Nicholson J. (2009) *Working in Warwick, including street traders in urban plans*, Durban, University of Kwazulu-Natal, p. 9

## 5. BISCUIT MILL SATURDAY MARKET CAPE TOWN

Salt River, Cape Town

**DESCRIPTION:** The Biscuit mill market is Cape Town's gourmet market which features over 100 specialty traders, fine-food purveyors, organic merchants, artisan goods, gourmet products, local farmers, seasonal items, plants & herbs, fresh produce, boutique wine estates, micro-breweries, fashion items, handmade children's toys...

**SIZE:** 2 rooms each of 30m x 22m

**HEIGHT:** 4m, 6m

**NO. OF STALLS:** +85

**NO. OF VISITORS:** 1500, 3000 in summer

**DELIVERY:** Early morning delivery only (from 7am). Main setup time for stall holders is between 8 and 9 am. This is when the entire market gets set up for the day.

**WASTE:** All waste is recycled. Two workers sift through the waste on Mondays. All waste generated is stored in 16m<sup>2</sup> space adjacent to the market until it is sorted and collected on Monday.

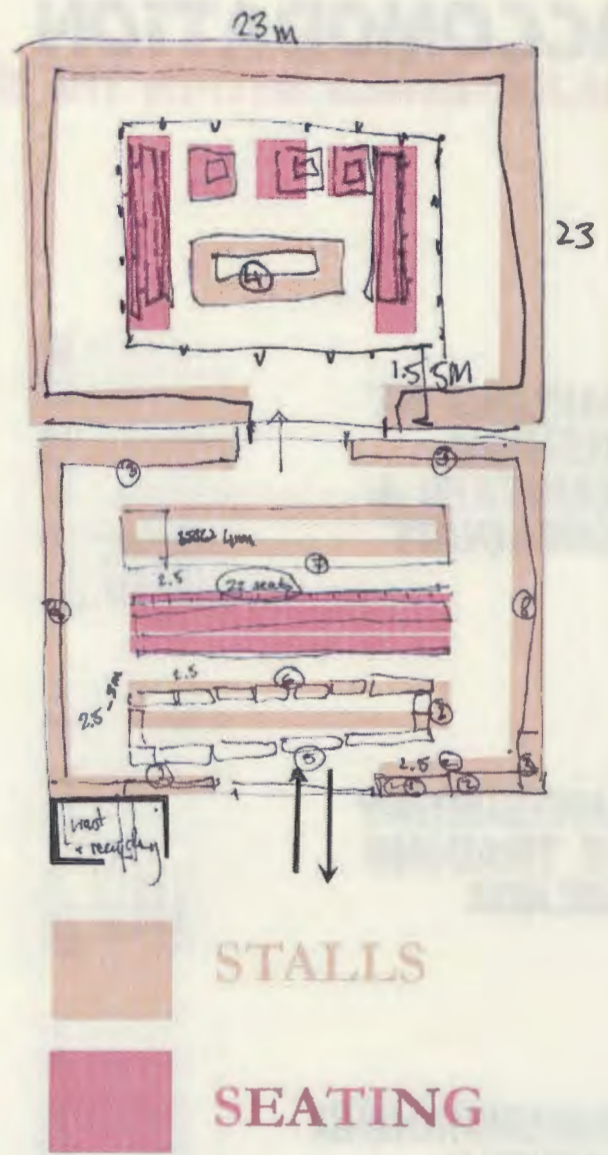
**SEATING:** Communal eating happens at long tables and benches which are laid out in the middle of the space



Google Image: Biscuit mill market; <http://media.photobucket.com/image/biscuit%20mill%20market/xanderglobal/NGmarket1.jpg>, accessed on the 10th September 09

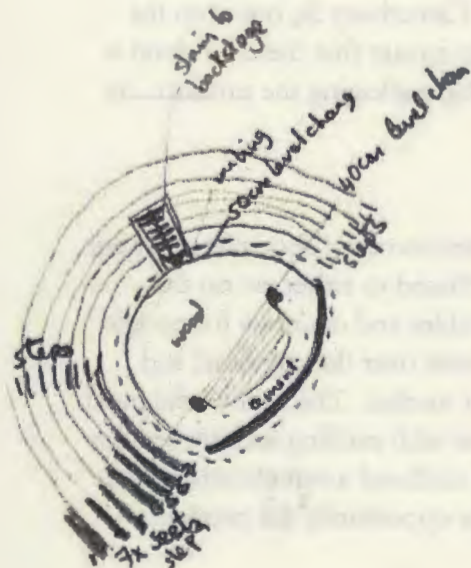
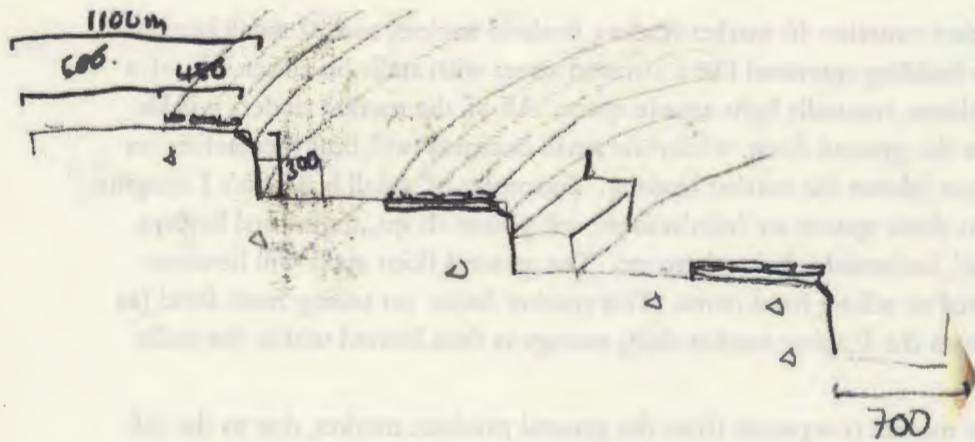
**WHY I LIKE THIS MARKET:** This is a highly successful local market which on a Saturday morning brings together everyone who can afford to pay R40 for a sandwich. People often come for breakfast and end up staying for lunch as well because of the nice environment in which to enjoy a leisurely Saturday in public. Simple elements such as haystacks, box crates and old doors are used as public furniture upon which people relax.

reference: Cameron Munroe & Justin Rhodes founders of the Biscuit Mill Saturday market

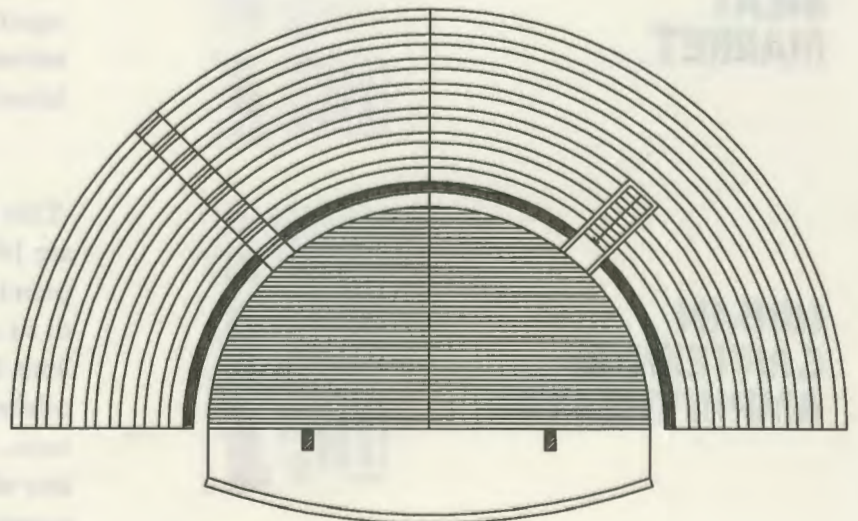


## 6. V&A WATERFRONT AMPHITHEATRE

Measuring up this popular outdoor venue for comparison of scales with the meeting of cultures project.



Google Image: Waterfront amphitheatre; [http://image05.webshots.com/5/1/32/4/81313204yEPgji\\_ph.jpg](http://image05.webshots.com/5/1/32/4/81313204yEPgji_ph.jpg), accessed on the 10th September 09



# 5.C. SCHEDULE OF ACCOMODATION

## MAJOR ZONES WITHIN THE SCHEME

### DARLING ST WISHING FOUNTAIN & FORECOURT

- A large attractive fountain; the movement of which will draw peoples attention to the site of the market. The site sites on one of two inner city large stormwater pipes, so I thought it would be nice to bring some of that water up to the surface. There should be public seating in the landscaping around this forcourt for the market building.

### CANTERBURY ST TRADING ARCADE

- A continuous arcade on the canterbury elevation of the market leading up to Canterbury Square. This arcade will generate activity on the street itself. Stall holders will rent out 2.5m x 2m stalls. These stalls will be equipped with a sterdy roller shutter door for when closed, and an electricity point. Stall holders may build any display items or tables they wish as well as their own storage devices. Street shoppers will be protected from the SE winds and rain by the market building and overhang.

### UNDERGROUND PARKING

-As preveously discussed, large amounts of parking is nessessary for this site. There will be a 4 levelled underground parking garage under Canterbury Square which can park over 800 cars. The entrance and exit to the car park will happen off Caledon St, more or less in the same location of the old Lambs lane on the site.

### BRAAI STALLS, SEATING & PARKING ON CANTERBURY SQUARE

-People like to have a gathering around their car, play music, have a few drinks, dance, and relax in a beautiful context of public space. On the more secluded forcourt from major traffic, that of Canterbury square, I have decided to do away with half of the current existing parking on the site to make way for public picnic spots under the old pepper trees on the site aswell as build 16 sterdy stone and concrete braai stalls. These stalls are an opportunity to have your meat (bought from the meat market) marinated and cooked right then and there, and to enjoy it in a public square.

### PRODUCE MARKET & SMALL BUSINESS'

-This market contains 46 market traders, 6 island traders, and 32 small business stalls. the building operated like a covered street with stalls on either side of a double volume, naturally light arcade space. All of the market traders will be located on the ground floor, whilst the small business' will find themselves on the 1st floor (above the market traders). Examples of small business's I imagine would rent these spaces are hairdressers, cell phone shops, traditional healers, seamstress', locksmiths, bric a brac etc. The ground floor stalls will however be restricted to selling food items. This market focus' on selling fresh food (as straight from the Epping market daily, storage is thus limited within the stalls.

### MEAT MARKET

-The meat market is separate from the general produce market, due to the different nature of the product for sale and different needs of the stall owners. 16 meat stalls will trade from the ground floor of Canterbury St, out onto the square. Each stall owner has his own cold room to ensure that the cold chain is never broken. Adequate space for cutting, weighing, packaging the product... is taken into account.

### URBAN CANTEEN & AMPHITHEATRE

-This is the main section of the development, the architectural showpiece. There are 14 stalls from which cooked meals may be purchased to either eat on the premises or take away. There are long communal tables and counters for people to sit on and eat as well as enjoy the magnificent views over the city bowl and lions head from the higher position above the meat market. This will be the most celebrated space in the development, a large volume with exciting architecural features. adjacent to the urban canteen will be a semi enclosed amphitheatre space. this will enable entertainment, more seating and the opportunity for product, companies etc to do promotions theirin.



# RAW, MEDIUM, WELL DONE

raw, medium, well done are terms used to describe the state of the food being sold at the Cape Town Market. from raw (unprocessed produce), to well done (cooked foods, lengthy process) The application of these expressions is also to describe the design of the building and the nature of the architecture for each condition of selling food, as well as set out three typologies and scales of stalls from which to sell food. Raw, medium, well done, hence refers to time and process.

Through the filter of raw, medium, well done; three different groups of urban eating places emerge; revealing contemporary attitudes to food, social behaviour, space and aesthetics.



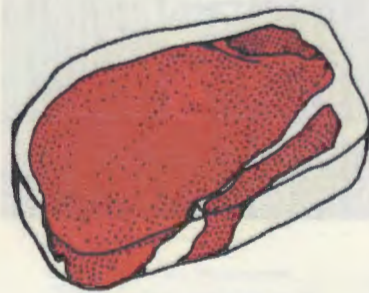
## RAW

Raw food and raw space both raw food and raw space carry connotations of simplicity and wholesomeness. Raw food and space embody the most direct and unprocessed state of food and space; this is linked to the temporal and regional. This condition suggests immediacy both of material and assembly. There are no hidden elements or processes in raw food and space, the success of the whole relies on its clarity and down to earth qualities.



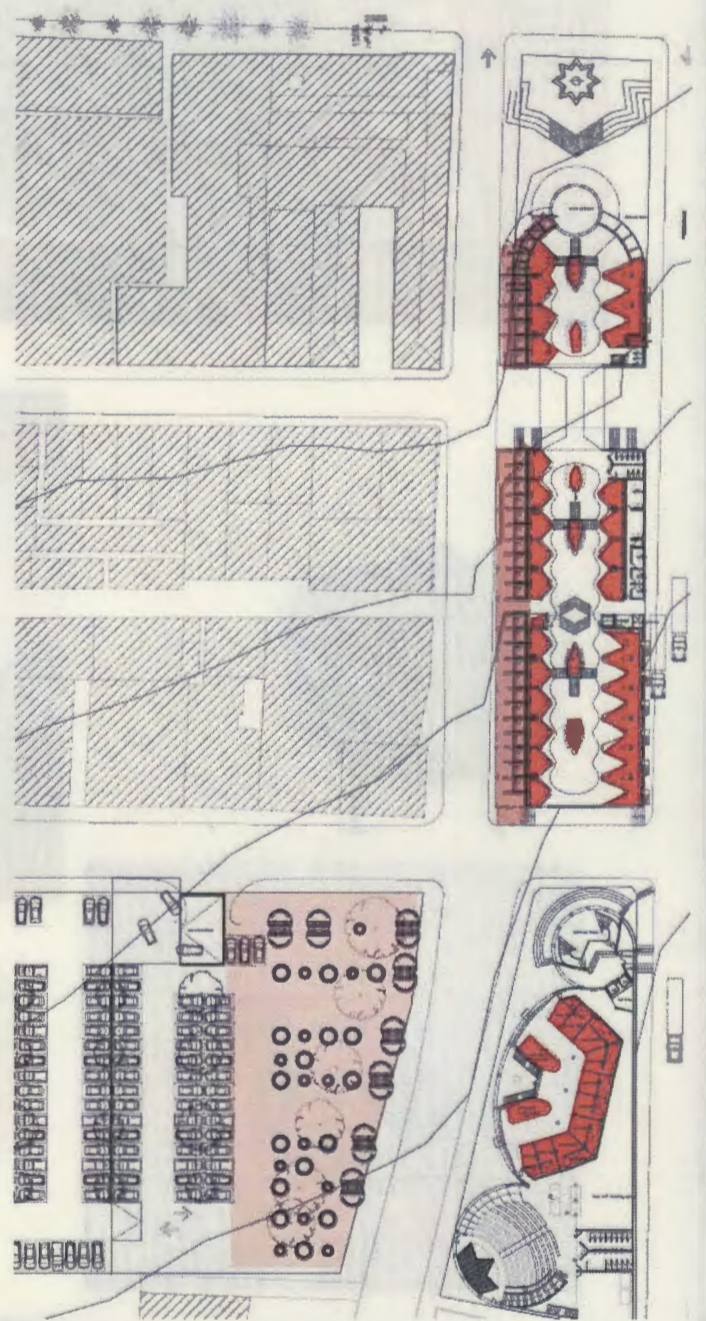
## MEDIUM

Medium food and space balances between the two extremes of the raw and the well done (cooked, fastfood, ready made, easy to prepare)



## WELL DONE

Well done food and space suggests time consuming processes that can transform very ordinary ingredients into a refined and concentrated state.



market plan showing the stall arrangement from raw (outdoors with minimal infrastructure in light pink) to well done (enclosed, with services. shown in red).

# TENNANT / ADMIN

SOURCING / OFFICE ADMIN

DELIVERY

STORAGE

PREPARATION

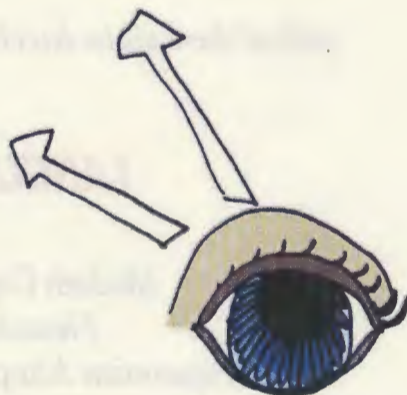
COOKING

HEATING

CLEANING

WASTE MANAGEMENT & RECYCLING

SERVICES



PUBLIC OPEN SPACE

PARKING

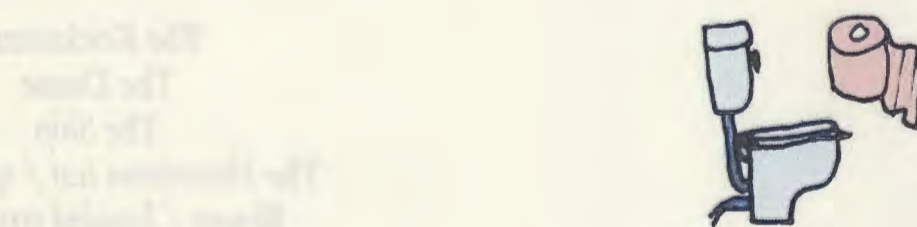
WC

CIRCULATION

DISPLAY

SERVING

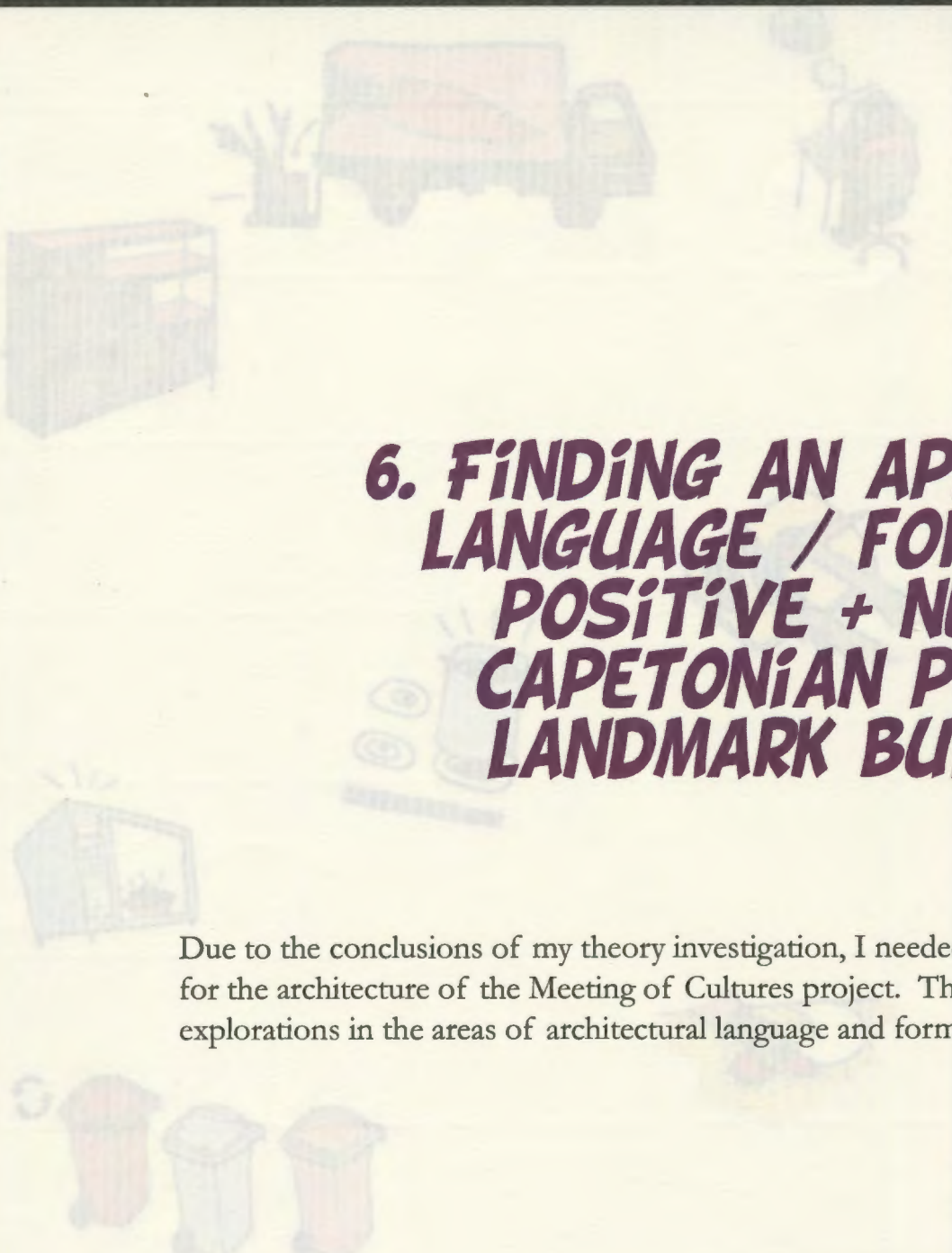
EXCHANGE



# VISITOR & TENNANT

# VISITOR

CONSUMING SPACE & ENTER-

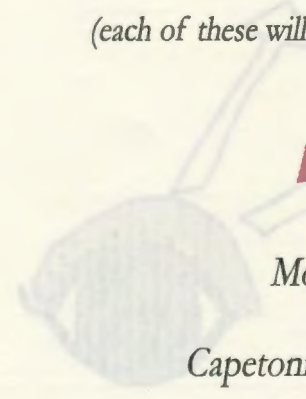


## 6. FINDING AN APPROPRIATE LANGUAGE / FORM FOR A POSITIVE + NEUTRAL CAPETONIAN POPULAR LANDMARK BUILDING:

Due to the conclusions of my theory investigation, I needed to find an unprecedented original idea for the architecture of the Meeting of Cultures project. The following few pages sum up my explorations in the areas of architectural language and form.

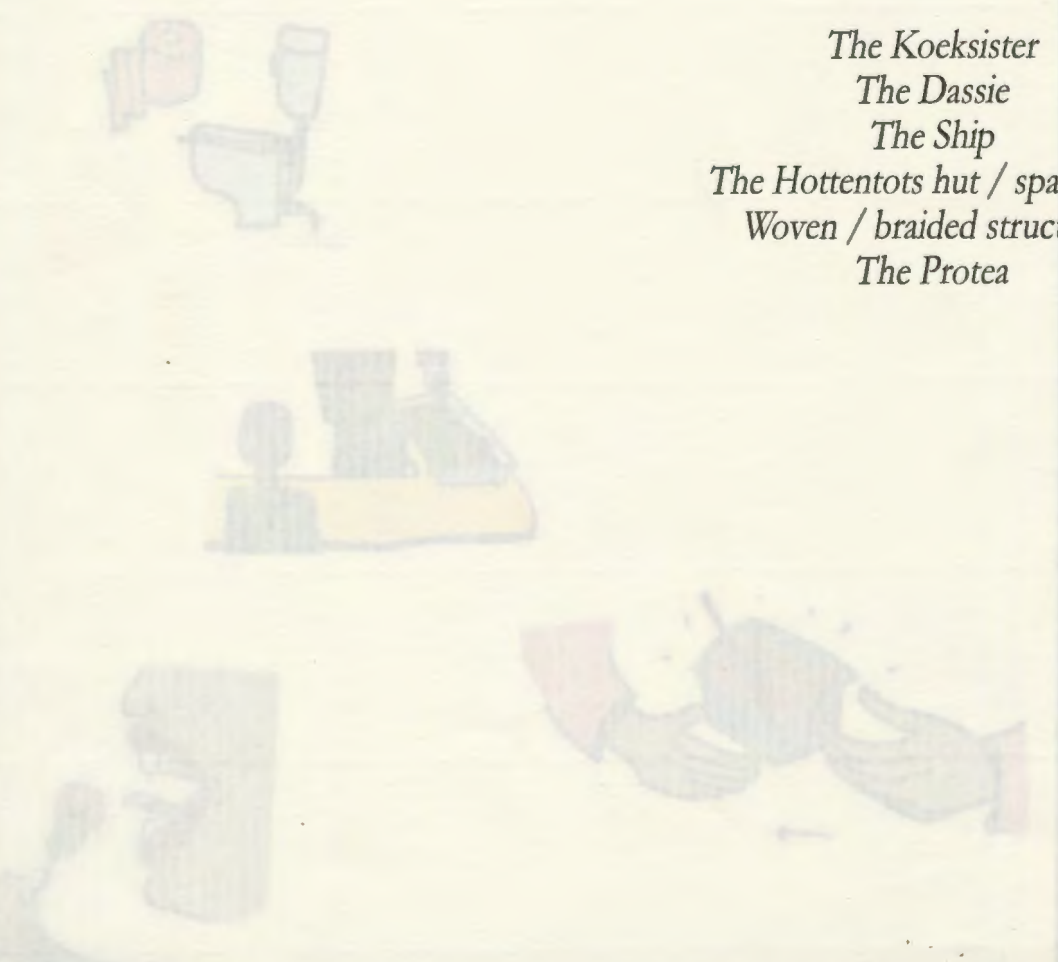
(each of these will be described in the following pages)

### LANGUAGE:



Modern Cape Dutch  
Neondebele  
Capetonian Afropop architecture

### FORMS:



The Koeksister  
The Dassie  
The Ship  
The Hottentots hut / space ship  
Woven / braided structures  
The Protea

## LANGUAGE:

### L.1: Modern Cape Dutch

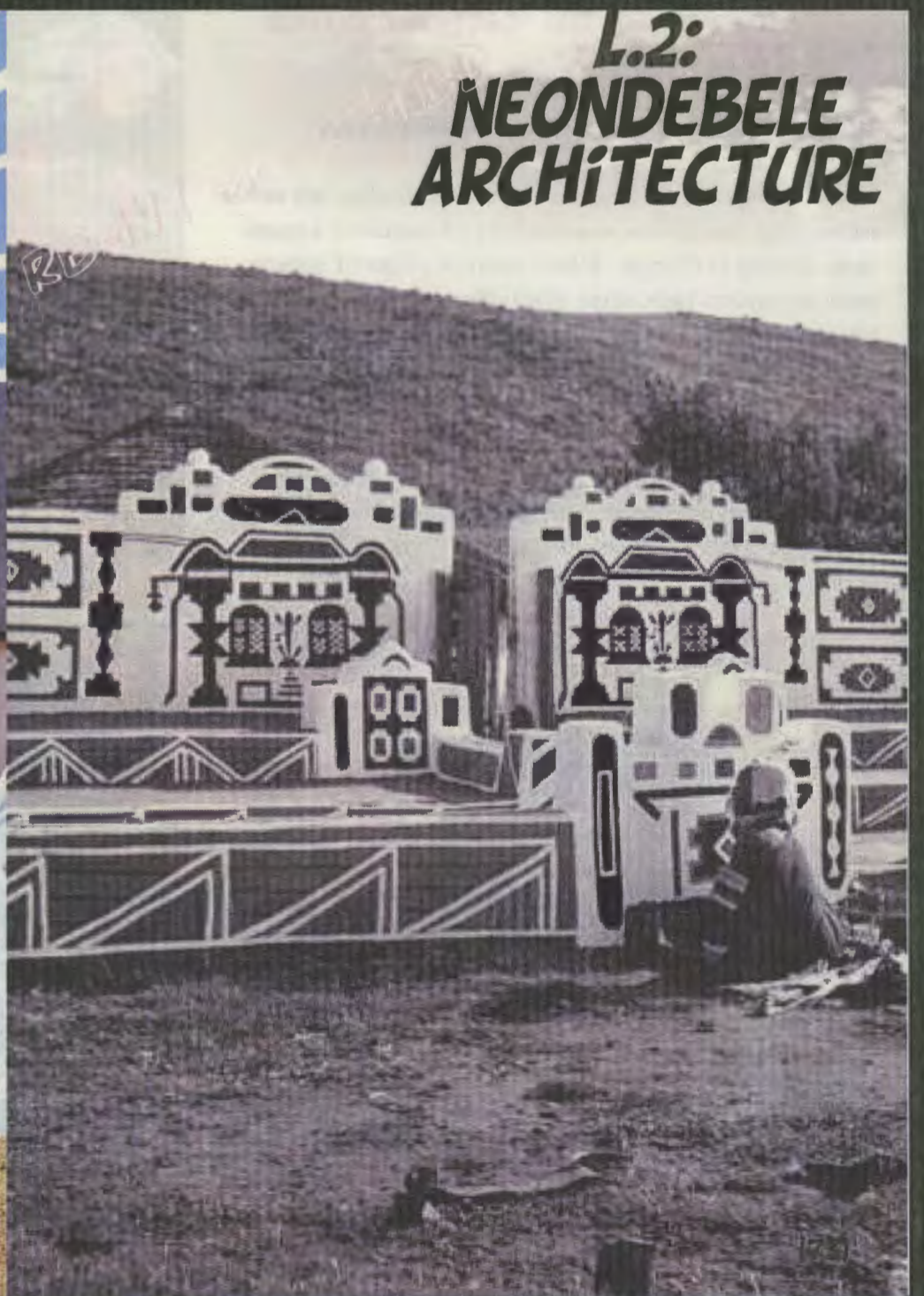
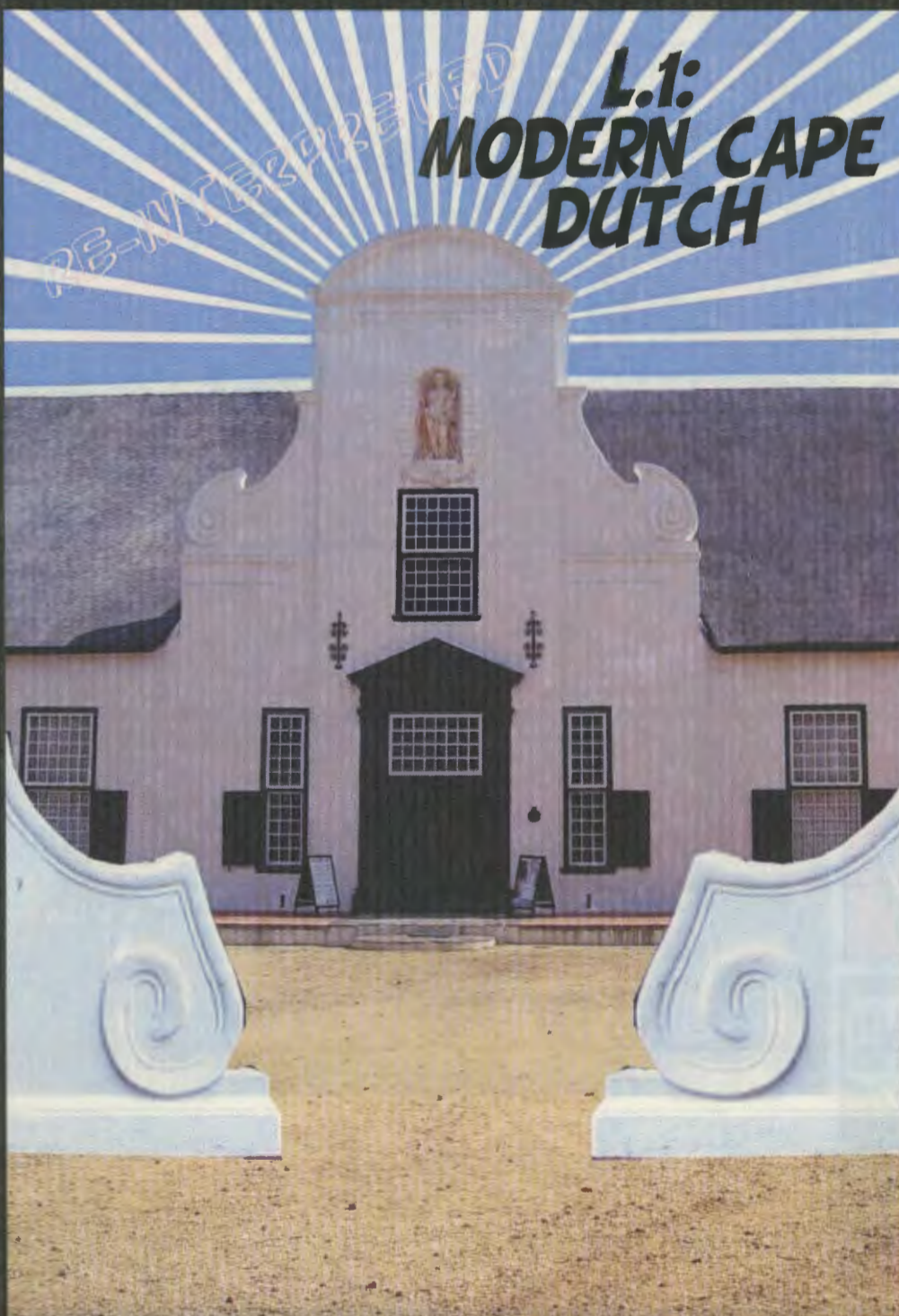
In my search for an authentic Cape style of architecture, the strongest, most recognisable Capetonian style is the Cape Dutch style. I began by trying to imagine what a modern, reinterpreted Cape Dutch building would resemble. I was excited by the Cape Dutch curves, thickness of the walls, simplicity and sociable stoeps of this type of architecture. The Modern Cape Dutch style idea was put aside due to my feelings that this might be quite elitist and not obvious enough.

### L.2: Neondebele

Neondebele style was inspired by a song called Neondebele by Xander Ferreira of Gazelle. Similarly to the modern Cape Dutch style, Neondebele inspired me to re-imagine Ndebele architecture for the city. I imagined the amazing shapes and colourfulness of an Ndebele house translated into colourful glass panels like stained glass windows in neon colours with lights behind them for animation. As with the Cape Dutch style, the formality and simplicity of the Ndebele plan with its forcourts and stoeps made for easily readable, sociable public spaces which I think would work really well in my semi-formal Victorian-proportioned Canterbury Square. The Ndebele pattern design was put aside as Ndebeles are not originally from Cape Town and I had made the decision to make something that is really of the place and indigenous to Cape Town only.

### L.3: Capetonian Afropop architecture

Finally I have settled on making Capetonian Afropop Architecture! I have made up this term to indicate a happy, comic, colourful, inclusive style of mixed influences in the architecture. I imagine the forms to have rounded edges, and thickness that communicate an unfussy clear and simple idea much like a comic book illustration. I have looked at the work of Capetonian comic artists Conrad Botes and Konradski from Bitterkomix, as well as the work of Brett Murray, as this work has a definitive look to it, which is recognisable as South African comics style. The colour palette, forms, roundness and lines in the work of these artists takes on very big issues and translate them into (dark) humor for the public. Their work is attractive and colourful and has a strong sense of the tactile, which I like a lot for a building as it makes one want to go up and touch it.





### L.3: CAPETONIAN AFRO-POP ARCHITECTURE

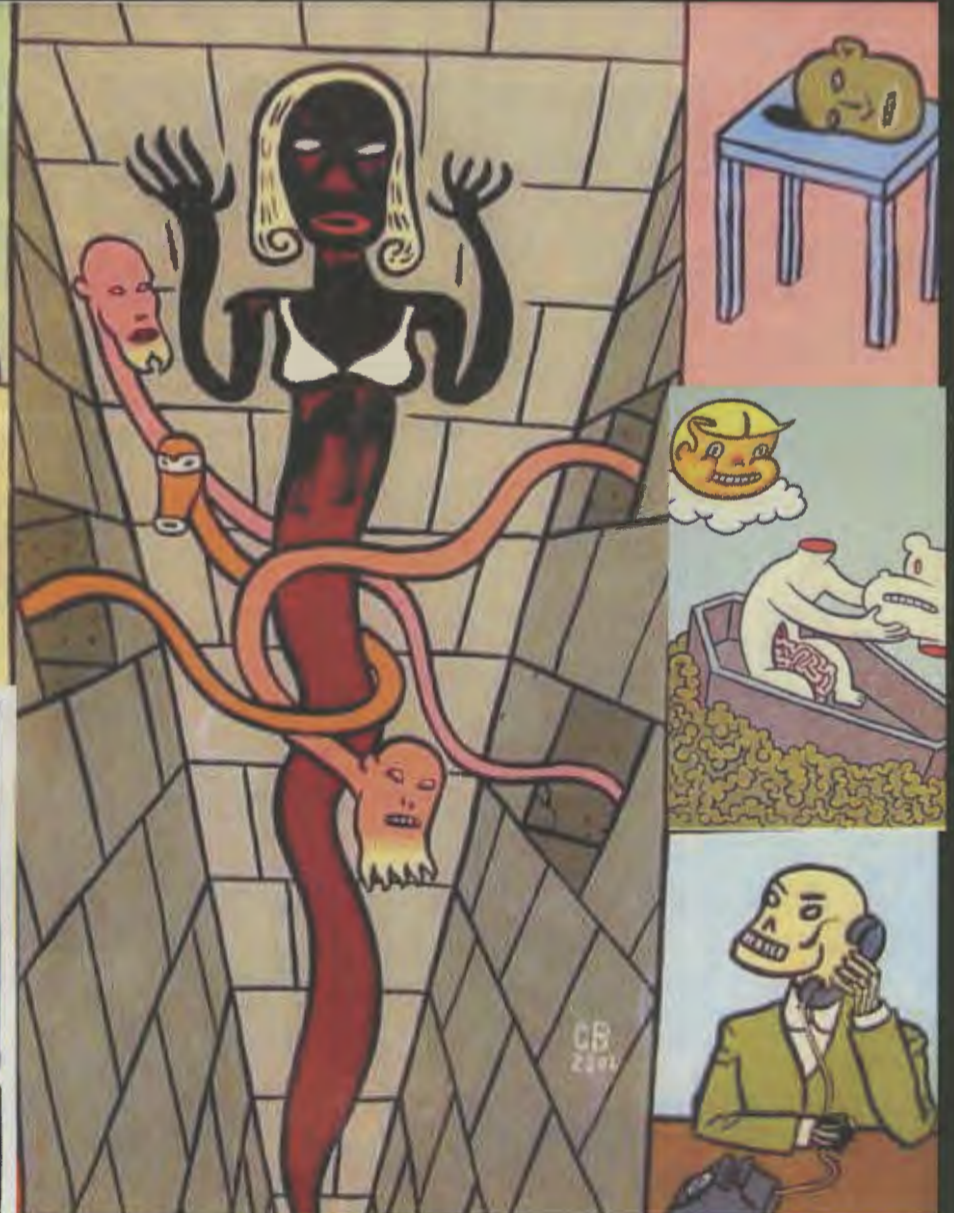


#### 1) DARK POP ARTIST CONRAD BOTES AND BITTERKOMIX;

'Risky, challenging, skilful, courageous. Bitterkomix'

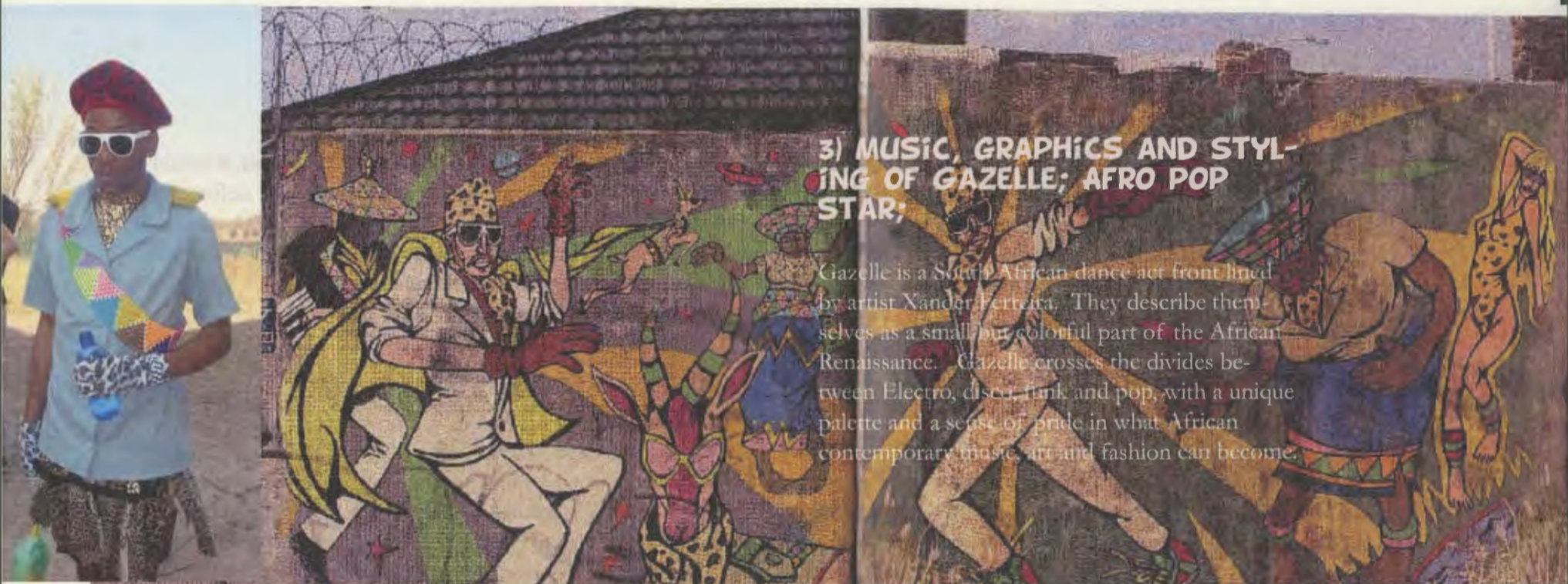
'never sitting on the vibracrete fence of suburbia, but rather telescoping directly into the shadows of minds on a continent, drifting in change. Where tectonic plates of society creak up against each other, that's where we find ourselves when reading Bitterkomix- between the cracks.' Spier arts trust introduction, the big bad bitterkomix handbook, 2006 Johannesburg, Jacana Media

Gregory Kerr, the head of the Stellenbosh art school has described Bitterkomix artists as outrage artists-their work both rooted in a sense of personal outrage and intended to outrage others. (p.15 Bitterkomix handbook)



**2) WORK OF CAPE TOWN ARTIST BRETT MURRAY;**

Brett Murray's work is characterized by its bold pop language and uncompromising directness, it enquires into identity in a post colonial, post apartheid context. Murray has developed a colloquial version of a globalized pop tradition which tentatively calls itself African. Brett Murray uses aliens as humans to express ironies of the human condition. His work "forces the viewer to engage with real and present contradictions in the discourse and the experience of our time and place" (Murray B. (2002) White like me, Cape Town, Standard bank young artists publication p. 15)



**3) MUSIC, GRAPHICS AND STYLING OF GAZELLE; AFRO POP STAR;**

Gazelle is a South African dance act front lined by artist Xander Ferteita. They describe themselves as a small but colorful part of the African Renaissance. Gazelle crosses the divides between Electro, disco, funk and pop, with a unique palette and a sense of pride in what African contemporary music, art and fashion can become.

**4) NONTSIKELELO 'LOLO' VELEKO'S WONDERLAND;**

Nontsikelelo photographs people with style on the street. The street thus becomes a stage set for chance encounters, looking and being looked at. Nontsikelelo approaches and appropriated subjects on the street for their identities. Nontsikelelo's context is the African urban environment; the lack of specification in the city backgrounds have enabled Nonstikelelo's work to enter a wider global contemporary urban identity discourse. Nontsikelelo is preoccupied with individual style; hairstyles and accessories play a role in representing your attitude to life, your philosophy... Her subjects all exert individual style, one that is contantly evolving, their clothing and style sets them apart, they are expressive, colorful, bold and comitted. (Art South Africa Vol. 04 issue 04 Winter 2006 p. 44)



**5) WANGECHI MUTU'S AFRO-ALIENS**

"part of my challenge... is to envision, not so much blackness as a race, but the existence of African elements in culture in the future and how is that possible" (Wangechi Mutu, Saatchi and Saatchi gallery website)  
 Wangechi works as an artistic anthropologist, deconstructing stereotypes in order to produce a new figure. She works in collage drawing from resources such as the National Geographic magazine, Vogue, porn, African art, lifestyle magazines as well as her personal biography. Her characters are thus made up from multiple sources which they represent, overrule and reconfigure. She has assembled an army of afro-cyborg women, hybrids, mutate; 'these are strong adaptive beings who in a single breath appear to both confirm and dispel any or all stereotypes that they infer and (literally) embody.' (Art South Africa Vol 5 issue 1 Spring 2006 p.27)



**FINDING A CATCHY/ RECOGNIZABLE / NEUTRAL/  
BEAUTIFUL/ FUN/ SOUTH AFRICAN FORM  
FOR THE MEETING OF CULTURES  
POPULAR MARKET**

**FORMS:**

**F.1: The Koeksister**

The idea of a giant Koeksister building came to me when I realised that if there is a ridiculous building like a giant koeksister, it would be an instant success in the popularity polls. A giant koeksister is so recognisable, comical, bizarre, proudly South African and unforgettable. This building would contrast with every building in Cape Town, making it special. However I found this form difficult to work with, as it did not suit that of my program as a food market. The koeksister has a tower-like shape; like a golden twisted tall beacon, whereas the food market, in order to be successful, needs to be grounded, and not twirling up into the sky; this just seems impractical. A form with a large base was needed for the program.

**F.2: Rhodes Memorial re-imagined**

This memorial, designed by Sir Herbert Baker, was built in 1912 to honour the former Cape Colony Prime Minister and mining magnate Cecil John Rhodes. It is an architectural opportunity to show off how far we have come as a country from colonial, imperialist, and racist, to being united and equal as people of South Africa. Re-building a new Rhodes Memorial in Cape Town city right next to the train station and central hustle and bustle would give the people in the city a nice public space/ platform on which to sit and relax. Rhodes Memorial is set out on a grand formal plan with magnificent steps leading up to a temple like pavillion from which one can admire Cecil John Rhodes' favourite views of the city. The new Rhodes Memorial would be built in similar strong stone and plan, however the details of the building should be shifted to an afropolitan mindset design and include humour.

**F.3.: The Dassie**

The dassie is a Cape animal that lives on Table Mountain and looks down on the city. It is a comical overlooked animal, with a disgruntled face and odd, interesting features which I thought would make a great substitute for the grand and serious lions that watch over Rhodes memorial which visitors climb all over to take their pictures.

**F.4: The Ship**

The ship the vessel from which the Dutch arrived and started the town of Cape Town. I liked the idea of a vessel building due to the location of my site as a gateway between the city and District Six.

**F.5: The Khoisan hut / space ship**

The Khoisan hut/spaceship idea came to me in a very clear and visual series of dreams. They are illustrated on the following pages. the fusion of the Khoisan hut and the alien spaceship represented the unification of the original and alien people at the cape into one large structure. This also worked programmatically very well, gathering everybody under one large public umbrella which alluded to elements of the traditional.

**F.6: Woven / braided structures**

Looking at baskets and braiding shapes, techniques, and patterns and how/if one can build a high tech/traditional interesting and beautiful structure from it. The concept of weaving is very motherly and nurturing which I thought would be comforting to a large audience, it is also rhythmic, full of patterns, and could offer good lighting effects through the weaving. After much exploration, this concept was abandoned for the protea, which, as an animated, living growing object, has more life in it than a woven structure.

**F.7: Proteas**

# F.1: THE KOEK-SISTER





Tone Deaf Junkies present

# RISE of the KOEK-SISTER

Featuring The Bulgarian Mr Chips Dexlexic Am Freddy Flush  
for a night of a propa fidget-jacking, techno-trackin, glitch-'n-bitchin', winter slappin' way.  
Featuring Diamond Ray & Berka Level 9 on Visuals... ..madness!

Saturday 16th June • R20 cover • at Fiction

# F.2: RHODES MEMORIAL RE-IMAGINED



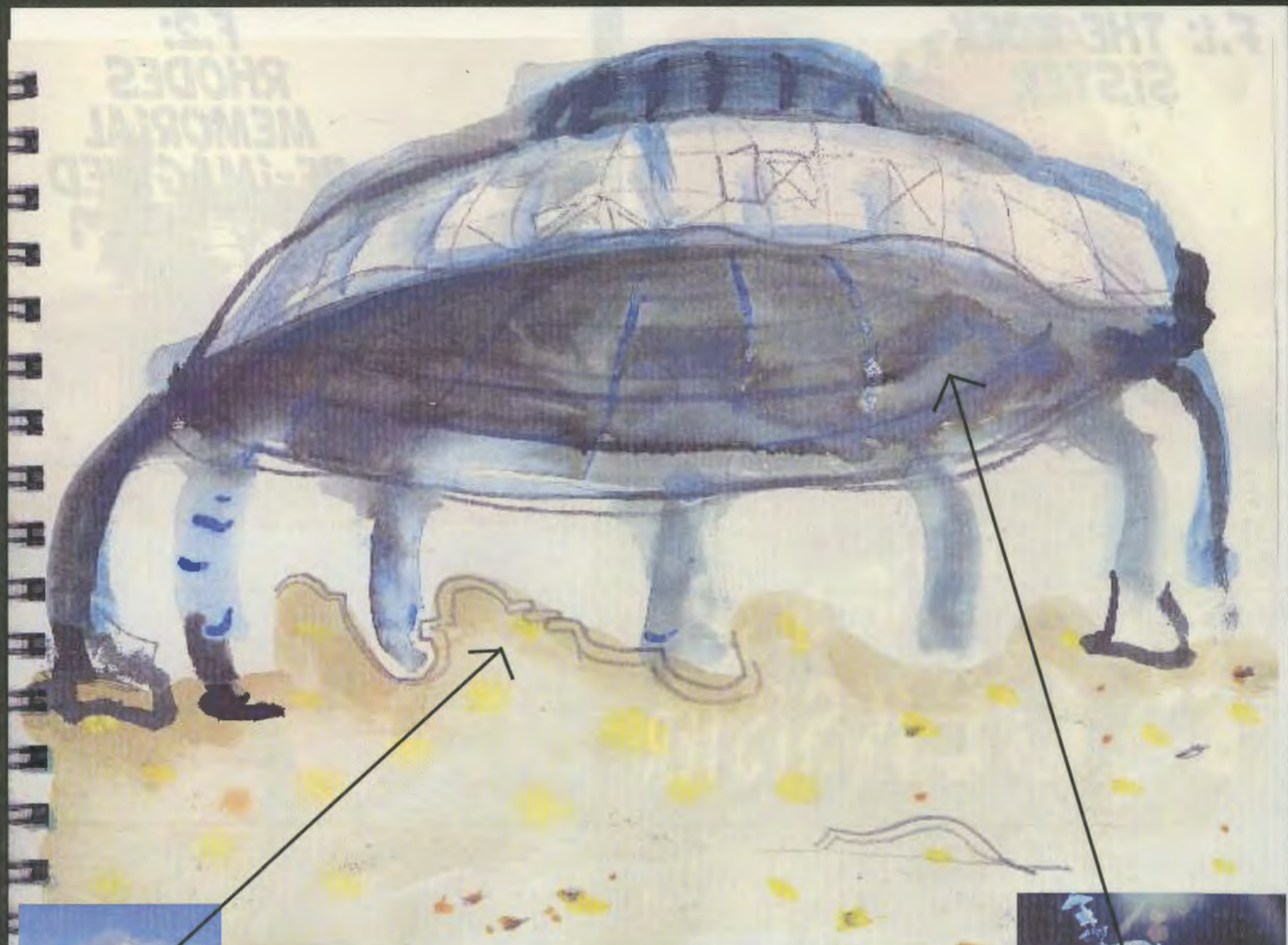
# F.3: THE SHIP



# F.4: KHOISAN HUT & SPACE SHIP FUSION

why I liked it:





modern Cape Dutch base  
+ stoep

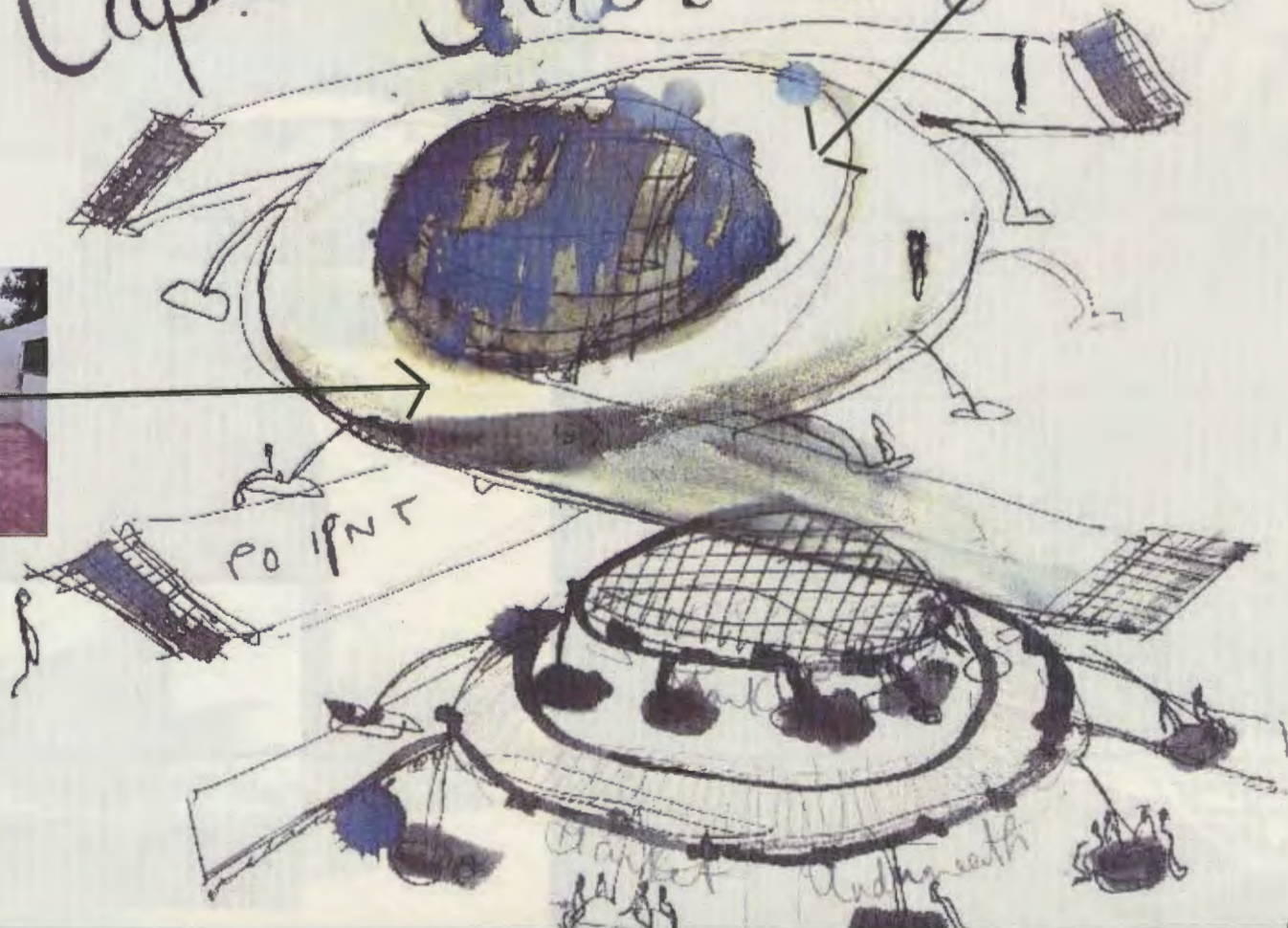


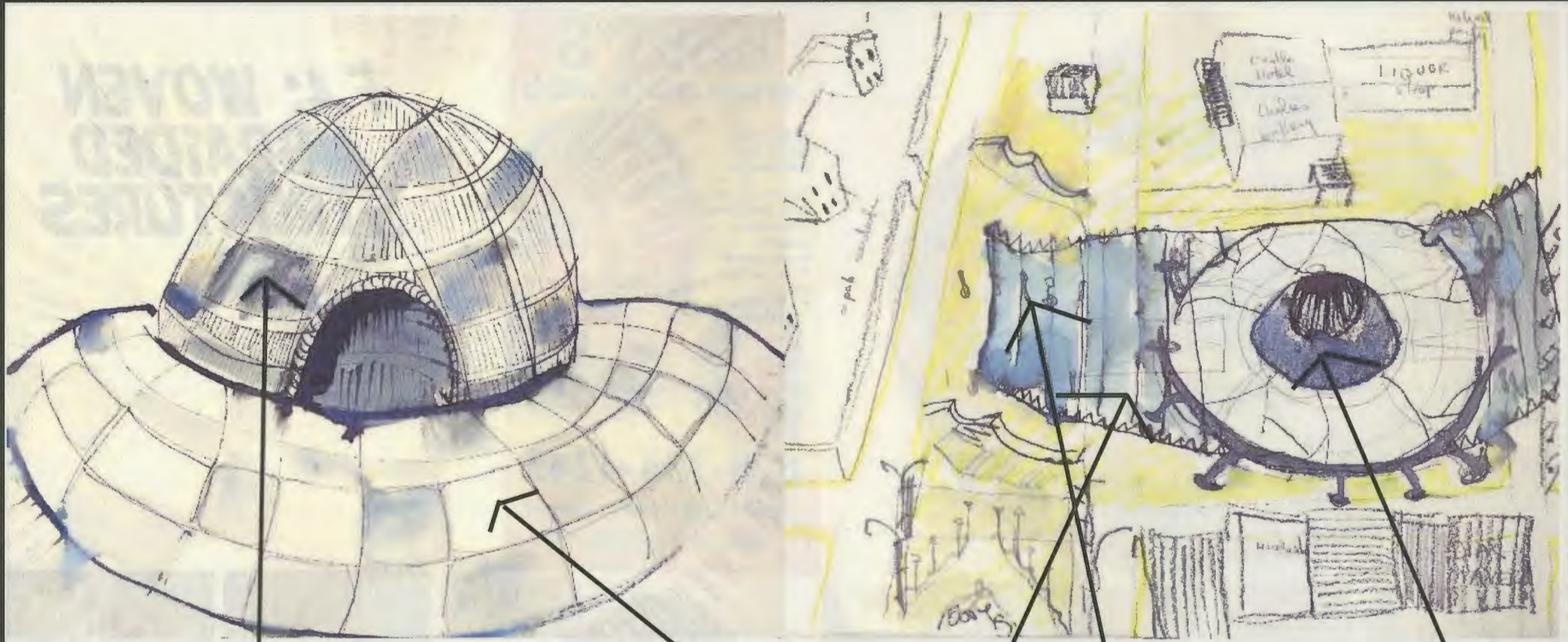
alien space ship

# Cape Town Market



London zoo penguin pen





woven Khoisan huts



disco lights and dancefloor  
(saturday night fever)



fantasy dreamscape



Mzoli's butchery vibe



la Boqueria in Barcelona  
bussling trade zone



cowrie shell; original african money. symbol of exchange



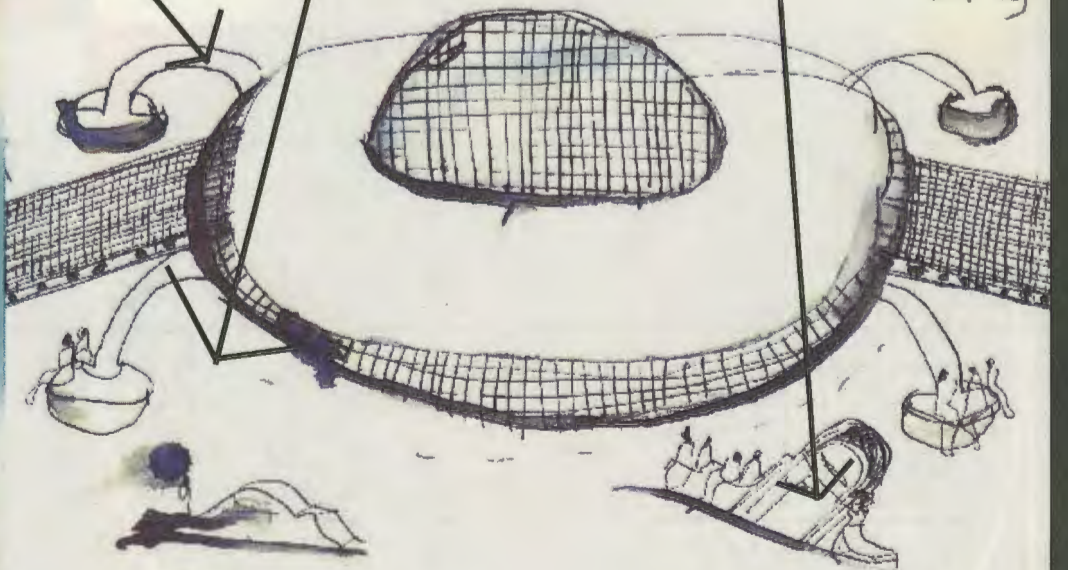
plastic concrete,  
everything rounded,  
melted, thickened



colonial architecture sinking into the ground

Africa must appear to the forms of multiplicity which are constituents of its identity.

lumpy shade market fruit veg



take life Dutch - traditional architecture + turn them into alienor spaceships  
what is African style - what is African - (79)  
there is no African authentic - immigrant colonial market



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**F.4: WOVEN  
/ BRAIDED  
STRUCTURES**



*We style ... You Smile...*

**AFRICAN HAIR BRAIDING GALLERY**  
**203-932-2424**

*Ami*

**Micro Pony Twist**

**Yarn Twist**

**Micro Curl**

**Cornrows**

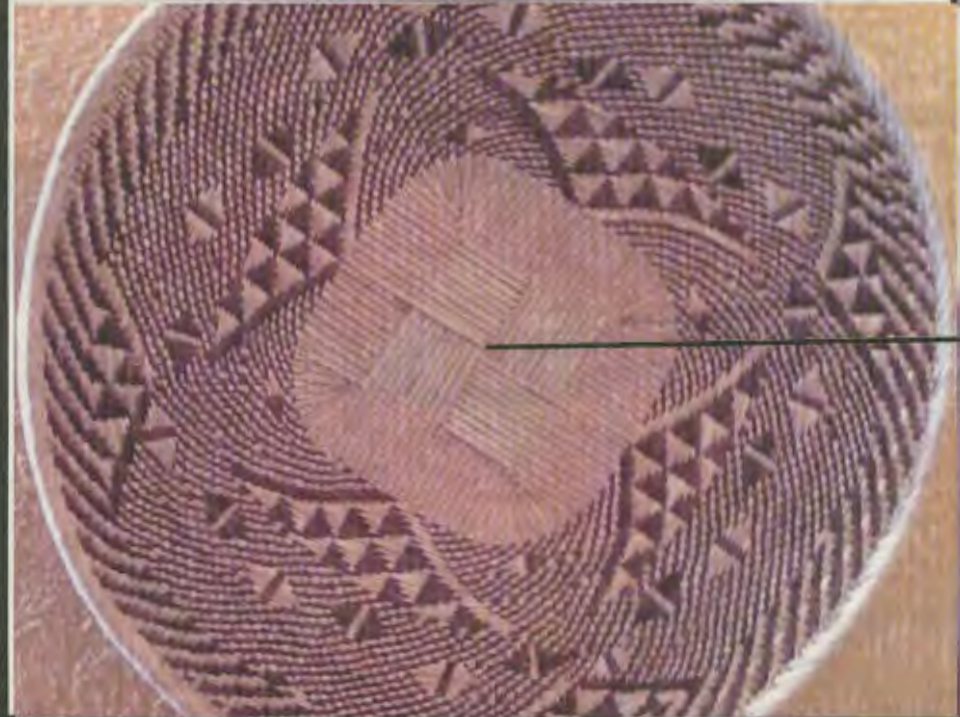
**Micro Braids**

**Basket Cornrows**

**Micro Weave**

**Micro Twist**

**953 Campbell Ave.  
West Haven, CT 06516**  
[www.braidinggallery.com](http://www.braidinggallery.com)  
[www.hairextensiongallery.com](http://www.hairextensiongallery.com)



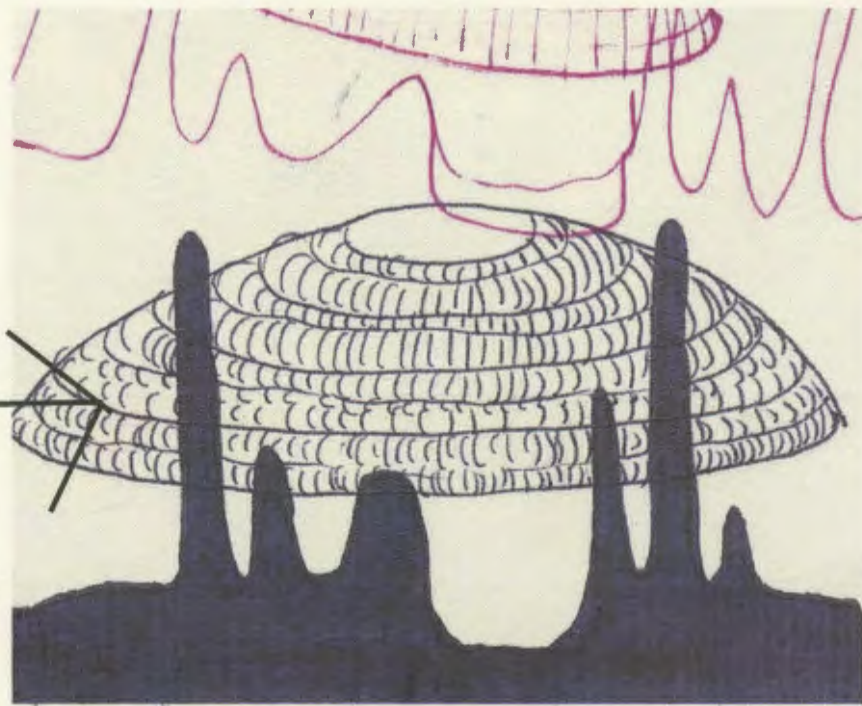


Park Guell influence  
welcome/ defining steps

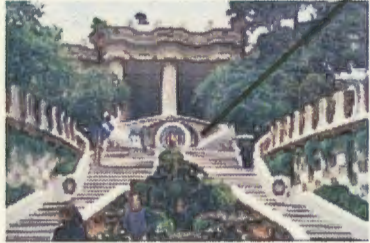
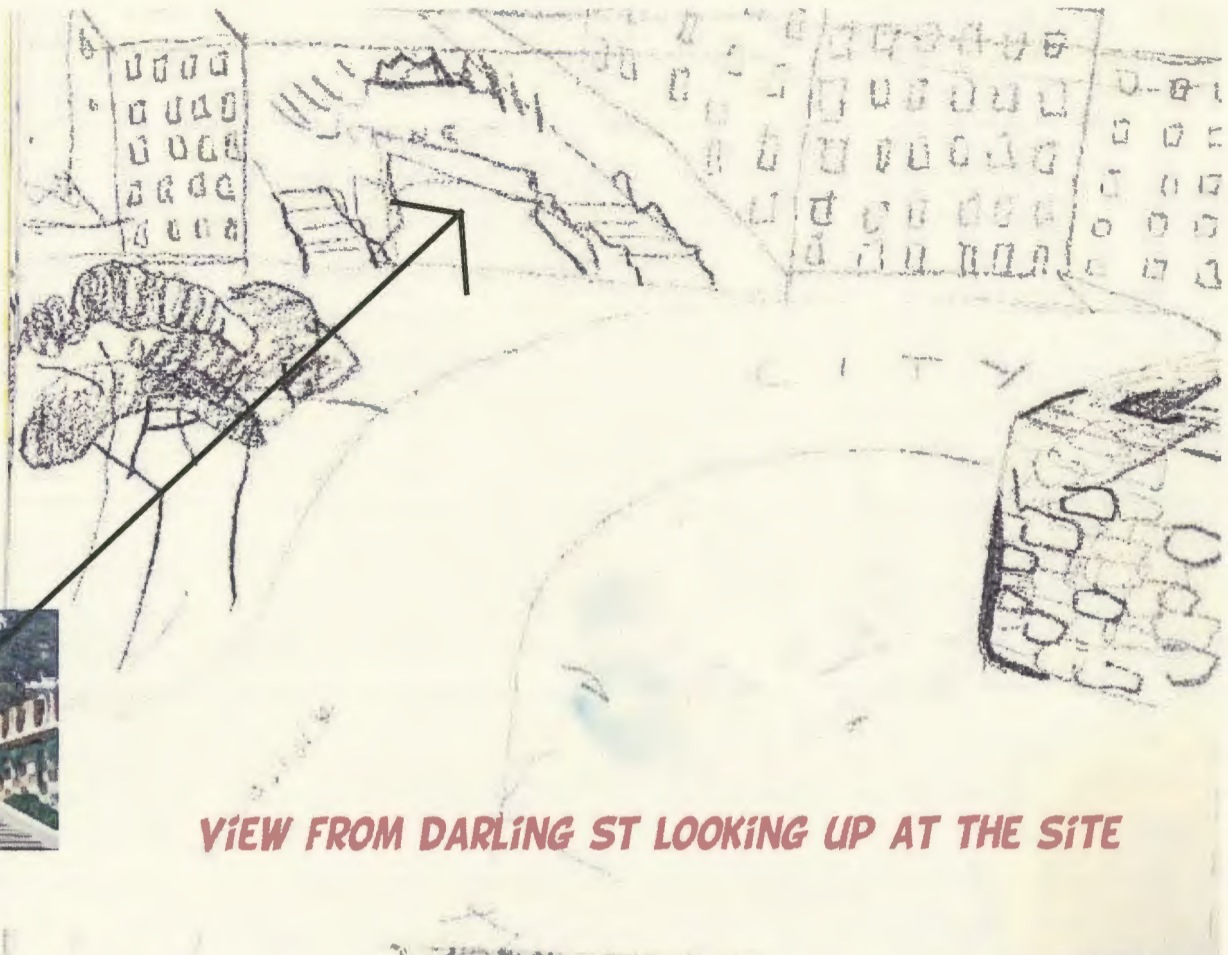
**VIEW FROM DARLING ST LOOKING UP AT THE SITE**



**BEGINNING OF WOVEN MARKET STALLS OPP.  
THE OLD GRANARY**



**BUILDING IDEA: PLASTIC UNDULATING GROUND WITH  
CONTRASTING WOVEN GIANT ROOF + OCCULUS**

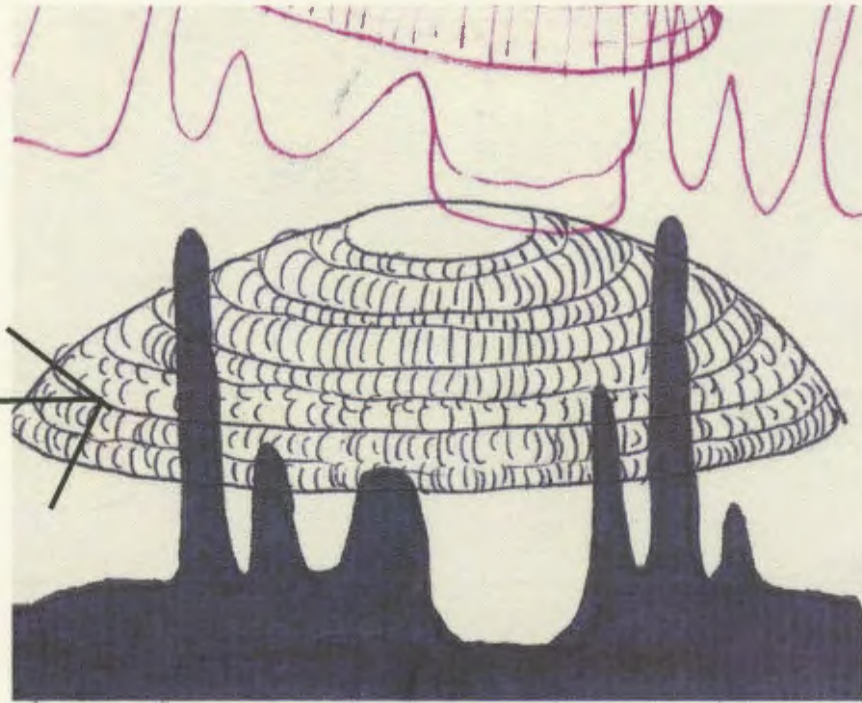


Park Guell influence  
welcome/ defining steps

**VIEW FROM DARLING ST LOOKING UP AT THE SITE**



**BEGINNING OF WOVEN MARKET STALLS OPP.  
THE OLD GRANARY**



**BUILDING IDEA: PLASTIC UNDULATING GROUND WITH  
CONTRASTING WOVEN GIANT ROOF + OCCULUS**



VIEW FROM DARLING ST LOOKING UP AT THE SITE



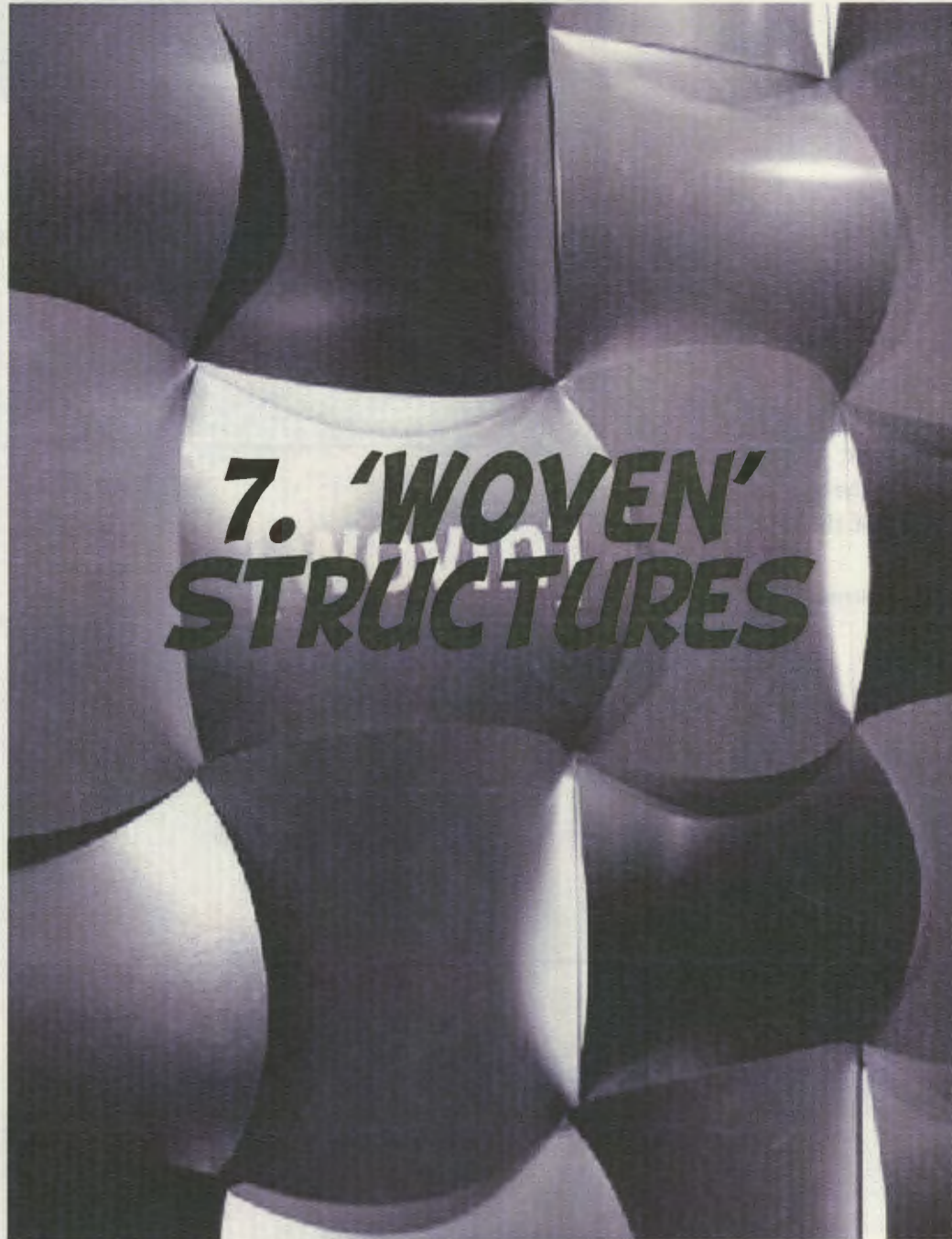
THE OLD GRANARY  
Historical building with  
the roof structure



THE OLD GRANARY  
REPAIRING OF WOVEN MARKET STALLS OPP.



BUILDING IDEA: PLASTIC UNDULATING GROUND WITH  
CONTRASTING WOVEN GIANT ROOF + OCCURS



## 7. 'WOVEN' STRUCTURES

### **OBJECTIVES, IMPORTANCE OF THE STUDY:**

*-Understanding and uncovering the potential and limitations of the concepts of 'weaving' and 'braiding' in architectural construction and design.*

The study will be divided in five parts:

PART A: Introduction to the paper and concepts

PART B: Precedent in weaving in architecture

1/ non structural weaves in buildings

2/ allusions to weaving in the structure of a building

3/ structural weaving: examples from basketry to architecture: An exploration into Basket structures that may enable the concept of 'weaving', 'braiding' in architecture.

- a) Coiling
- b) Plaiting
- c) Wicker work and Twining
- d) Frame fill

PART C: Experiments in woven structures (practical examples), with structural critique from a structural engineer (learning through design)

PART D: Conclusions & Bibliography

## 7.A. INTRODUCTION TO THE PAPER AND CONCEPTS

### INSPIRATION FOR PAPER:

#### Marveling at weaving

My inspiration for this paper comes from a love of all things woven and braided. I discovered this passion whilst on holiday in Mozambique whereby I could not resist buying baskets daily on the markets (I have + 25 baskets). I became fascinated with the woven, continuous and plaited qualities of the baskets, the hands and process for making them, their size, shape, material, smell and touch.



De Moyencourt L. (2004) Basket shop Maputo market [photograph] (private collection)

#### Uncovering weaving

A year later I found myself having to make woven props for a movie. I had taken the job, without any weaving experience and had to learn quickly, I initially worked with an expert blind weaver from the blind weaving association, and then once I had gotten the jist of weaving structures, was left to my own devices. The film is called Les Deux Mondes, it is a French science fiction comedy. All of the props had to be 'rustic' and hand made looking. My job was to make the prototype props based on the production designer's descriptions. I learned a lot about weaving, mainly that it is a therapeutic process, nice to touch and has a wonderful decorative aesthetic, pattern and texture.

(All images from my personal collection) Images are numbered from left to right.

1. Hand made loom, with half women mat for set dressing
2. Kidney shaped basket, stitching the straps onto the kidney shaped basket
3. The final basket with all the woven straps and hand-made coiled rope
4. Weaving in a circle
5. Learning to plat with 5 strands
6. A 'Hero' prop (needs fine detailing) Setting out a basic structure for the weaving and hand-made needle for quick weaving
7. Detailing of strapping to cover the joints in the wooden structure for the hero mat
8. The finished mat on its stand, this mat was made up of 5 different weaves
9. Details of the finished mat
10. Cane and leather binding detailing
11. Cane chair for transporting the chief in the movie, a highly decorative piece.





## ABSTRACT

This study is concerned with a structural analysis (a how to do it) of basket making, and then a how could you do it in architecture. It is neither historical nor anthropological; it is a personal interpretation, concerned with the aesthetic qualities of weaving, braiding, and architecture, as it relates to process, material and human impulse. This study is my opportunity for developing a number of ideas about basketry and architecture. I suppose the real purpose of the work is also to express my own love of woven and braided structures (baskets, hats, mats, boxes, decorative elements...) in order to enable creative design for my architectural thesis. Through this technical investigation I hope to discover innovative ways of realizing my concepts of 'weaving' and 'braiding' in a structure. I believe that fascinating structures can be made for the built environment by applying knowledge from the infinite variety in woven structures.

In all woven structures, basketry, and braiding... I find that it is the accommodations that are the fascinating features of the structure; the beginning and endings of the weave and how they are dealt with, the forcing of a motif into a shape as it develops the making of a symmetrical pattern on a non symmetrical structure, the strengthening of a weak woven structure... The creativity, ingenuity and design seem to kick in at these moments where decisions about these accommodations need to be made in the structure. The most part of the weave is even, repetitive, pattern like, and therefore in my mind soothing on the eye; it is at the junction of an ending and beginning of a weave that the magic happens. I find it fascinating how a beautiful, even, continuous and regular weave can arise out of various starting points, and how neatly these weaves are terminated.

Page 1 and 2 show baskets in a collection  
Page 3 is a basket from my personal collection

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Since architecture is concerned with structures I have turned to the structure of basket making in order to find examples which can be appropriated into the scale of architecture. This paper will speculate on how lessons from basket making structures may be applied to the scale of architecture

#### Basket making:

Basket making is one of the most ancient and persistent hand crafts. When Neolithic man was grinding, polishing tools and starting to domesticate animals, he was also making and using baskets. The other technologies of early man have perished but basket making and baskets remain basically the same and constantly useful.

This is why in basketry we may feel linked by the common everyday object (the basket) to our remote ancestors. We find ourselves in a time whereby the habits, beliefs, and institutions inherited from the past are being forgotten and hence destroyed by our technological society; baskets impose a recognition and continuation of our natural history. Baskets have figured in all the changing contexts of everyday life throughout history, 'like monuments which have acquired a special dimension of meaning by remaining the same whilst the human scene changed around them.'

Baskets have been called the most destructible of all textile constructions. Unlike ceramics, very few baskets have managed to survive. Yet through the persistence of tradition, and the conservatism which makes baskets virtually changeless, baskets have withstood all the destructive forces to which they are subject; moisture, heat, fire, mold, insects, wear. Although the lifespan of a basket is very short, another basket will take its place. Baskets have been replaced and replaced over and over, unmodified, unimproved, and unchanged. In their perpetual freshness they are thus survivals from the past.

Until recently basket makers at work have been a familiar sight in almost all human settlements. The materials used being the materials that grow in the local area, everyone being acquainted with these materials as part of the local landscape; willow, cane, palm, grasses... Today locally fabricated baskets are transported to far away markets, the baskets and their materials become anonymous. Basket making takes place mainly in areas where hand labor is cheap and available, in the undeveloped countries. European baskets are mainly produced in Spain, Portugal, Italy, Poland and Czechoslovakia. The cheapest and most plentiful baskets are from Korea, Taiwan, Pakistan, India, Ecuador, and Mexico. Baskets in our society have come to be associated with cheap labor, poverty, illiteracy, therapy in mental institutions, and the non-intellectual. Reactions to the occupation of basket making and what it represents have stigmatized the works themselves.

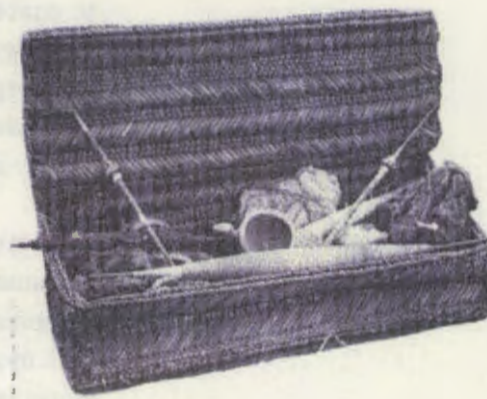
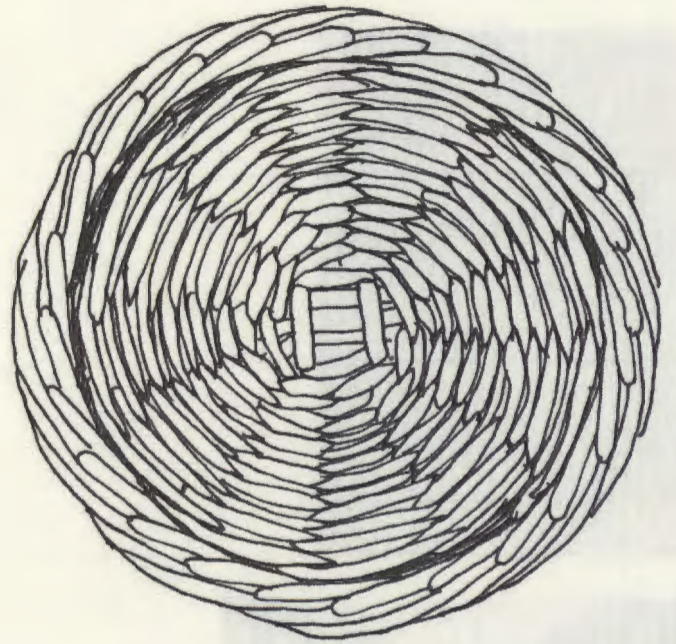
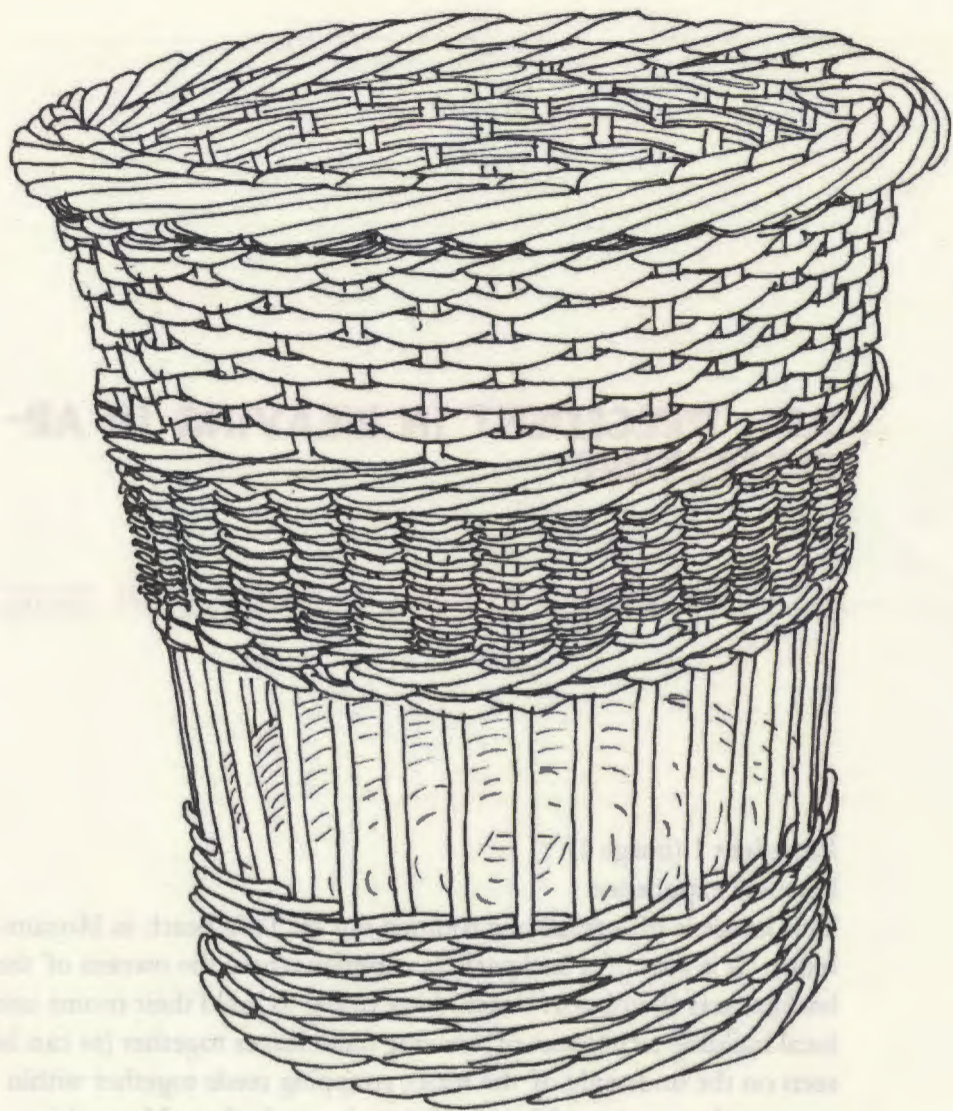


Image 1 and 2 from Rossbach E. (1974) Baskets as textile art, London, Studio Vista, P.12  
Image 3 is a basket from my personal collection

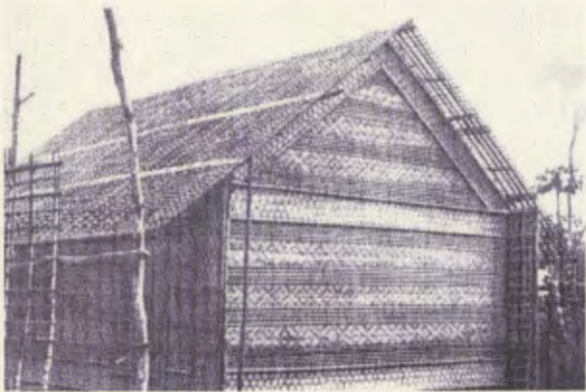
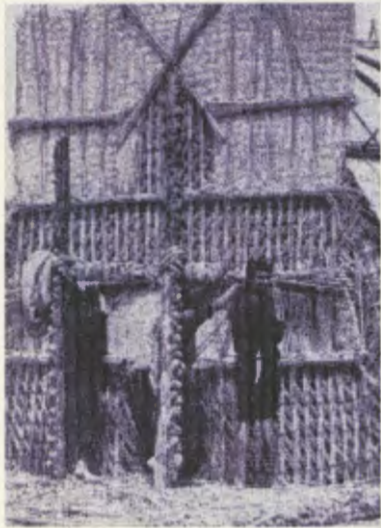


#### What is weaving?

Weave: blend, braid, entwine, fuse, incorporate, interlace, intermingle, knit, mat, plait, twist, unite, make up, and put together, criss-cross, move in and out, wind, zigzag... Weaving is a process

#### What is braiding?

Braiding is the act of creating a composite rope from a number of strands of material that is thicker and stronger than the single strand. Braiding is a process. The simplest braid is the common plat, a solid three-strand structure. More complex braids can be made from more than three strands. One usually needs an odd number of strands for braiding hence the numbers go up in two's ( 3 strand, 5 strand, 7 strand...). Braids are commonly used to make rope, hairstyles, or decorative objects. Braids are a common form of expression in African and African American hairstyles. Some braids are highly elaborated reflecting the individual style of the person wearing the braids. Compared to the process of weaving a wide sheet of cloth from two separate, perpendicular groups of strands (warp and weft), a braid is usually long and narrow, with each component strand functionally equivalent in zigzagging forward through the overlapping mass of the others.



## 7.B. PRECEDENT IN WEAVING IN ARCHITECTURE

### 1/ NON STRUCTURAL WEAVES IN BUILDINGS

#### Precedent 1 (image 1)

##### Personal experience

This image is of a small one roomed hut on Tofu beach in Mozambique. It is part of a backpackers complex where the owners of the backpackers (Bamboozie Beach) have opted to build their rooms using local building techniques of weaving palm leaves together (as can be seen on the underside of the roof), strapping reeds together within a gum pole structure. I loved this hut, it matched my Mozambican baskets, it is highly decorative but also very simple, made of two materials; wood and makuti (palm) as well as incredibly tactile, I couldn't help running my hands over the woven parts.

#### Precedent 2 (image 2,3)

##### Large woven structure

These Iraqi marsh dwellers weave their houses from six to ten meter long reeds that grow locally. The intricate construction displays considerable technical virtuosity. The marsh dwellers are in a continual and seasonal state of renewal, reinforcing and rebuilding their dwellings. The dwelling is therefore constantly updated and fresh.

#### Precedent 3 (image 4, 5)

##### Decorative woven structure

These images of woven palaces are taken from the book: architecture without architects. Image 4 is of a house in the royal quarter of Bakuba in Congo. Image 5 is a detail of the palace of justice at Aloa Bay in the Solomon Islands. In these examples patterns are introduced into the weave for additional decorative effect.

Image1: De Moyencourt L. (2004) my woven hut [photograph] (private collection) this hut was a delight to stay in or a couple of days.

Image2, 3: Corbin P. (1978) All about wicker, New York, E.P.Dutton paperback, P. 10,11.

Image 4, 5 Rudofsky B. (1977) Architecture without architects: Great Britain; academy editions. P. 136, 137



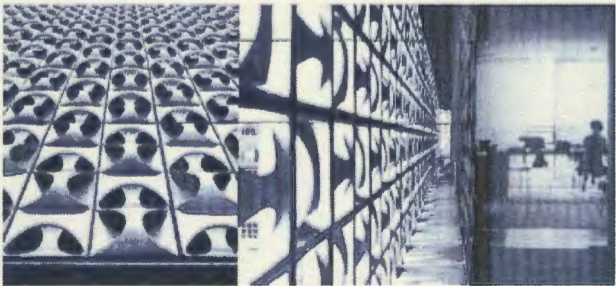
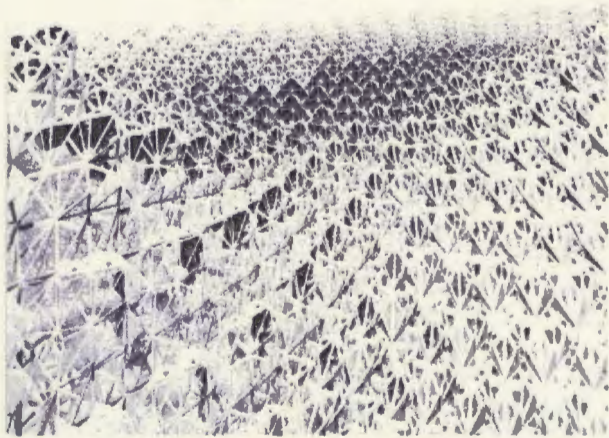
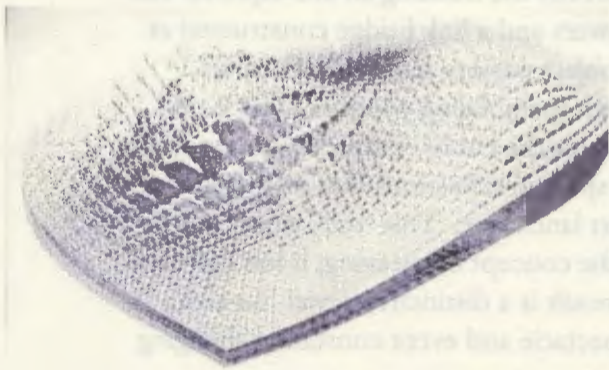
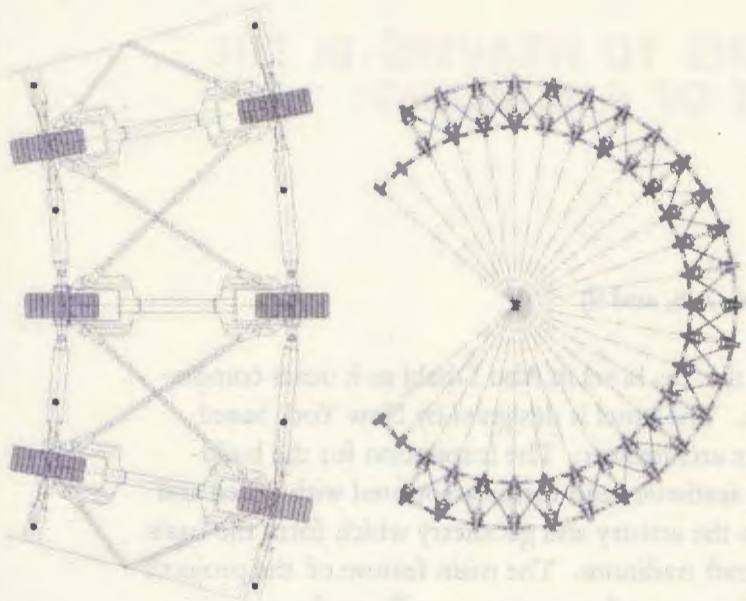
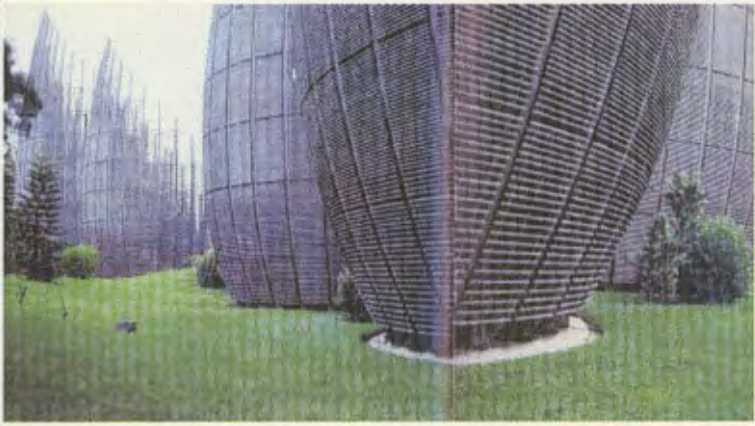
Image6, 7, 8, 9; Google, Yas hotel; [http://www.bustler.net/index.php/article/the\\_yas\\_hotel\\_abu\\_dhabi\\_by\\_asymptote\\_architecture\\_nears\\_completion/](http://www.bustler.net/index.php/article/the_yas_hotel_abu_dhabi_by_asymptote_architecture_nears_completion/), accessed on the 17th May 2009

## 2/ ALLUSIONS TO WEAVING IN THE STRUCTURE OF A BUILDING:

Precedent 4 (image 6, 7, 8, and 9)

Allusion to weaving

These images show the Yas hotel in Abu Dhabi as it nears completion of construction. The hotel is designed by New York based architects Asymptote architecture. The inspiration for the building ranges from the aesthetics and forms associated with speed and movement as well as the artistry and geometry which form the basis of ancient Islamic craft traditions. The main feature of the project's design, a 217-meter expanse of sweeping, curvilinear forms constructed of steel and 5,800 pivoting diamond-shaped glass panels. This Grid-Shell component affords the building an atmospheric-like veil that contains two hotel towers and a link bridge constructed as a single-hulled sculpted steel object passing above the Formula 1 track that makes its way through the building complex. The Grid-Shell visually connects and weaves the entire complex together while producing optical effects and spectral reflections that play against the surrounding sky, sea and desert landscape. This 'veil', whilst not being a literal weave, alludes to the concept of weaving; it lets light and air in through its joints. The result is a distinctive, jewel-like composition; an architecture of spectacle and event constantly changing with the light of the day.



#### Precedent 5

Allusion to weaving and the traditional The Jean-Marie Tjibaou Cultural Centre in New Caledonia by Renzo Piano celebrates the local vernacular and culture of the Kanak. The centre is composed of 10 units called 'cases' all of different sizes and different functions, but with the consistent form of vertically positioned basket-like structures which resemble the traditional huts of New Caledonia (image 10). The architectural tectonic is made up with a deliberate 'unfinished' appearance as a reminder that Kanak culture is still in the process of becoming and therefore rustic. This example is interesting to me as it alludes to traditional craft and weaving. The double structure of the wooden facades (Image 12) adds depth to the façade creating a different inner and outer side which is typical of weaving.

Image 10, 11, 12 Blaser W. (2001) Renzo Piano Centre Kanak; Berlin; Birkhauser publishers for architecture, p.i, 28, 42

#### Precedent 6

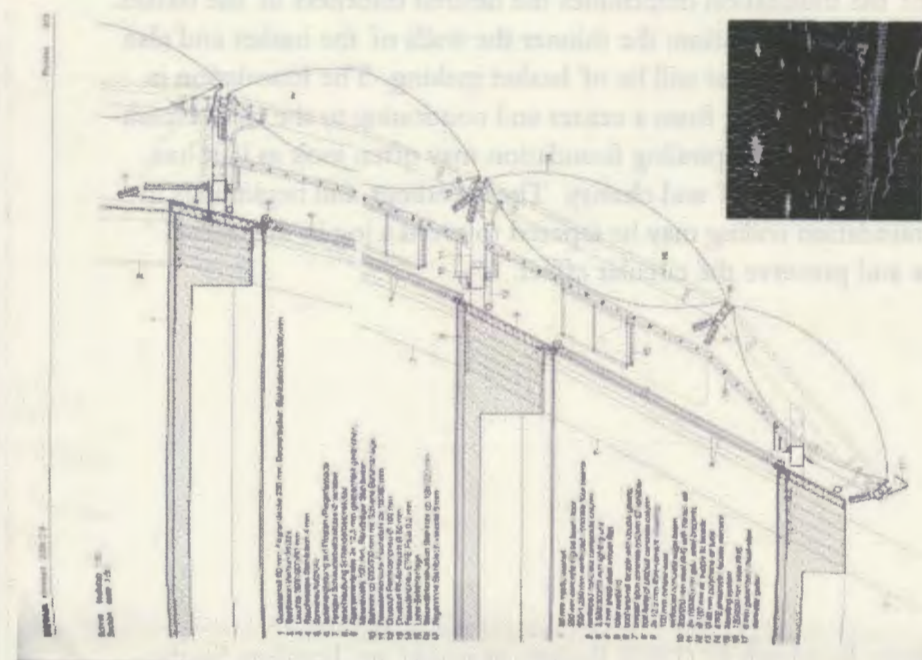
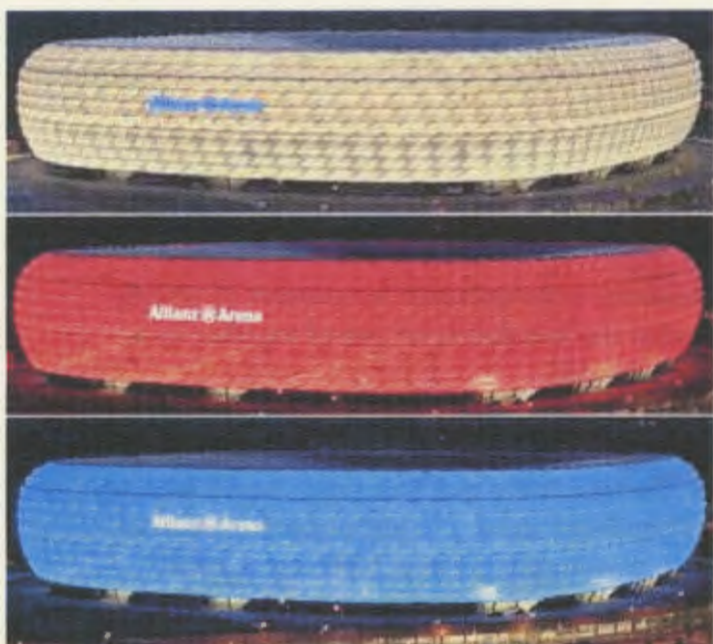
Allusion to weaving, abstract super structures These examples of structure which allude to the concept of weaving come from the book: Morpho-Ecologies (Ed. Hensel M. and Menges A. (2006) Morpho-Ecologies, London, AA Publications) which brings together twenty student projects undertaken by unit 4 at the AA school of architecture in London. Each student explores new design concepts, tools, techniques and organizational principles of construction.

'Our inheritance of the existing urban fabric of buildings and public spaces carries the implication of continuity and of a future existence- the continuing presence of the past posits the future'  
These architectural projects explore the relationship of mankind and nature; these projects seem to imitate the interior structures of plants, animals, and electron microscopy.

Image 13, 14 Hensel H. and Menges A. (2006) Morpho-Ecologies; United Kingdom; AA publishing, p. 10, 21



IN STRUCTURAL  
EXAMPLES FROM  
STRUCTURE  
AND A VERTICAL  
THE FACADE  
THE FACADE



Precedent 7

Allusion to weaving, abstract super structures

The Allianz arena in Munich is an architecturally unique stadium built with pneumatic ETFE cushions. The stadium was designed by Hertzog & de Meuron. This miracle plastic technology is discussed further at the end of this paper under the plastic section. The Allianz stadium, with its bulging diamond shaped cushions looks like it is woven. The outer skin of the building consists of 2 874 diamond shaped cushions with a diagonal dimension varying between 2x7m and 5x17m. The segments of ETFE for the cushions were digitally cut to a tolerance of less than 1mm and thermally welded together.

The roof ends around the pitch internally with a 370m long pneumatic eaves section. The ETFE membrane cushions are clamped to a steel supporting structure with aluminum fixings. The roof covering, as a single entity, can absorb thermal expansion. On the façade however, expansion joints were necessary.

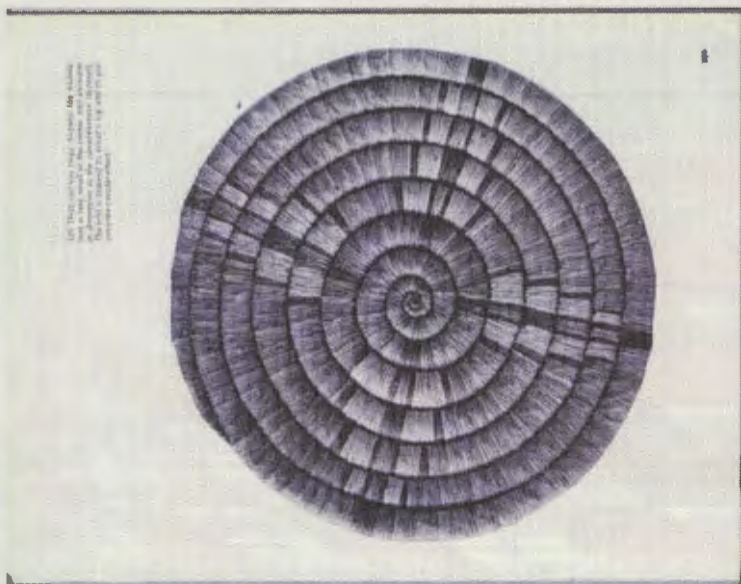
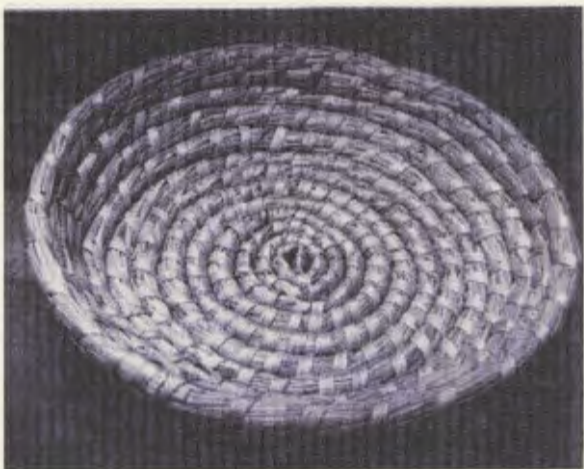
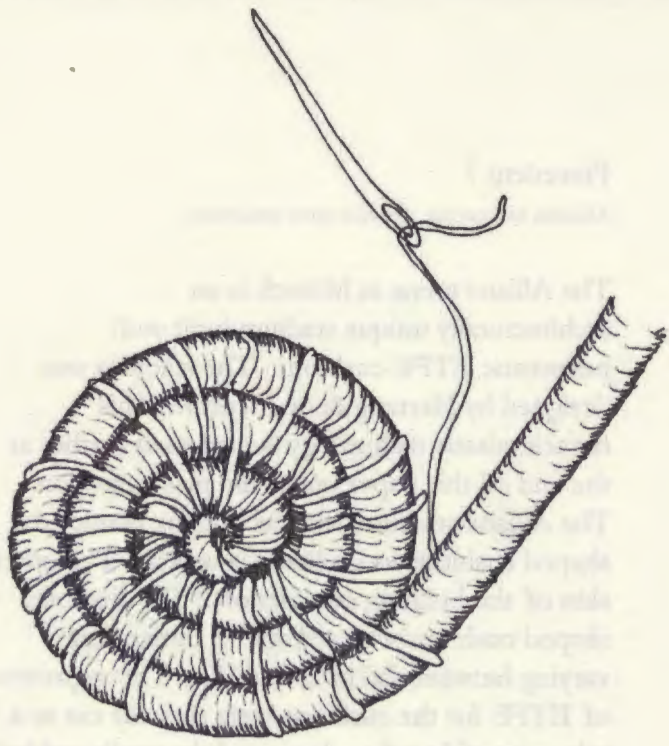
A special drainage system prevents excessive loading on the membrane in the event of rainwater being tapped in hollows.

Vandalism to the cushions is avoided by raising the first row of cushions 4 m off the ground. Minor damage to the ETFE can be repaired with local in-situ welding.

At night the Allianz arena lights up in one, two or three colours; transparent (white), blue or red. This lighting system turns the entire building into a spectacle

Image 1: Google, Images, Allianz Stadium, [http://www.eurohypo.com/media/bilder/presse/AllianzArena\\_ohne\\_Schriftzug.jpg](http://www.eurohypo.com/media/bilder/presse/AllianzArena_ohne_Schriftzug.jpg), accessed on the 21 September 2009  
 Image 2: Detail Magazine, Issue 12, December 2002 p. 77  
 Image 3: Google, Images, Allianz Stadium, [http://www.zeitung-hk.de/wp-content/files/Allianz\\_Arena\\_pixelquelle.de2005\\_simon\\_benkard.png](http://www.zeitung-hk.de/wp-content/files/Allianz_Arena_pixelquelle.de2005_simon_benkard.png), accessed on the 21 September 2009





### 3/ STRUCTURAL WEAVING : EXAMPLES FROM BASKETRY TO AR- CHITECTURE :

AN EXPLORATION INTO BASKET AND  
HAT STRUCTURES THAT MAY ENABLE  
THE CONCEPT OF 'WEAVING', 'BRAID-  
ING' IN ARCHITECTURE.

#### A) COILING

Coiling is unlike other basketry techniques as it is a process of sewing or stitching. Materials called the foundation are sewed together by a stitching element called the binder

Coiling seems a simple form of basketry, easily comprehended and performed. In basketry, the foundation may be a single, heavy reed or a group of such reeds, a bundle of straw... This foundation material is constituted during the basket making process, with new material being added constantly to maintain a foundation of the desired thickness (unlike a roll of cord or yarn, which is made in advance). The size of the foundation determines the desired thickness of the basket. The finer the foundation; the thinner the walls of the basket and also the slower the process will be of basket making. The foundation is continuous, spiraling from a center and continuing to the rim. Finishing the ends of the spiraling foundation may often look as if it has abruptly been cut off and clumsy. These endings and beginnings in the foundation coiling may be tapered to avoid a jog in the overall shape and preserve the circular effect.

Image 1: Rossbach E. (1974) Baskets as textile art, London, Studio Vista, P.176, Coiled basket from Pakistan. The centre of the basket is a square of plaiting around which the foundation starts to spiral. Bits of cloth and metal are occasionally laid under the binder for a decorative effect.

Image 2: Rossbach E. (1974) Baskets as textile art, London, Studio Vista, P.67, Coiled basket from Denmark. The elements are laid parallel in a bundle to create a coil of considerable bulk. The foundation element is visible due to the spaced out stitching of the binder

Image 3: Rossbach E. (1974) Baskets as textile art, London, Studio Vista, P.109, This image shows a thick coiled tray from Hopi in Arizona. The foundation is very small at the centre, and increases in dimension as the circumference increases. The end is tapered to avoid a jog, and to preserve the circular effect. In this mat the foundation is completely obscured by the tightly stitched binder.



Another method of coiling is to allow a space between foundation coils. Such spaces can serve a utilitarian purpose of lightening the load of the basket, or allowing water to drip through. The appearance of the basket is lacelike, giving a sense of lightness, with intervals of open and closed, open and closed coils. The spacing of the foundation creates deeper shadows and hence pronounces the foundation itself. Coil baskets have a special feel; of firmness, rigidity and solidity. They tend to settle down and almost become attached to the place on which they are positioned. These baskets have a certain clumsiness and chunkiness which can be appealing aesthetically, or if the foundation is thin; a special delicacy.

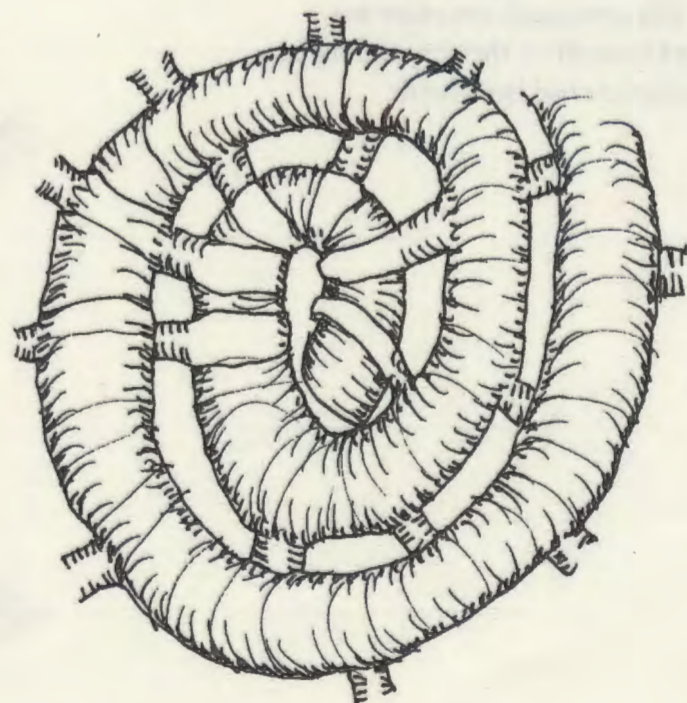
Often the centre of a coiled basket appears awkward, overworked and inappropriate; this is because the starting point of the basket is the hardest for the basket maker to begin.

The spiral or helix (when the coil moves up gradually so as to make the form of a cylinder) has a linear movement, not that of concentric circles or stacked hoops. The foundation element thus encompasses the entire basket. A coil basket or structure can hence never be symmetrical. An illustrator making a sketch of patterns on a coil basket would probably show them as circular or symmetrical patterns, so slight is the departure from the circular or symmetrical. Yet the fact that patterns which in their essence are symmetrical appear on structures which in their essence are not symmetrical accounts for much of the visual quality of coil patterning.

The stitching or binding material in a coiled basket is made of a length of flexible and narrower grass or chord. This creates an exciting visual tension between heavy (foundation) and lighter (binder) elements. This stitching may be done with a needle (for a tight basket), but often the end of the thread is poked through holes which are opened up in the foundation material with a sharpened stick or bone... The stitching is pulled tight, making the structure quite rigid. If instead the binder was loose and able to sag, friction between the binder and the foundation would quickly wear out the binder which is relatively slim and delicate. The stitches must be dense and close enough together so that the foundation material does not fall out. If the foundation material is long, widely spread out stitches in the binding are possible, but if the foundation is made up of grouped short bits of material then the stitches will have to be close together. Often, in a basket, the binder will completely cover the foundation, the foundation material can only be seen by forcing the stitches apart and looking between them. The configuration of the stitching provides the basket's pattern; stitches can be variously spaced, twisted etc to create different visual effects in the patterning, different color threads and materials may also be used in combination with each other to create patterns. Surface decoration is applied during the binding process.

Image 1, 2 (below) sketched illustrating the gap in the weave

Image 3 (left) Rossbach E. (1974) *Baskets as textile art*, London, Studio Vista, P.119, Spaced coiled basket from Mexico; the foundation coils are held apart by the binder to create an open lace-like effect.



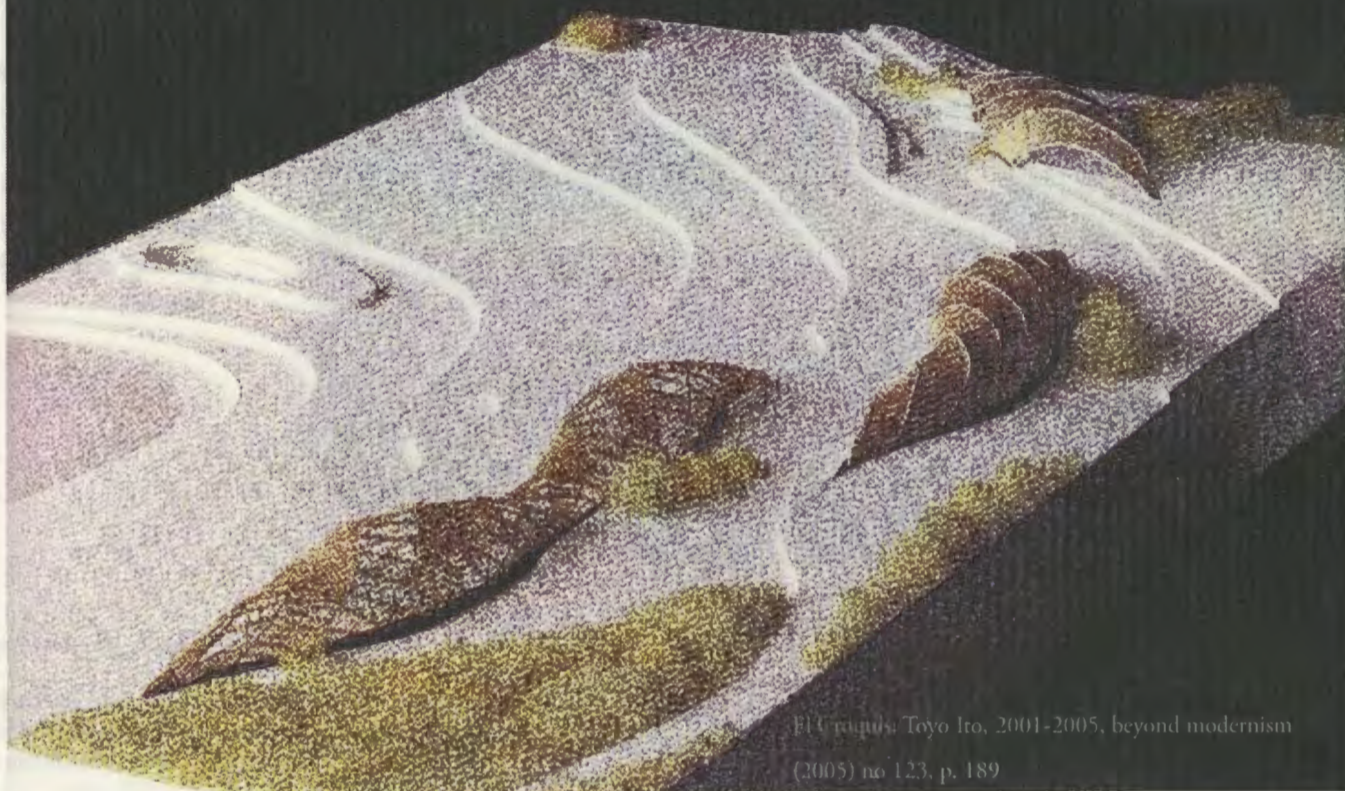
**COILING IN ARCHITECTURE:  
TOYO ITO'S RELAXATION  
PARK IN TORREVEIJA SPAIN  
2002**

Toyo Ito's Relaxation Park in Torreveija, a Mediterranean resort town on the East coast Of Spain, is a new spa facility in a setting of rolling hills and lakes. The concept for the building was to design a building which is in harmony with its surroundings; three snail shell structures emerged, all employing the same coiled structural system. Although the architecture might appear complex at a first glance it is in fact based on the simple system of coiling and stitching (in this case the coiling or foundation are steel tubular elements with the stitches being timber struts spanning between the foundation elements).

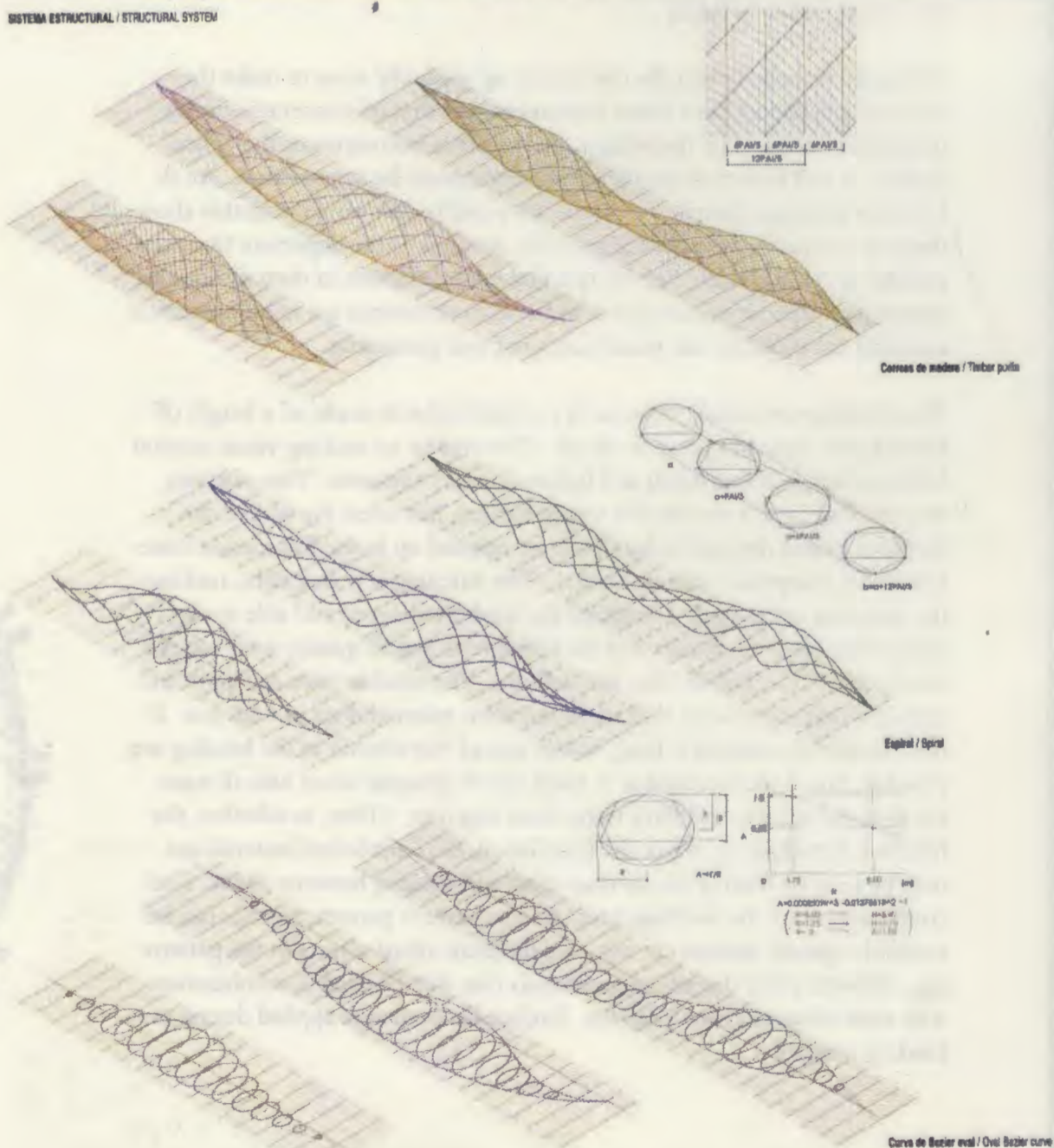
The shell plans were generated by using Bezier curves which follow the landscaping elements of the site. The spiral weaves together five steel rods (each 60 mm diameter) which are linked to timber joists (180mm x 90mm). The timber joists span between 4.5m and 5.5m, this creates the external shell. Some parts of the exterior are enclosed with plywood, resulting in a soft exoskeleton structure similar to that of a living creature. The floors are hung from the spiral structure which connects the 5 steel rods, giving the structure additional rigidity and stability. In this connection of spiral structure and floor, all of the components function as structural elements and thus contribute to the whole.

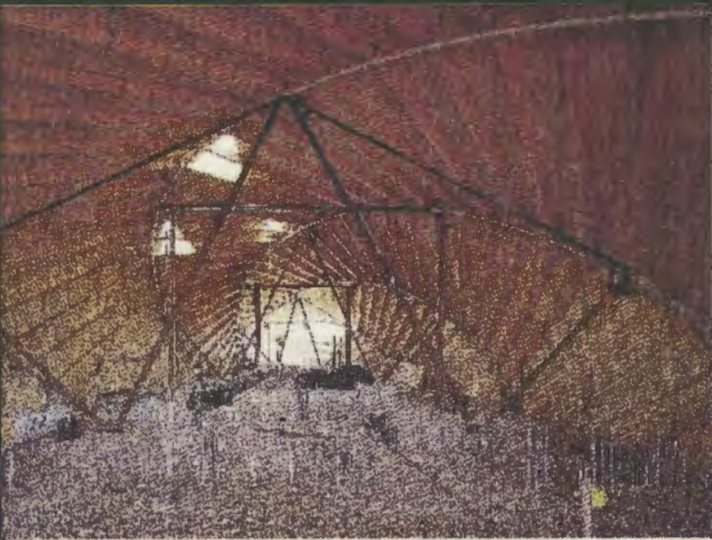
Half of the structure is buried underground, resting on a large concrete channel (7m wide). The concrete channel secures the spiral from rolling down the hill and acts as a foundation for the structure.

During the construction of this structure, an auxiliary structure was need to hold the spiral in position; this temporary structure was later removed once all of the connections in the spirals structure had been made.

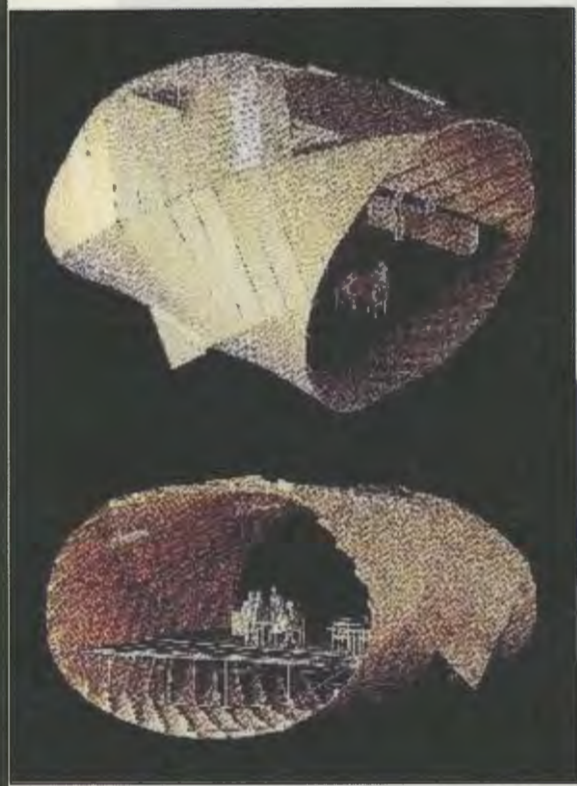
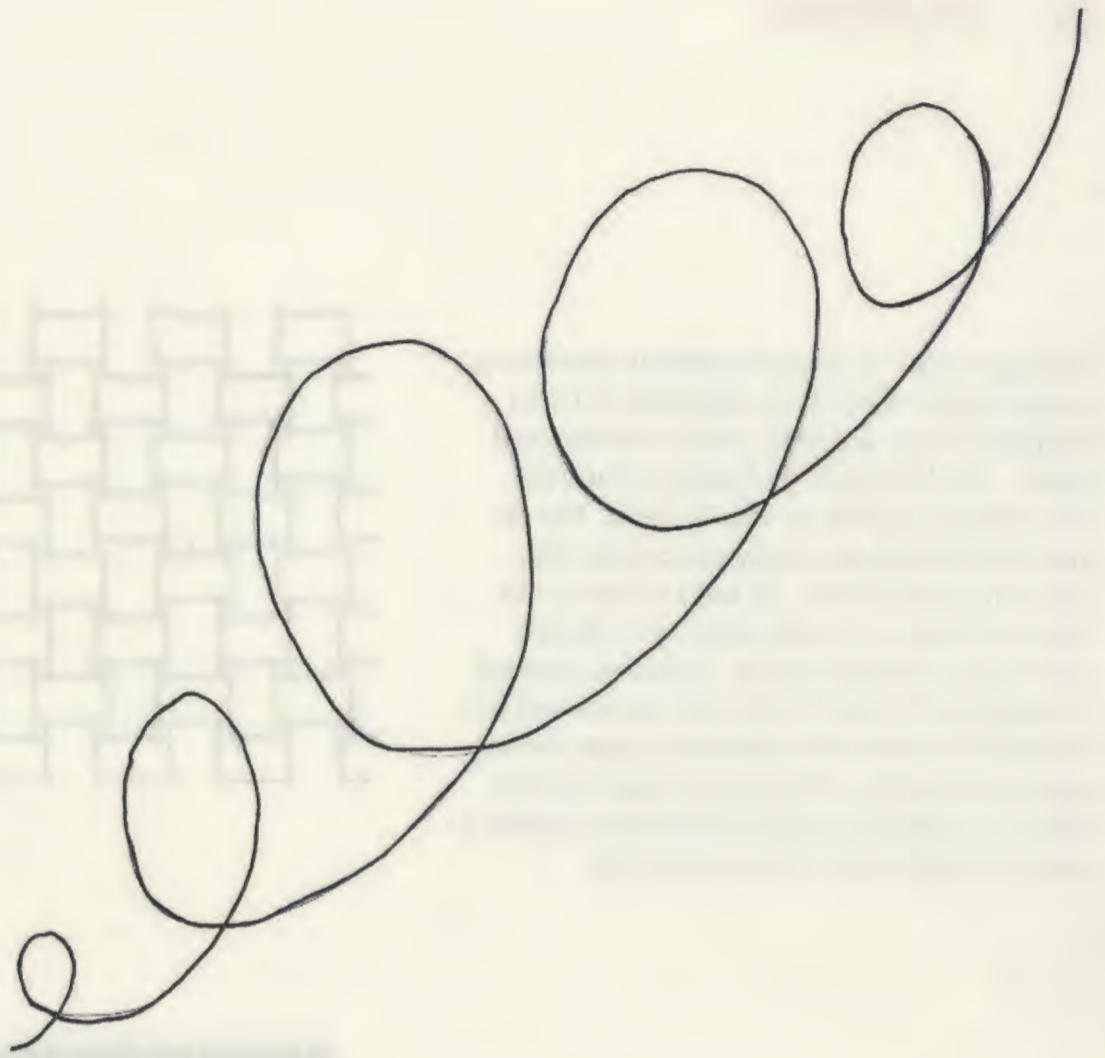


El Croquis: Toyo Ito, 2001-2005, beyond modernism (2005) no 123, p. 189





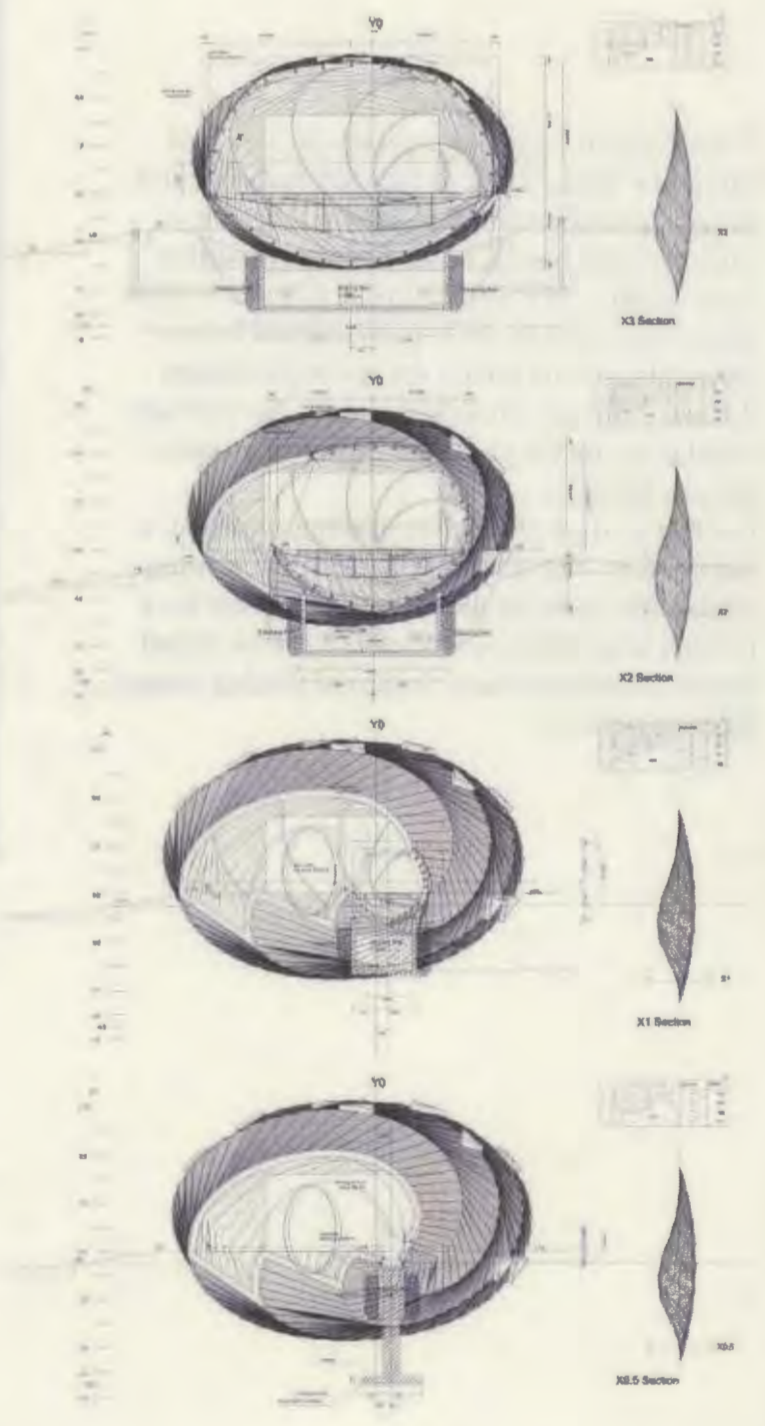
El Croquis: Toyo Ito, 2001-2005, beyond modernism (2005) no 123, p. 201



El Croquis: Toyo Ito, 2001-2005, beyond modernism (2005) no 123, p. 200



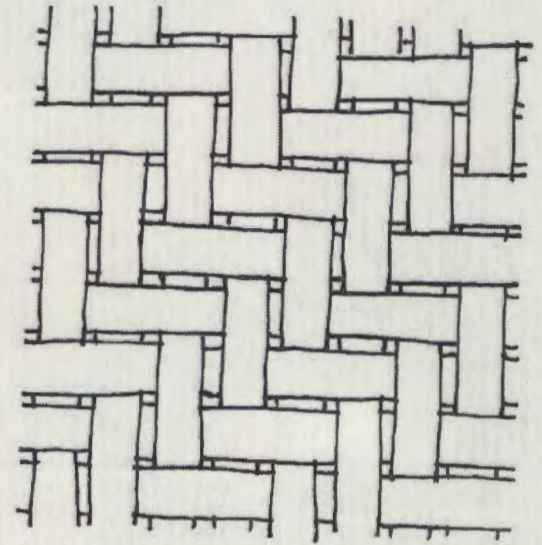
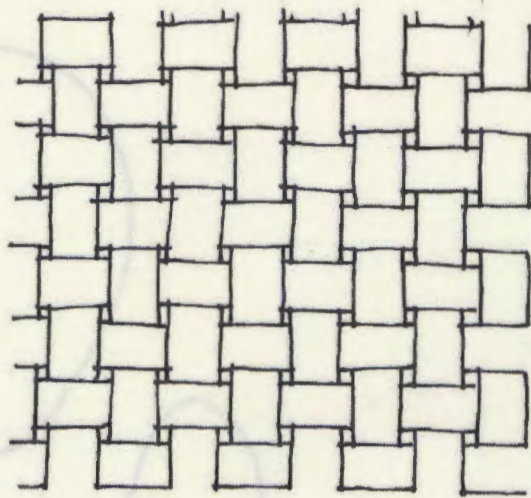
El Croquis: Toyo Ito, 2001-2005, beyond modernism (2005) no 123, p. 200



El Croquis: Toyo Ito, 2001-2005, beyond modernism (2005) no 123, p. 200

## B) PLAITING

Plaiting consists of diagonal elements intersecting at right angles. There is no distinction between elements as warp and weft, or as foundation and binder. All elements in the basket perform the same function and all are equally active. The elements for plaiting are usually more or less flat, ribbon-like and flexible. All must interact in the structure; none can remain static and inflexible whilst others move around it. Unless the material for plaiting is flat and flexible, the material will not fit together but will hold themselves apart, leaving gaps in the plaiting. This thinness and flexibility which is essential to a tight plaited weave imparts a sense of fragility and of being cloth like.



These types of baskets contradict the notion of baskets as 'hard textiles' as they feel malleable and delicate in contrast to the solidity and rigidity of a tightly coiled basket, or the firmness of wicker-work baskets. The base of a plaited basket is often saucer-like, whereby the corners seem to want to lift off the ground (unlike the flat coiled baskets discussed above). Therefore even by the way such a basket sits on the ground, it expresses its buoyancy, its lightness.

Compared to a coiled basket, plaiting a basket is a fast process. The wider the material that is being plaited, the faster the process will be. There are a number of possible patterns which can be plaited within a sound structure; hexagonal plaiting (image) diagonal plaiting.



Rosbach E. (1974) Baskets as textile art, London, Studio Vista, P.125  
Plaited baskets from Madagascar (foreground) and India (background) In these baskets the elements have been pulled in plaiting to force the corners into points.

## C) WICKER WORK AND TWINING

The third basic structure in basketry and weaving is wicker work and twining; in which systems of warps, or stakes, are held together by wefts. A single weft can move around and around through the stakes in an over and under pattern called wickerwork. Or two or more wefts can be moved together, twisting between each warp to lock the warp into position; this is called twining (image). All sorts of variations on these processes are possible, each producing a different visual and tactile surface.

Patterns can be made through changes in color, material or weaves; bands of wicker work can be juxtaposed with bands of twining... A row of twining, for example, locks the warps tightly into a more precise position than wicker work, therefore at points of changes in direction, basket makers will often weave a few rows of twining so as to stabilize and equalize the weave after and before the change.

For a circular weave; a number of warps will intersect and overlap at the centre of the base. There are many methods which have been devised over the years and from different cultures to keep this centre, starting point from looking clumsy and without awkward holes.

The first rows of wefts force the warps into the desired position, as the circle of weaving grows larger, more warps may be added so as the stakes do not seem too widely spaced as the circumference of the basket increases (image). An interaction usually occurs between the warps and wefts at this point (the beginning) sometimes the warps are completely covered by the wefts, at other times the warps are exposed for long distances.

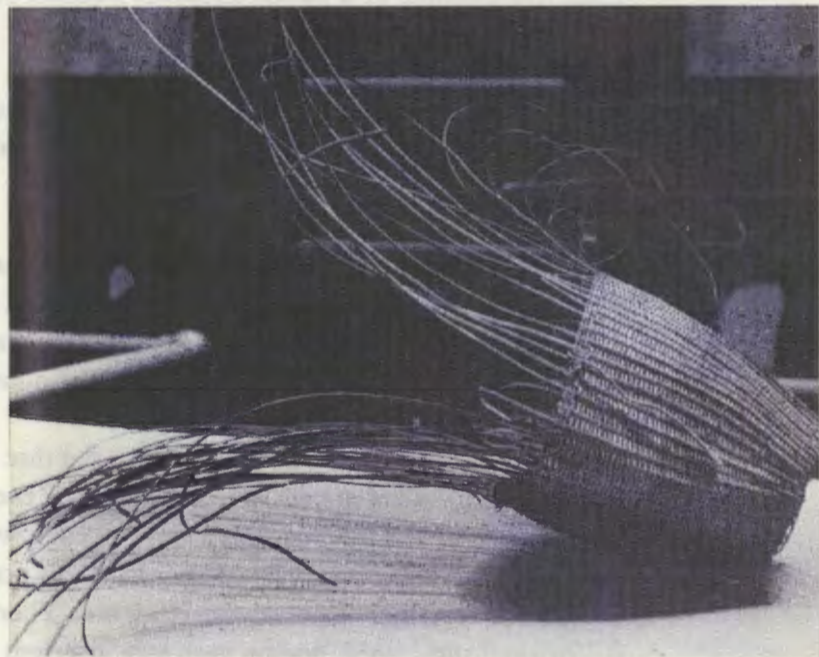
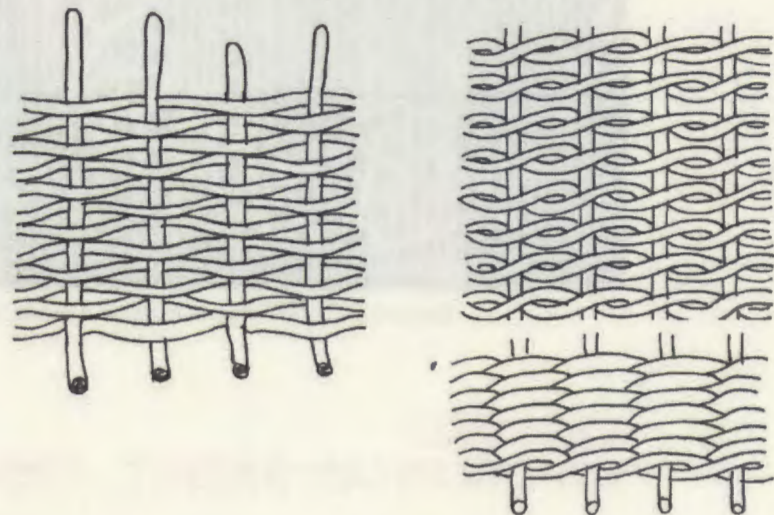
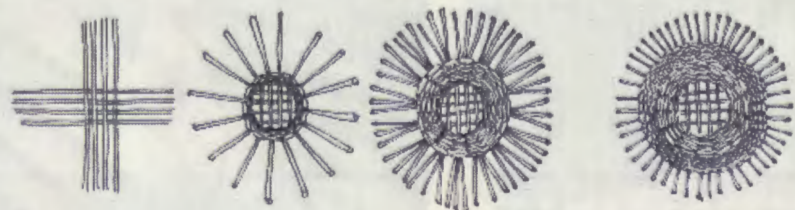
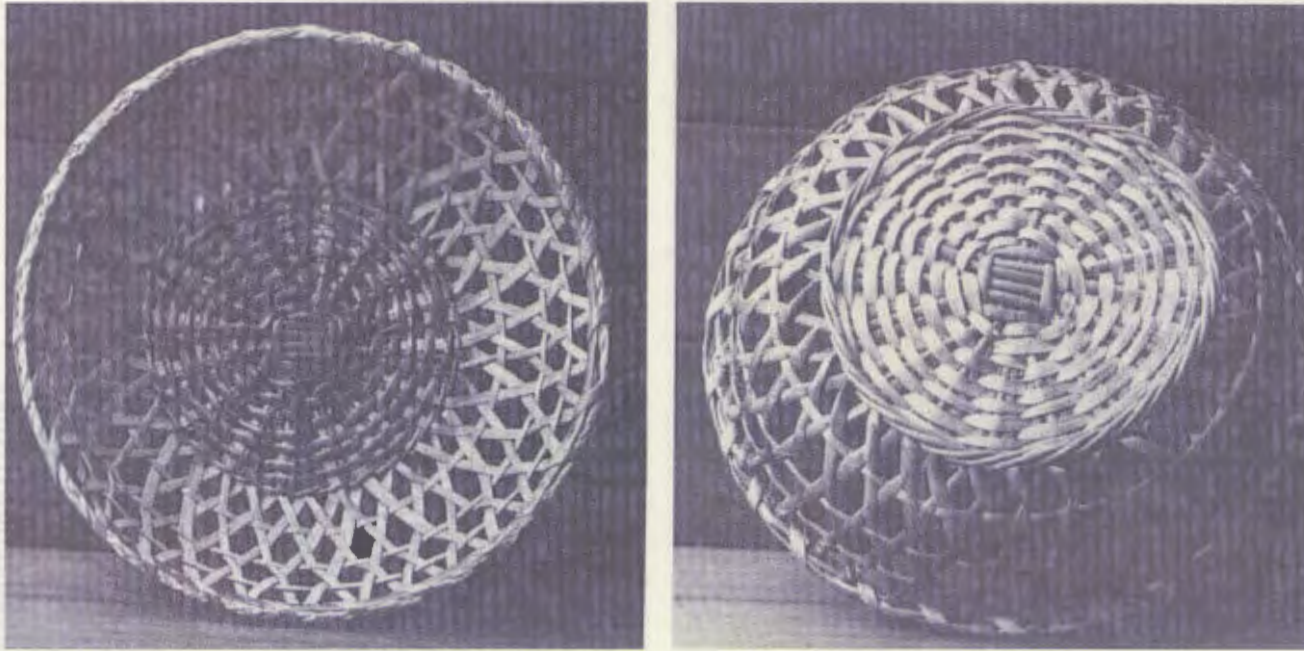


Image 1: Rossbach E. (1974) Baskets as textile art, London, Studio Vista, P.139. An unfinished wickerwork basket from the Andaman Islands.

**EXAMPLE:** If four rods cross another four rods at right angles to start a basket (or structure), the number of warps (16) is immediately established. From then on the work including the finishing edge is in relation to the sixteen. As the weft is inserted, these sixteen warps will become evenly spaced, as the circumference increases, the sixteen radiating spokes will move farther and farther apart. Unless more warps are added, the structure will become weak or flimsy and the wefts will pack closer and closer together. If warps are to be added, for an even structure; an additional sixteen stakes will be added simultaneously, with one being inserted alongside each existing stake.

This type of basketry can be made to be either rigid and inflexible or light and malleable. The optimum distance between the stakes is determined by the gauge of the elements, and the type and function of the construction. Increasing and decreasing the number of stakes to maintain the optimum spacing as the shape increases or decreases accounts for much of the surface beauty of wickerwork or twining.





Rosbach E. (1974) *Baskets as textile art*, London, Studio Vista, P.158, 159 A wickerwork basket from Yugoslavia

**EXAMPLE:  
YUGOSLAVIAN BASKET, CROSSED WARP TECHNIQUE**

This decoration on the basket arises from the material itself as it appears through structural techniques. A number of different types of construction flow imperceptibly from one type of construction to the other. I like this example of a basket structure because of the marked differences between the open and closed areas formed by the various weaves.

In this basket the starting warps are rigid cylindrical rods to form a sturdy base. These warps terminate just before the open work begins in an upward curve (see image) in the curved bowl; the rigid cylindrical warps are substituted for a more flexible material.

The base is made up of four rods intersecting four other rods at right angles. In this basket the rods do not overlap four above four but rather the second group moves through slits cut in the first group of four. This intersection holds the warps firm until the wefts can keep them in position. Sixteen stakes are now in place, a seventeenth one is added to make the number uneven.

When enough weft is woven in to make a flat disc of the desired size (normal wicker work weave), the original (rigid) stakes are cut off at the edge of the weaving. Two stakes of split willow are then inserted on each side of the original stakes and forced down well into the woven structure. A row of four-rod twining of relatively fine willow is put in at this point to hold the new stakes firmly as well as to form a slight foot on the bottom of the structure. There are now 68 stakes as ribs for the side of the basket [17(original stakes) x 2 (one on each side inserted) x 2 (split stakes)]. 17 and 68 may seem like random numbers but they arose from the original four crossing four and the subsequent requirements of the weaves. An even number of stakes is necessary for the crossed-warp technique.

The walls of the basket are made by crossing over the warps three times. Three spaced out wefts are woven into this criss-cross structure in concentric circles. At the end of the basket all of the warps and wefts are concluded in a row of twining which strengthens the rim as well as ends the basket.

There are no exposed ends in this basket; everything is secured due to the twining edges of both the base and the rim.

Image 1: Rosbach E. (1974) *Baskets as textile art*, London, Studio Vista, P.143. A twined wickerwork basket from Hopi in Arizona.

Image 2,3: Rosbach E. (1974) *Baskets as textile art*, London, Studio Vista, P.166. A bamboo vase shaped basket from Japan. The elements are in a complex arrangement involving and combining plaiting, twining and wickerwork. The strips of bamboo float for long distances to create a lustrous decorative surface.





# Textiles in Architecture

AD architectural design, 2006, Nov. Dec. V. 76, No. 6 p. 22

## Twining in architecture

G.K.D. metal fabrics, 'mediamesh' stainless steel textile.

In this example; stainless steel cabling weaves strips of LED lighting at regular intervals using a twining (twisting) technique of weaving. The LEDs display digital images such as logos and advertising promotions. This 'mediamesh' covers the façade of a building, adding a second permeable skin to the building. Due to the spaced out, loose weave in the steel cabling, air and light is allowed through the mediamesh therefore acting as a transparent screen.

## d) Frame fills

This type of basket is made up of a structural frame which is 'filled' in by weaving, knotting etc. The weave is therefore (and unlike the previous examples) not structural. The frame shows the shape of the basket, the fillings can be decorative or simple. The filling serves to keep things from falling out.



Rosbach E. (1974) Baskets as textile art, London, Studio Vista, P.161  
A Spanish basket made up of a wire frame within which a delicate lacelike pattern fills all the openings, while the wire foundation provides the rigidity and support.

### 7.C. EXPERIMENTS IN WOVEN STRUCTURES (PRACTICAL EXAMPLES), WITH STRUCTURAL CRITIQUE FROM A STRUCTURAL ENGINEER: GAVIN LUTGE

In this chapter I have tried to take my abstract woven models into the scale of architecture. This chapter explores the relationship between the form, technique of weaving and its structural efficiency. In all examples I have described the models;

1. With a name
2. In basket making terms
3. In structural system terms relating to the scale of architecture
4. In a speculative example for a building

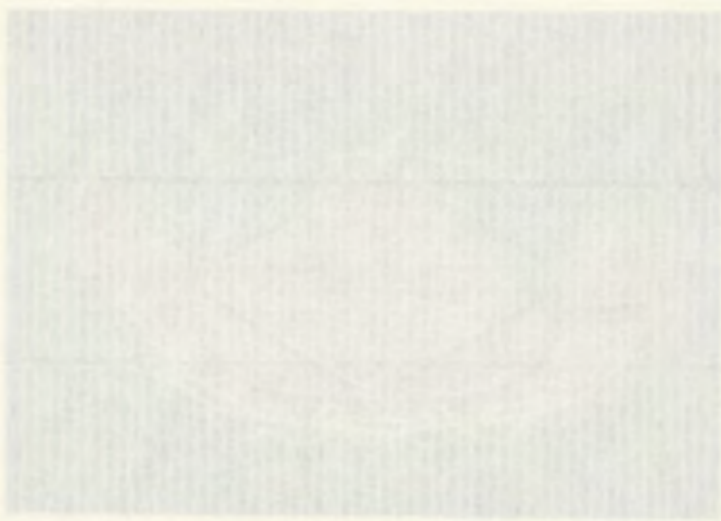
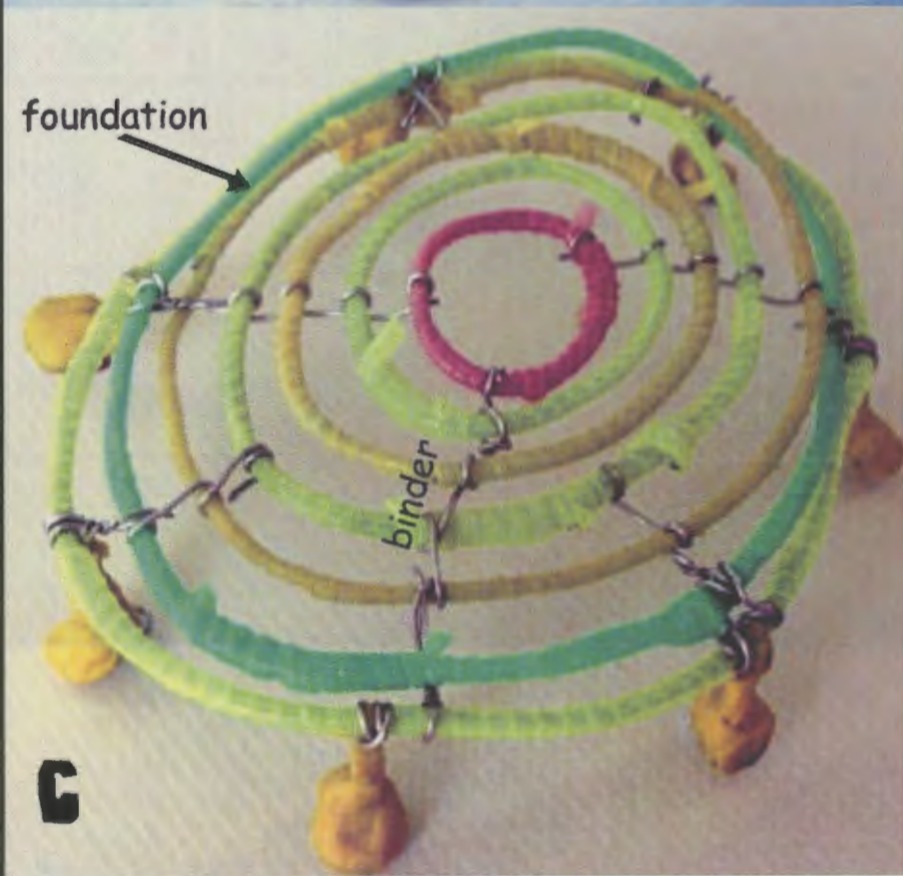
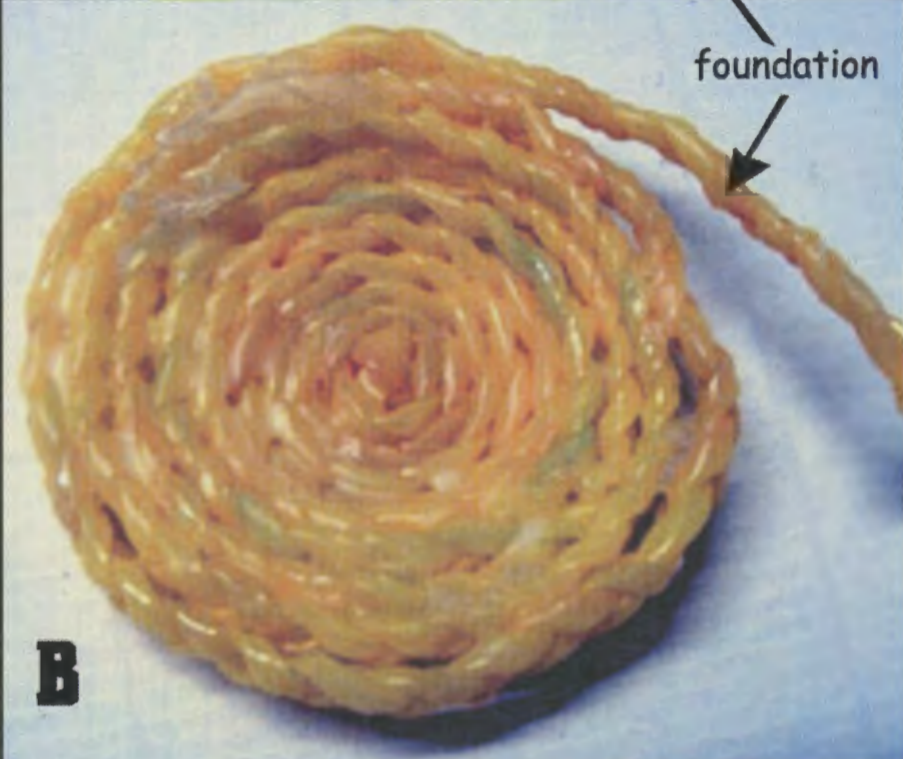
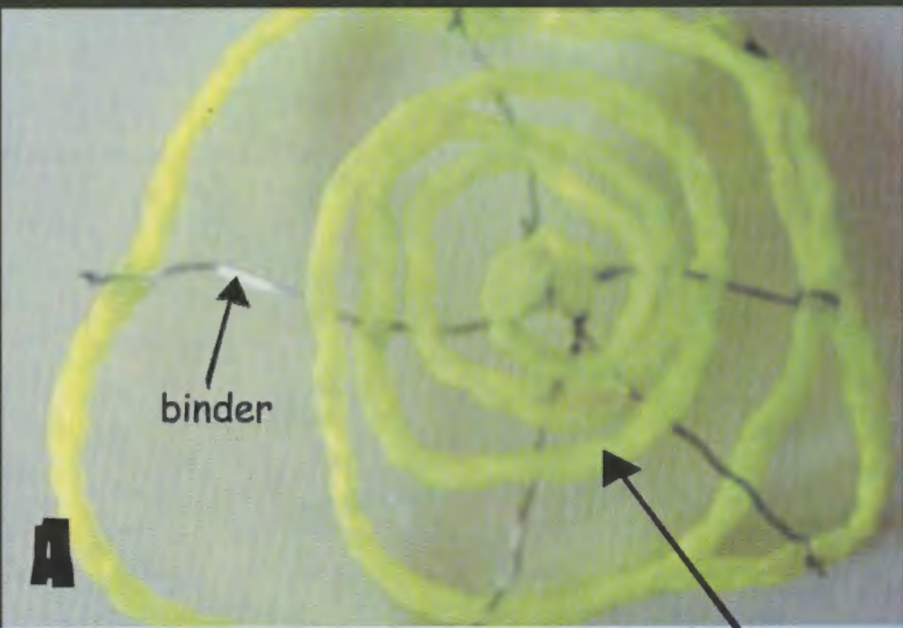


Figure 7.1: A square woven structure with a grid pattern, possibly a model of a building or a structural system.

The structure is a square woven structure with a grid pattern, possibly a model of a building or a structural system. It is composed of vertical and horizontal lines forming a grid. The lines are slightly irregular, giving it a hand-woven appearance. The structure is shown from a slightly elevated perspective, showing its depth.

The structure is a square woven structure with a grid pattern, possibly a model of a building or a structural system. It is composed of vertical and horizontal lines forming a grid. The lines are slightly irregular, giving it a hand-woven appearance. The structure is shown from a slightly elevated perspective, showing its depth.



## 1. 'COILED STRUCTURES'

### IN BASKETRY:

Each of these examples demonstrates a coiled basket structure; a foundation material is linked or stitched together by a binder, as previously explained in the document.

In coiled structure A: the coils are spaced out irregularly; leaving gaps between the foundation layers.

In coiled structure B: the coils are plaited and stitched closely for a tight rigid structure, with minimal gaps for light, air.

In coiled structure C: the coils are concentric circles (symmetrical) as opposed to the previous examples whereby the coils were spiralling out from a centre. In this case the binder needs to be stronger than the foundation as it is carrying the entire load.

### IN ARCHITECTURE:

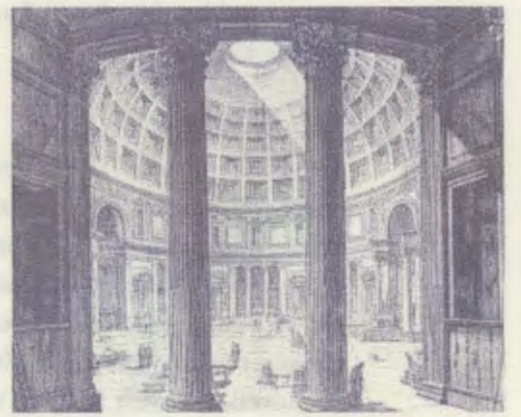
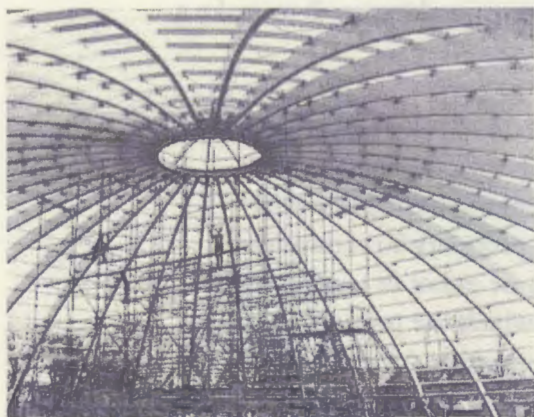
Structural system: These are form-active structures, meaning that all of the structural elements work as one within the structure, all elements are inter-dependent. If one element in the structure fails, then the entire structure is at risk of tumbling.

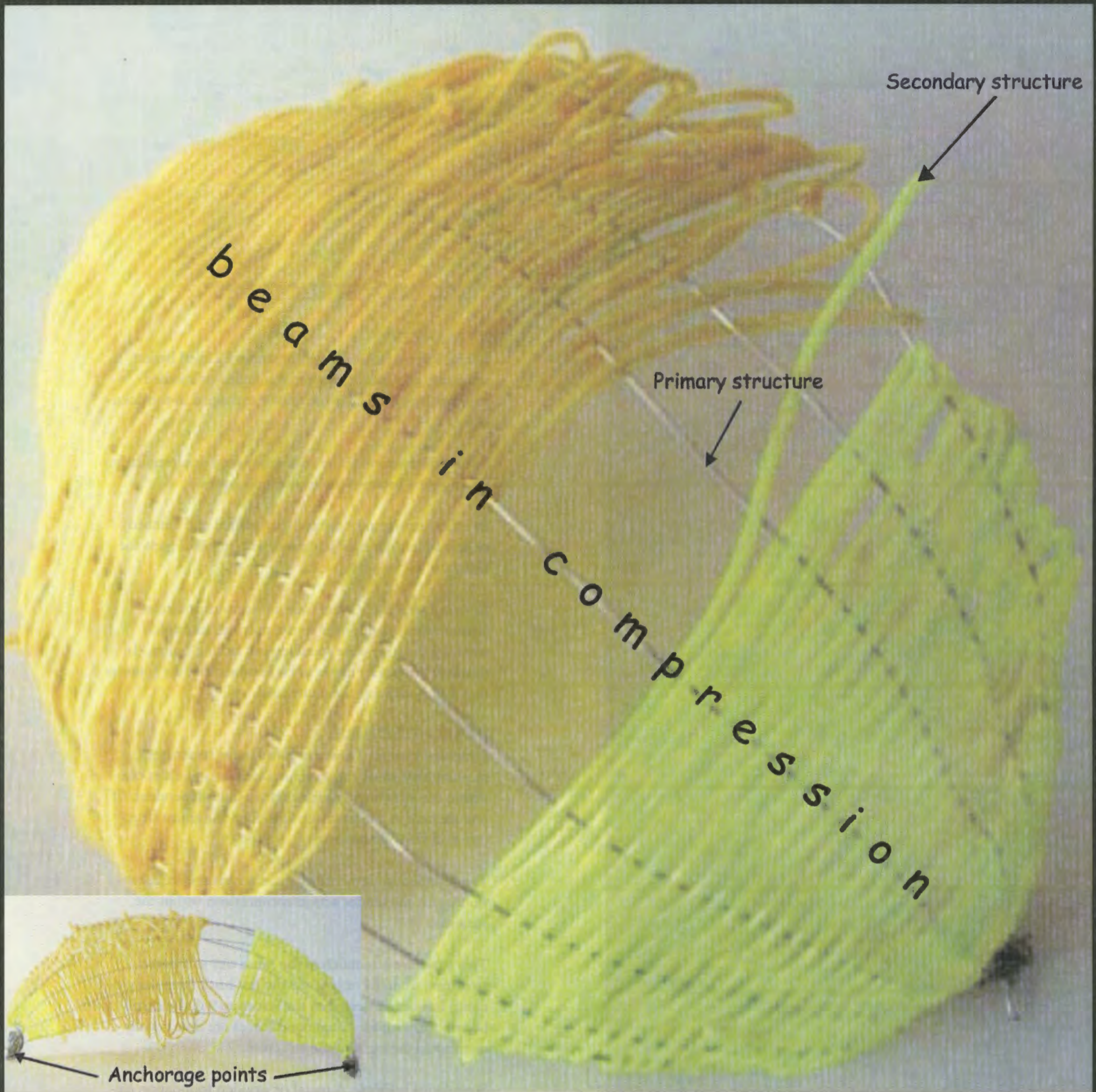
The foundation elements of these structures act in tension whilst the binder acts in compression within the structure.

This structure acts much in the same way as a dome structure; whereby only when the last brick (singular element) has been inserted to the structure will the dome be self supporting. Weight and forces are thus equally distributed throughout the structure.

Speculative building: A metal or wooden foundation element, held in place by a strong concrete or metal binder.

The Sports Dome in Perth, Scotland, is built in a similar structural system to that of these coiled structures: pictured below left; a series of arch elements in compression are used to produce the framework for a dome, leaving a gap (with a ring beam) in the centre to make an oculus. The Pantheon in Rome (2nd century AD) with its use of coffers or voids is another example of this structural system.





## 2. 'THE GONDOLA'

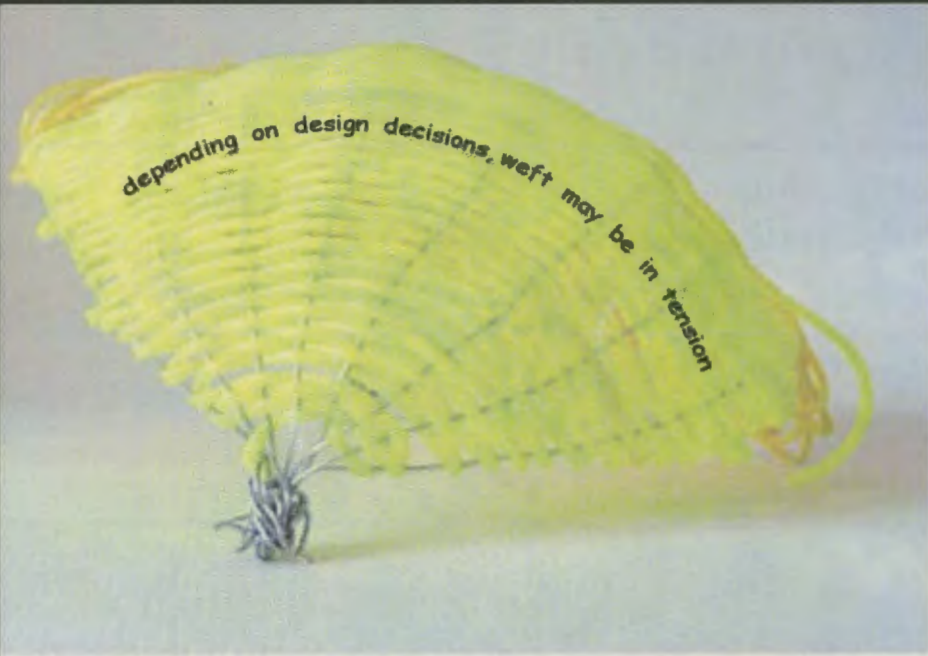
### IN BASKETRY:

This is a wickerwork structure whereby the warps are held in position at their beginning and end, the weft is woven in a straight forward way between these warps. An alternative would be that the wefts are twined (twisted) to make a tighter weave.

### IN ARCHITECTURE:

Structural system: The primary structure of this shell-shaped abstract model is the curved beams (the wire element in the model). The secondary structure (the yellow weft in the model) may be either in tension or at rest depending on the way in which the primary structure is fixed to the ground. If the primary structure is well anchored, the weft will not need to carry any of the tensile load. If the primary structure is not entirely anchored (for reasons of aesthetics or engineering), the weft may

carry some of the primary structures loads through tension (the structure will become form-active, work as one structural element). The middle primary structure beam in this model is straight, whereas the rest of the primary beams to either of the middle ones side are tilted and are therefore in more need of anchorage than the middle beam which is relatively stable. The more tilted the curved beam, the more anchorage support it will need. The above picture shows the anchorage point of the primary structure; these will have to be massive, strong, heavy elements which are able to take giant compressive loads. This structure would be more stable if there were 3 or 4 such anchorage points upon which the structure can balance.



**Speculative building:**

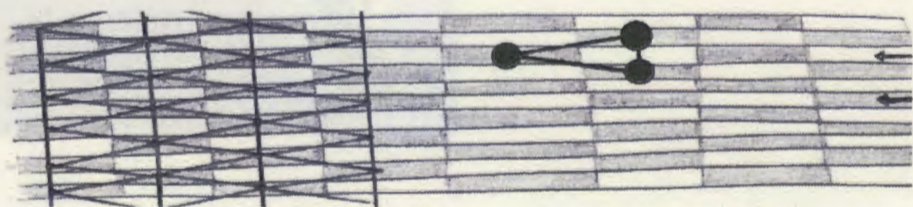
For a roof structure of the scale of Harrington square (80 x 80 m) It was advised that the primary structure be made of a steel castellated beam which is firmly bolted within a heavy concrete foundation on either end. The weft (secondary structure can be built out of metal cabling, tubing, plastic piping or industrial rope. To enclose the structure; roof panels (of glass, plastic, or metal) may be attached to the secondary structure on the underside or over side of it. The roof panels would be triangular shaped, attaching themselves at the three corners to the highest parts of three adjacent rows of the secondary structure. The roof panel triangles will get exponentially smaller in height as they are positioned closer to the foundations, the base of the triangle will stay the same throughout the structure.



Exhibition hall of the CNIT in Paris, here the principle structural element is a self supporting reinforced concrete shell. In this building of similar structural system to 'the Gondola', the reinforced concrete shell is anchored in three places for structural stability.

Macdonald A. (2000) Structure and architecture, second edition, Oxford; architectural press, p. 2

Three adjacent highest points in the weave and the resulting shape of the roof panel



**Pattern in the weaving:**

The shaded rectangles illustrate the part in the weave that tucks down, whilst the white rectangle illustrates the part in the weave where the weave bends over the warps (or stakes). The triangular roof panels need to be attached at the highest point of the over bend.

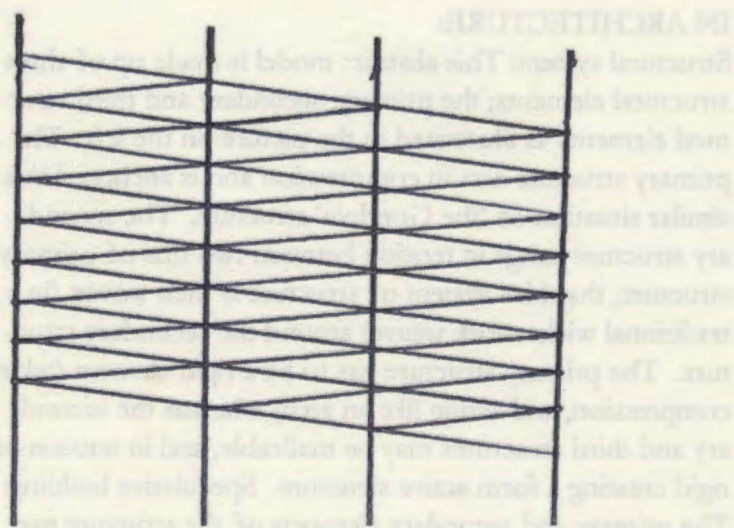


Illustration of an even pattern of roof panels which may be attached to a wickerwork woven structure such as this one (this pattern will be distorted by the double curves in the building)

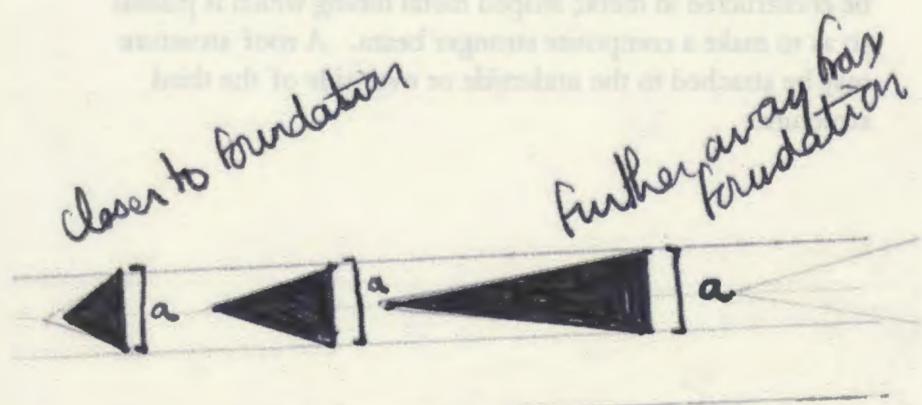
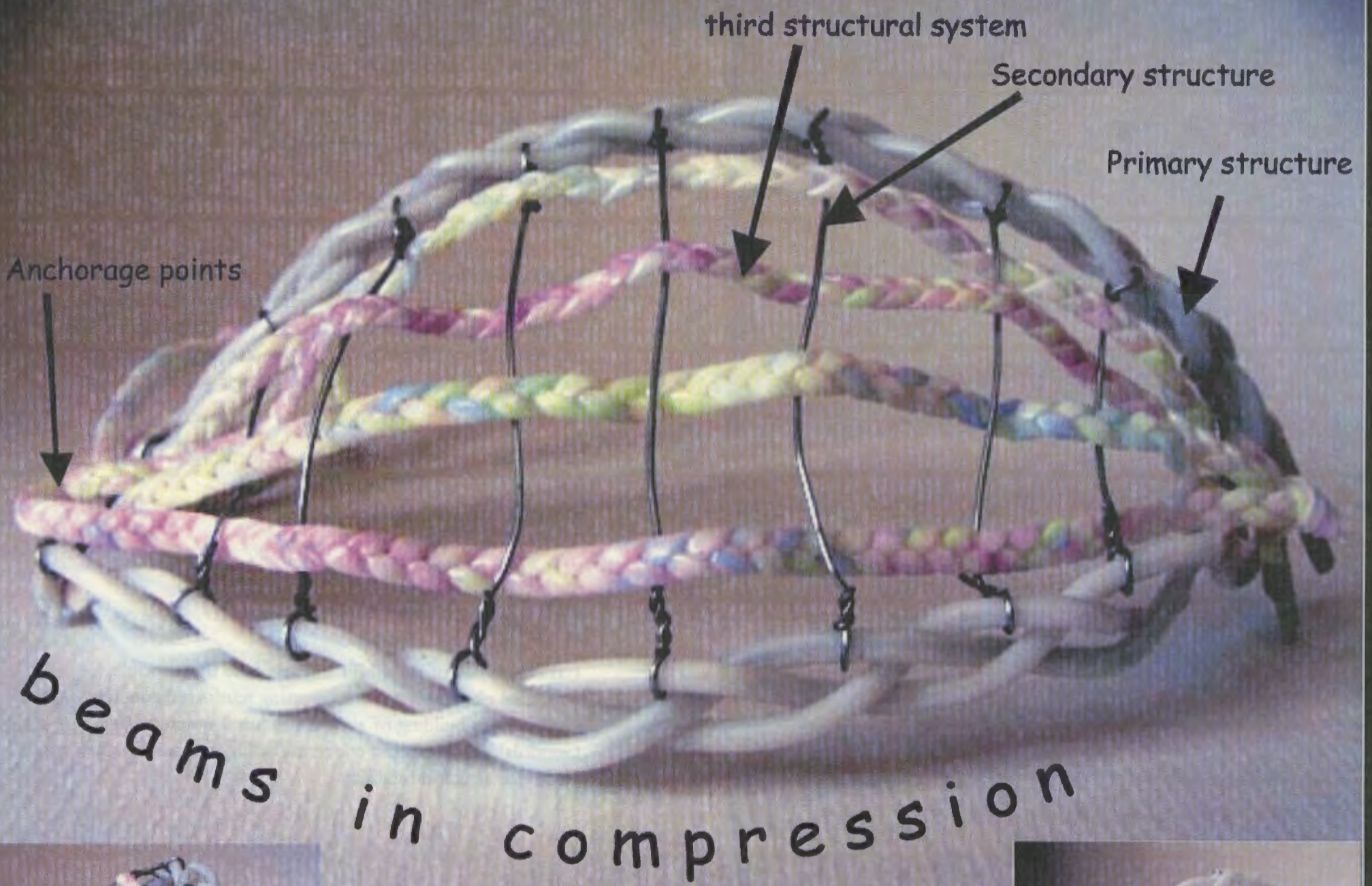


Illustration demonstrating the exponential growth effect on the triangle shaped roof panels. The further the panel's position from the foundation (the tightest section in the weave), the longer the height of the triangle. Similarly if the roof panel is attached onto a tight section in the weave, the height of the triangle will be shorter. The dimension: a, as indicated in the diagram, remains constant throughout the structure. This dimension (a) is equal to three times the diameter of the wefting material onto which the panel is attached.



beams in compression



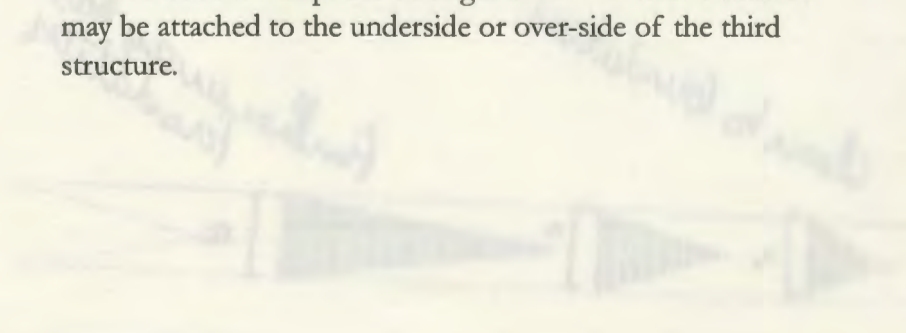
### 3. 'MAMA AFRICA'

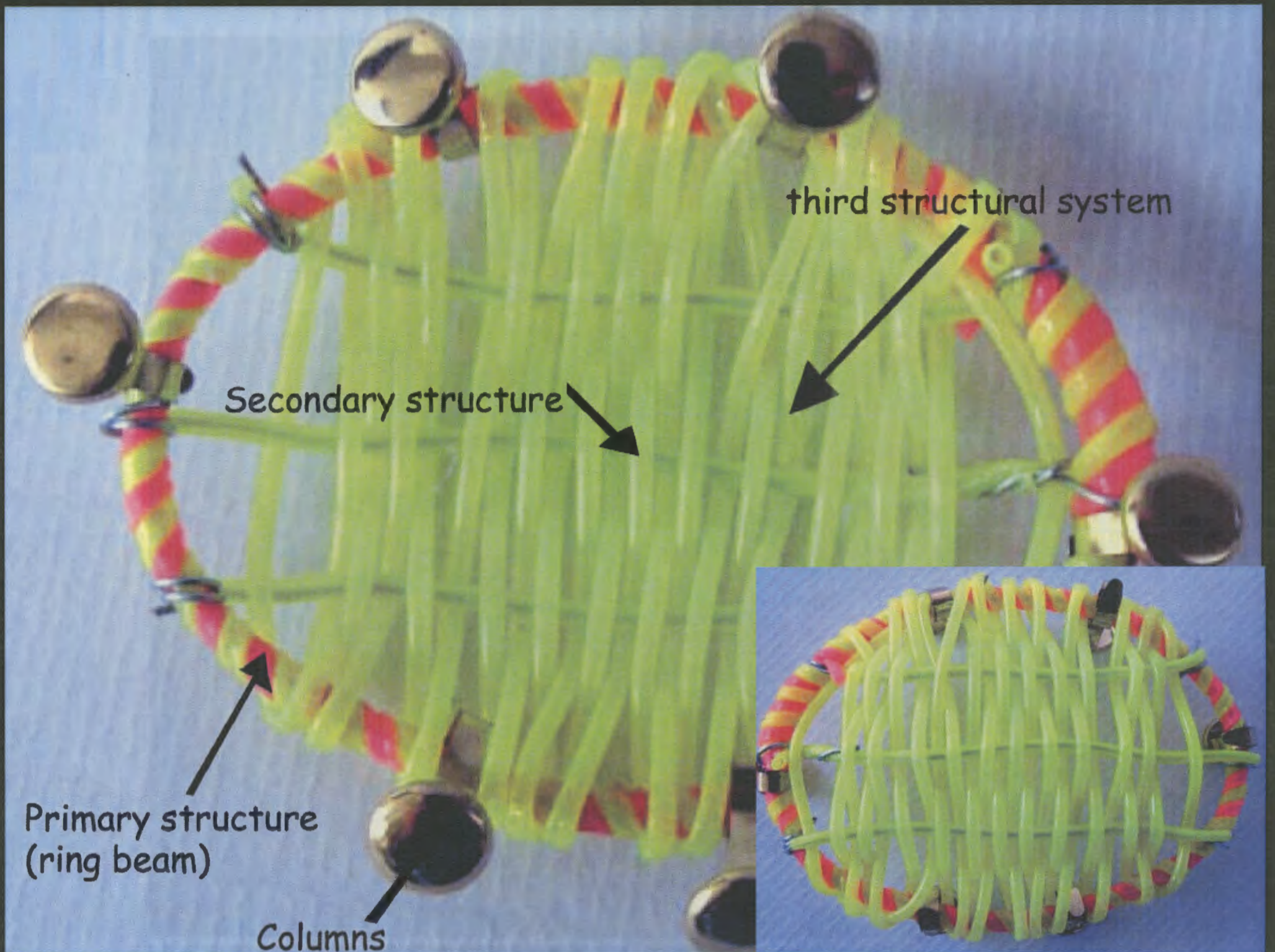
#### IN BASKETRY:

This is perhaps a section of a structure comprising of primary and secondary structural elements; The primary (large) braids make a firm frame within which a simple wickerwork fill is woven. This is an example of a frame fill structure as well as wickerwork. In this structure the wefts are made up of smaller malleable braids, the warps are made up of rigid non-braided element. In this structure the wefts need not be structural, they can be infill.

#### IN ARCHITECTURE:

Structural system: This abstract model is made up of three structural elements; the primary, secondary and third structural elements as illustrated in the picture on the left. The primary structure acts in compression and is anchored in a similar situation of 'the Gondola' structure. The secondary structure hangs in tension between two ribs of primary structure, the third system of structure is then woven (in a traditional wickerwork weave) around the secondary structure. The primary structure has to be a rigid element (taking compression, and acting like an arch) whereas the secondary and third structures may be malleable, and in tension or rigid creating a form active structure. Speculative building: The primary and secondary elements of the structure may be constructed in metal; shaped metal tubing which is plaited so as to make a composite stronger beam. A roof structure may be attached to the underside or over-side of the third structure.





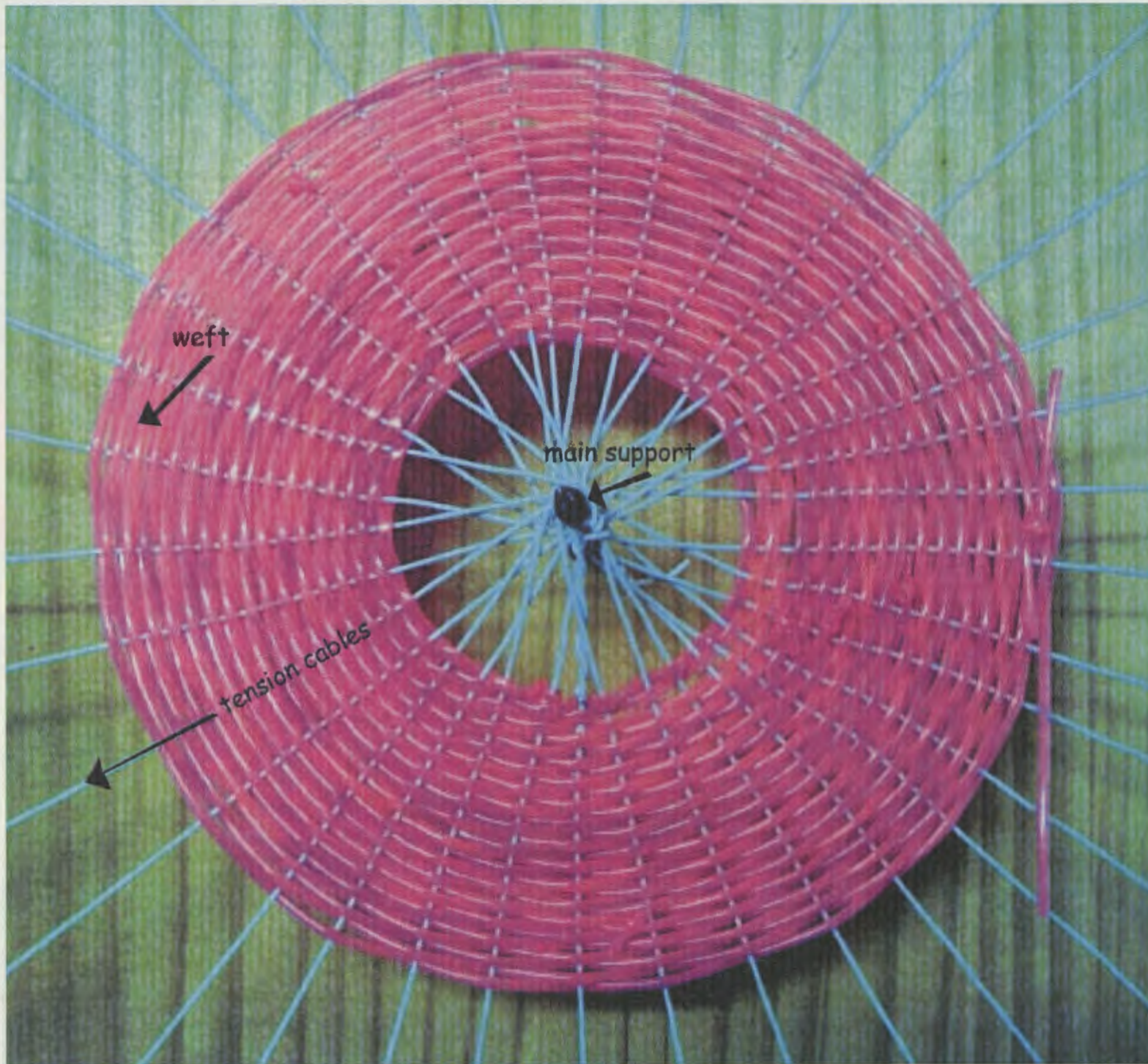
#### 4. 'RING BEAM PLAITED STRUCTURE'

##### IN BASKETRY:

This is a plaited structure within a structural ring. Both elements in the weave can either be equal in weight and dimension, or the one element may be stronger than the other allowing for a contrast in light and heavy structural elements at this level.

##### IN ARCHITECTURE:

Structural system: A giant ring beam rests on columns; the ring beam and the columns are acting in compression. The secondary structure may be either entirely in tension or in compression and tension depending on the desired aesthetic effect and material used. If the secondary structural element is in tension, the third structural element will equally be in a state of tension (the structure hanging from the ring beam is thus form active). If the secondary structural element is in compression, the third structural element is relieved of some of its structural work. Speculative building: The columns are built in concrete with a steel ring beam. The plaited elements are either equal (made of the same material and size), and in a lighter element such as steel cables, rope, plastic tubing, piping... or the secondary structural element may be constructed in steel to allow for a lighter third element.



## 5. '1 POINT TENSION STRUCTURE'

### IN BASKETRY:

This is a classic circular wickerwork structure. The warps begin at a singular raised point from which they radiate outwards. No additional warps have been added to the structure so the wefts spacing becomes increasingly wide the further from centre. Due to the directional lines of the warps, this type of structure creates a strong visual pull to the centre of the structure (where the weave is tighter).

### IN ARCHITECTURE:

Structural system: This structure is made up of a main central column or post which acts in compression. A number of smaller posts are positioned in a

circle around the main post. A series of secondary structural elements are secured from the central post (where they are all attached) to an outer post (where each post receives one of the secondary structural elements).

The central column is at a higher level than the outer columns; the secondary structure is thus pitched at a certain angle. The secondary structural elements all act in tension from one column to the next. If a ring beam is used on the outer columns; the compressive load on the columns will be lightened and therefore the columns may be slenderer and thus more economical.

The outer columns would have to be very strong so as to resist the overturning moment. This is however an aesthetic decision as the structure

may function with or without the ring beam. In this model for instance there is no ring beam; the columns are taking all of the loads. The ring beam will act in compression.

This structural system works best as a symmetrical, even structure. Gaps, cuts and extensions in the structure are possible; the principle being that you must compensate for what you take away from the structure by altering some of the elements.

The higher the pitch of this structure; the less tension will be exerted on the secondary structure which in turn affects the ring beam and outer columns. A higher pitch may result in much cost saving as it is a much for form effective structure.

#### Speculative building:

The main central column should be made of something very strong and heavy such as reinforced concrete. The outer columns can be made of steel or concrete. Steel cabling (10mm diameter) may be used evenly and often to form the tensile roof structure, within which the weft element is woven. The weft is the lightest element in the structure. Roof panels (to enclose the space) may be fixed to the highest parts in the weft on the upper or under side. These roof panels will be triangular shaped, all with the same breath dimension of 3 x the weft diameter, but with exponentially increasing height towards the outer rim of the structure.

There is the opportunity in this structure to have some spaces fully enclosed, whilst other are partially enclosed or open. This 'building' can change according to the weather and seasons.



## **BUILDING DEVELOPMENT**

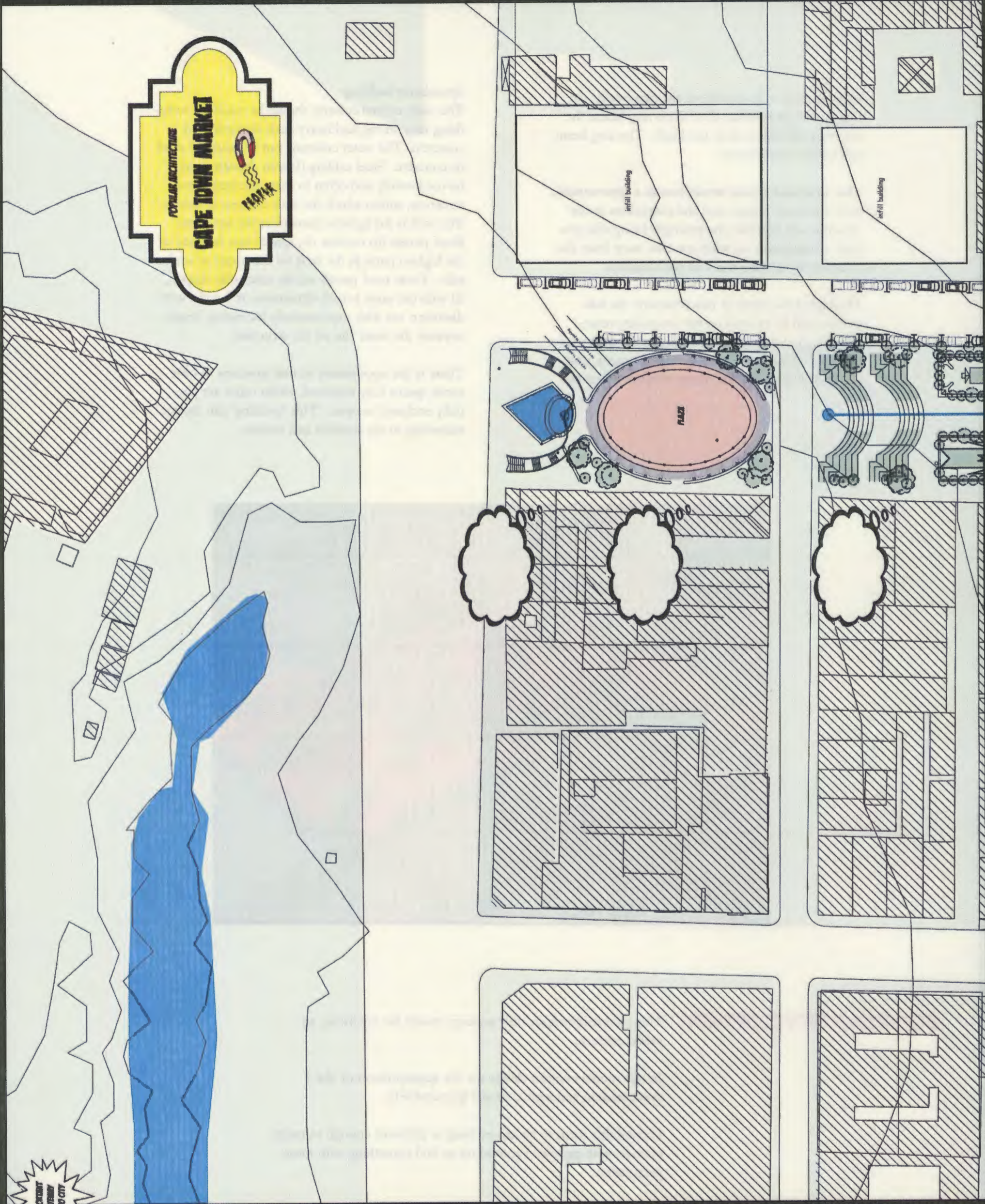
This picture shows an early concept model for my thesis, an urban canteen.

In this model one can clearly see the appropriation of the 1 point tension conceptual model (pictured left).

I found this form to be not exciting or different enough to really connect with people. I moved on to find something with more personality.

The following 3 pages are drawings for a building which followed on from this model. still with the concept of weaving a main superstructure. The landscaping and forms came from a blend of Modern Cape Dutch and Neondebele. I also found this unsuccessful, it was not catchy enough for the public, not original nor rooted in Cape Town and Cape culture. It was at this point that I decided that I must find one overriding strong concept for the building rather than blend and mix match elements.

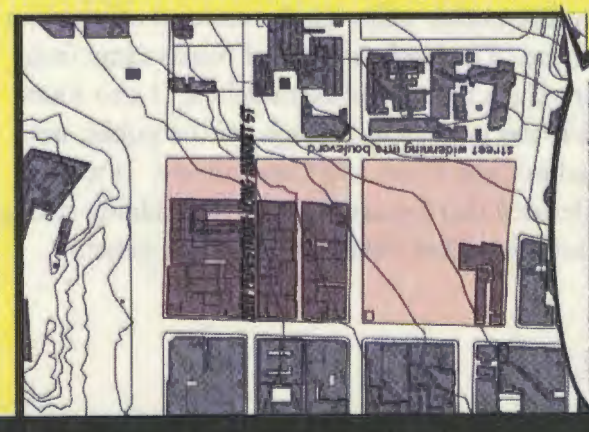
POPULAR ARCHITECTURE  
**CAPE TOWN MARKET**  
 MARKET



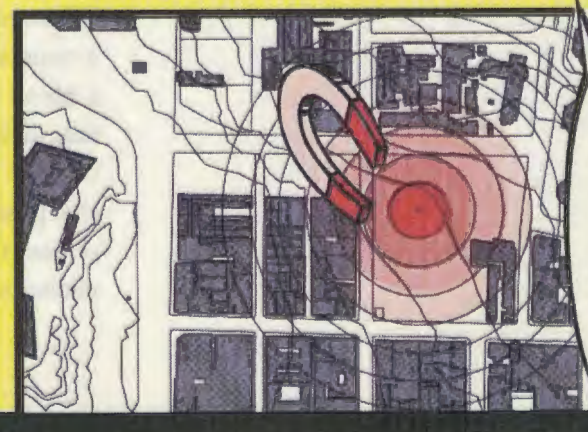
DISCONNECT  
 GATEWAY  
 INTO CITY



SITE: 4 PLOTS  
 RED - ZONED FOR BUILDING  
 PINK - ZONED AS PUBLIC OPEN SPACE



MAKE MORE PEDESTRIAN ENVIRONMENT



1 MAIN SPACE OF AGGLOMERATION  
 ATTRACTING PEOPLE INTO ONE SPACE



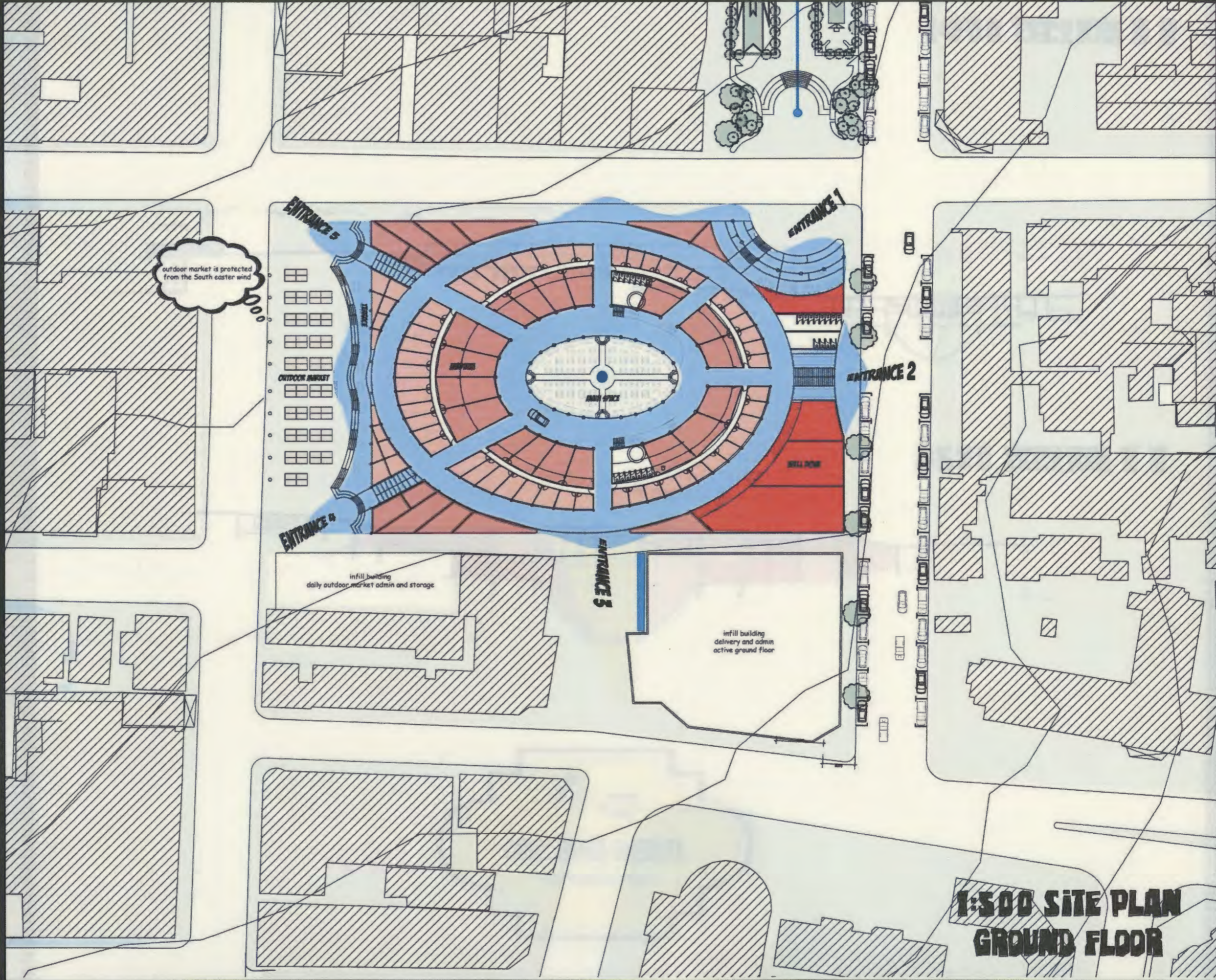
ACCESS TO MAIN SPACE



SPACES OF DIFFERENT SCALE AND CHARACTER  
RAW, MEDIUM, WELL DONE



MAIN CIRCULATION DIAGRAM





**REIBEN NDWANDIWE  
MASTER ZULU WEAVER**



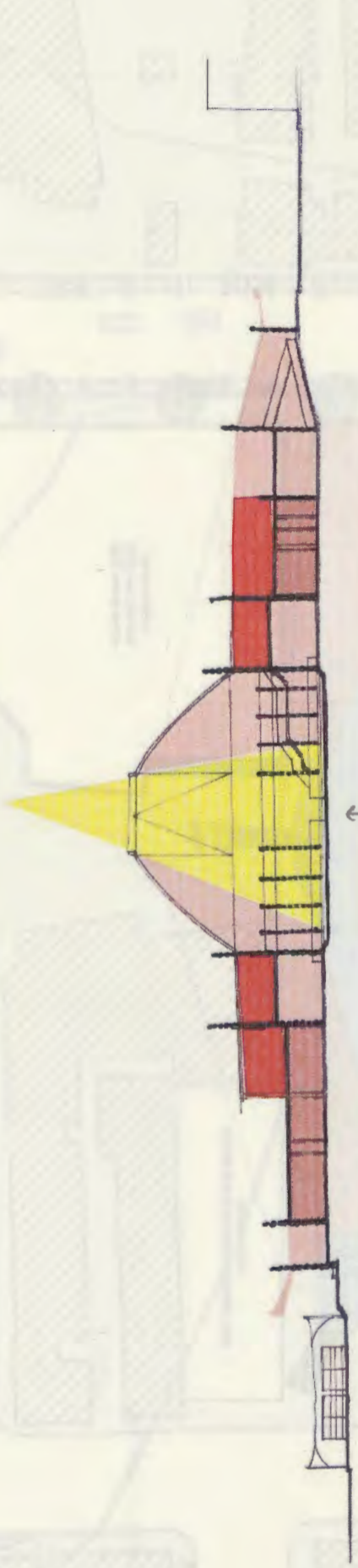
**OPERA CARNIER STAIRCASE PARIS**



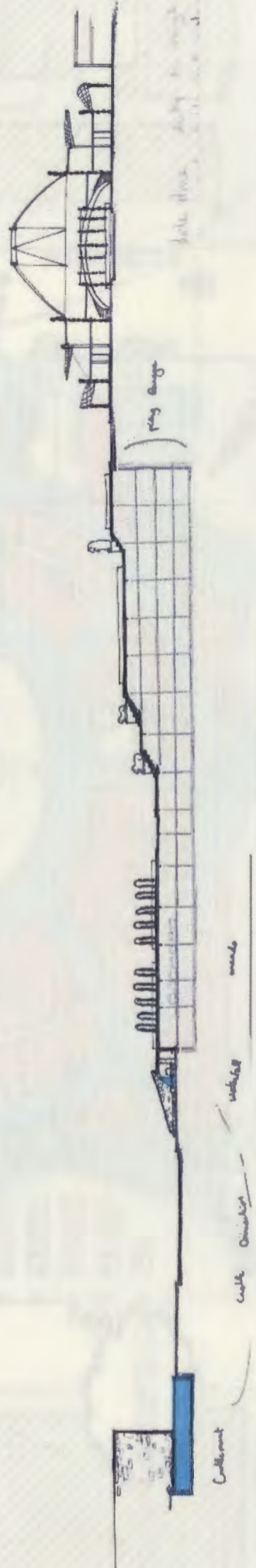
**RHODES MEMORIAL**



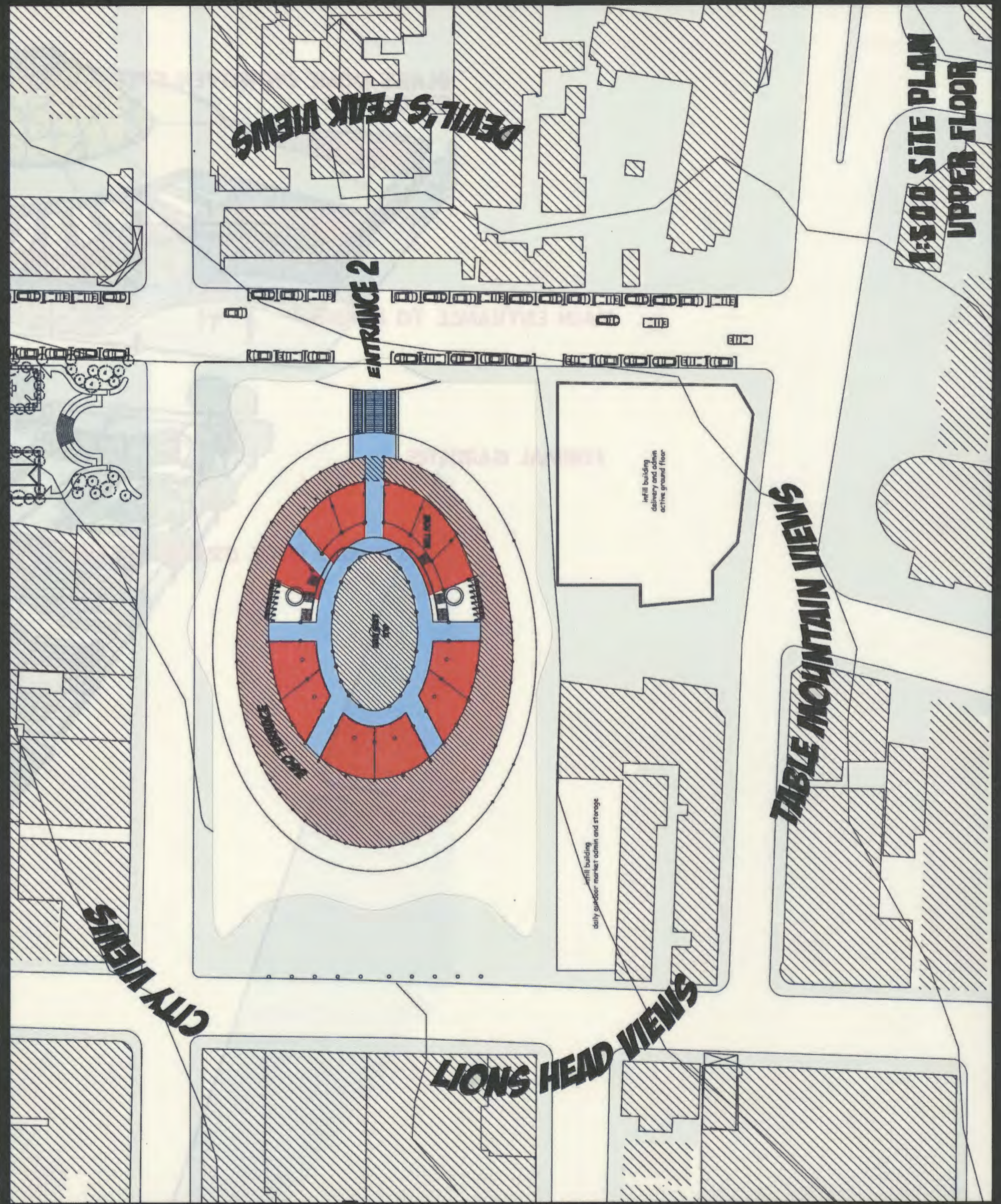
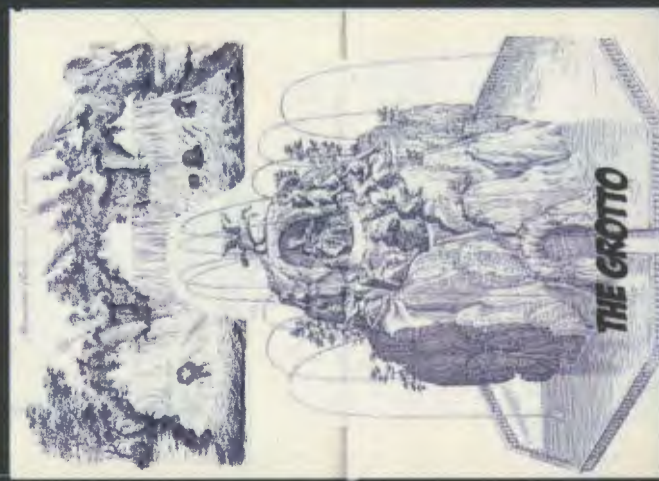
**VICTORIAN WICKERWORK  
FURNITURE**



**1:250 SECTION A A**



**1:500 SECTION B B**

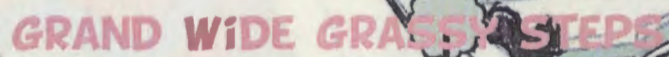


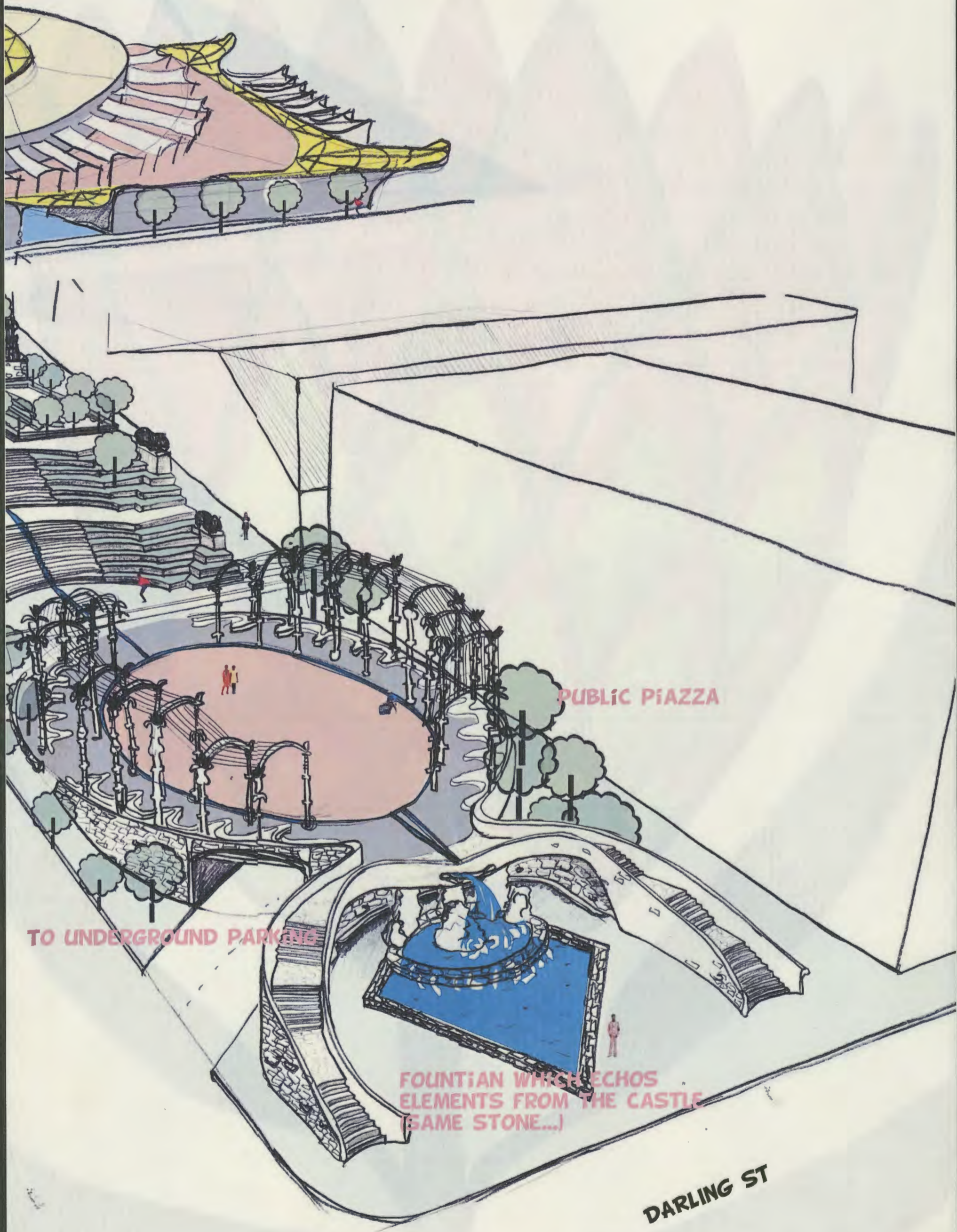
GLASS DOME ON WOVEN STEEL STRUCTURE

MAIN ENTRANCE TO MARKET

FORMAL GARDENS

GRAND WIDE GRASSY STEPS





PUBLIC PLAZA

TO UNDERGROUND PARKING

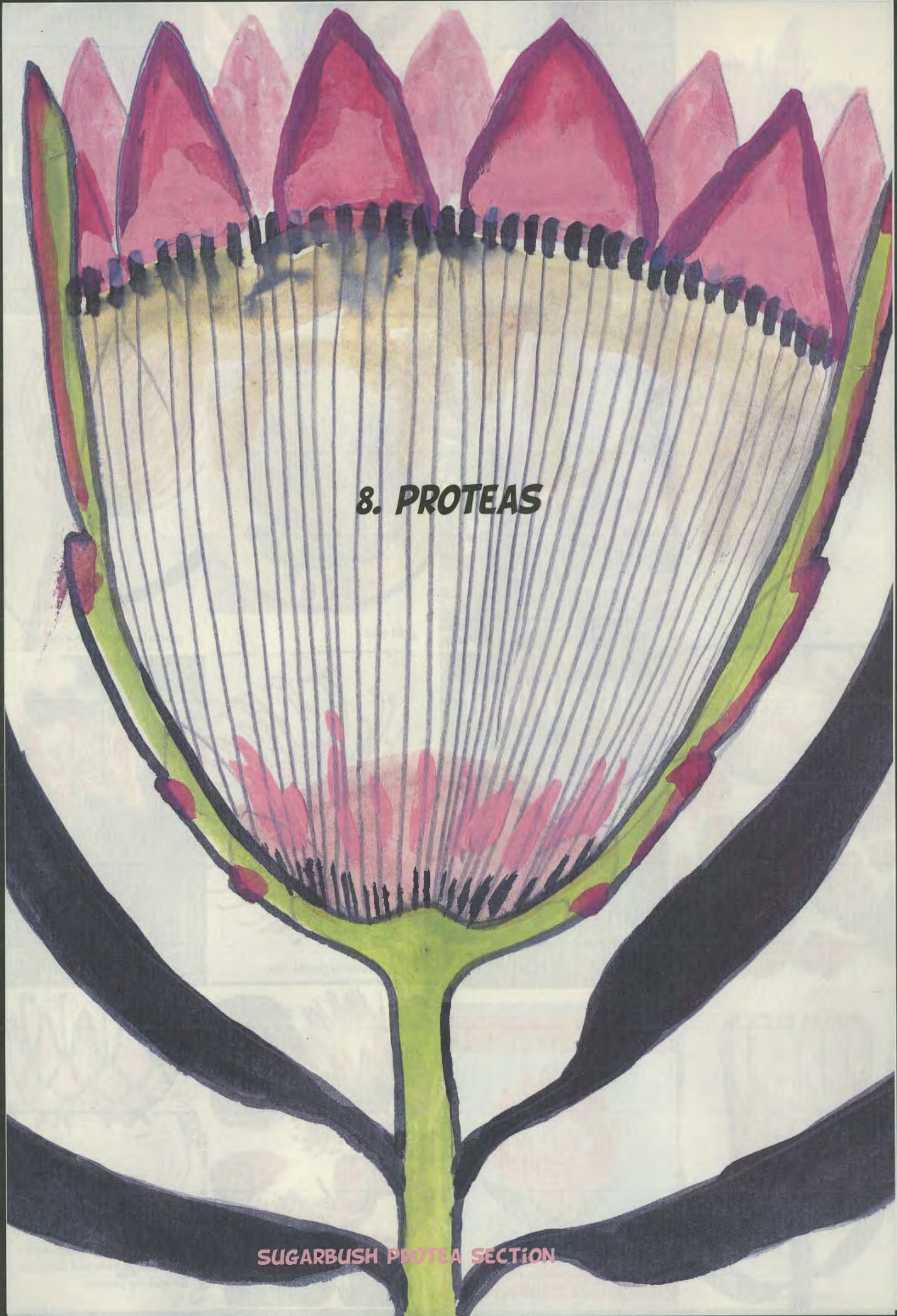
FOUNTAIN WHICH ECHOS  
ELEMENTS FROM THE CASTLE  
(SAME STONE...)

DARLING ST



SUGARBUSH PROTEA ELEVATION

SUGAR BUSH ELEVA.



**8. PROTEAS**

SUGARBUSH PROTEA SECTION



sugarbush protea plan



ProteaCourt Mall in Sandton, artists rendering



from the sketch book



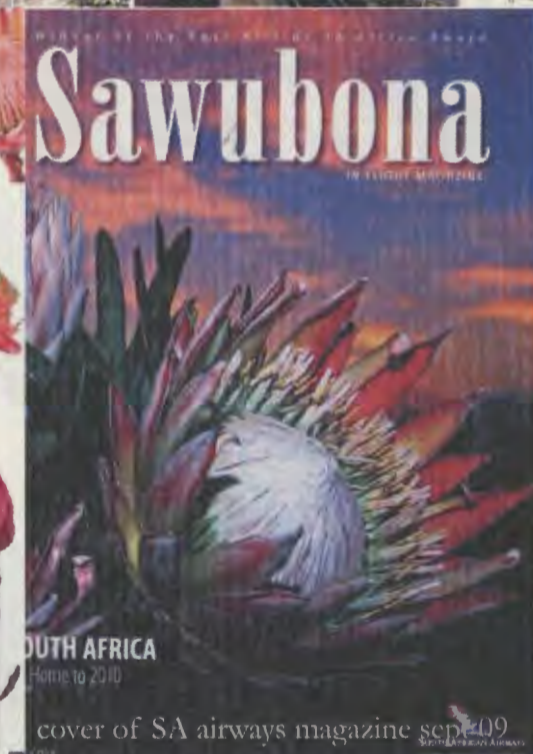
Protea Court mall Sandton city



gold coin



pincushion protea elevation



cover of SA airways magazine sep 09



pincushion protea plan



protea elevation



protea elevation



protea elevation



sketches showing design explorations in section and elevation for making proteas

Protea Court Mall  
by MDS Architects  
to be built in Sandton City  
Johannesburg.

The perfect example of the type of architecture that I do not want to make. There is nothing special about this weak allusion to a protea.

The main difference between this protea and that of the meeting of cultures is that in the case of the meeting of cultures the protea form is uncompromised. the protea is whole and recognisable, thus making it special, unique, original.



## A NATIONAL SYMBOL

Together with the Springbok, the protea is a national symbol in South Africa. The former South African Prime Minister and architect of apartheid, Hendrik Frensch Verwoerd, had a dream to change the then-current flag of South Africa and have in its center a leaping springbok antelope over a wreath of six proteas. This proposal, however, aroused too much controversy and was never implemented. After the demise of apartheid, the ANC government decreed that South African sporting teams, hitherto called "Springboks" were to be known as "The Proteas", although an exemption was made for the rugby union team, who remain "Springboks".

Protea flowers appear in our daily South African lives, from biscuit tins to stamps, vibracrete suburban walls, to beaded versions on the side of the road at any large intersection... These regal flowers have a distinct air of the wild. They act as a reminder of the wilderness of our setting below table mountain.

Over 100 species of proteas exist in South Africa, many of these are indigenous to our country. Cape Town city is thus a suitable place for a protea building being the largest city in the home of the protea; the Western Cape.

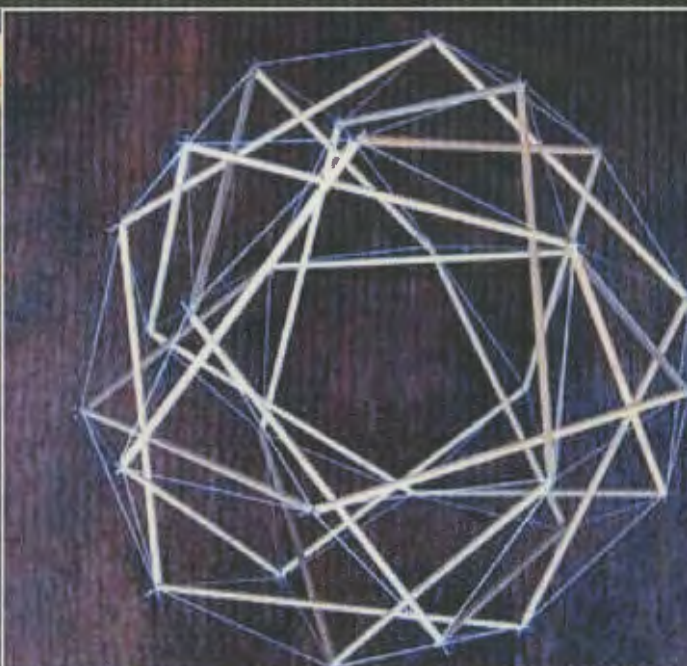
The flower was named after the god Proteus of Greek Mythology who was able to change his shape at will. The first botanists at the Cape named them so as proteas were found in such varying shapes and sizes.

Finally I find the protea an excellent subject from which to make a building as the flower has distinct, repetitive, and beautiful petal structure, lovely proportions and shapes. The dome of the protea could lead to exciting interior spaces.

Coupled with the rounded, naive style of afro-pop (previously discussed); an afro-pop protea market sounds like a positive and original uniquely Capetonian space.



Google Image; tensegrity structure; <http://www.calresco.org/wp/tenseg.jpg>, accessed on the 10th September 09



Google Image; tensegrity structure <http://bobwb.tripod.com/synetics/photos/ztsn.jpg>, accessed on the 10th September 09



Google Image; skylon tower; <http://jcs.biologists.org/content/vol116/issue7/images/large/JCS00359F1.jpeg>, accessed on the 10th September 09

## BUILDING A PROTEA?

### TENSEGRITY

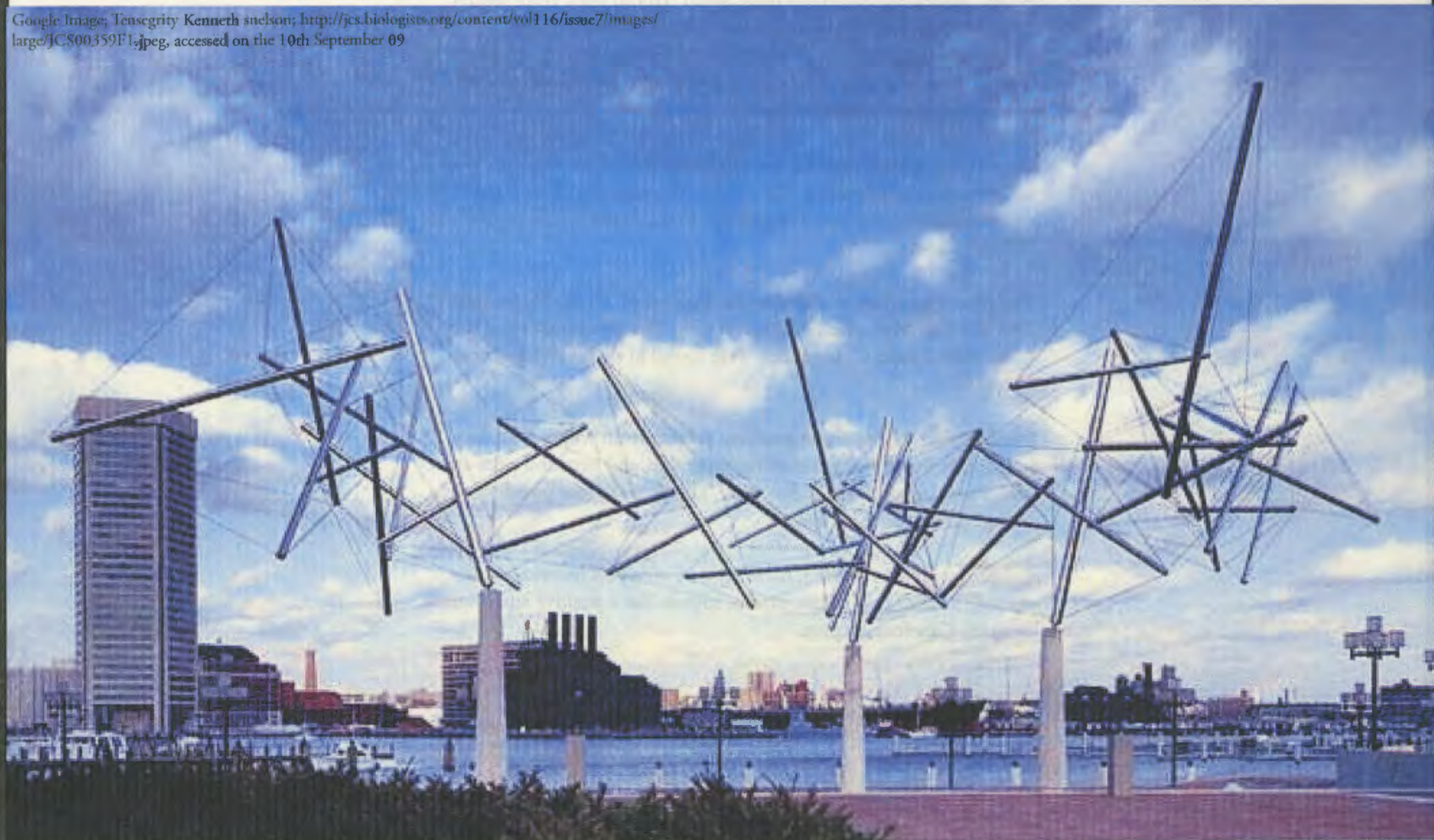
Kenneth Snelson is a contemporary sculptor and photographer whose works, composed of flexible and rigid components, are arranged according to the concept of tensegrity.

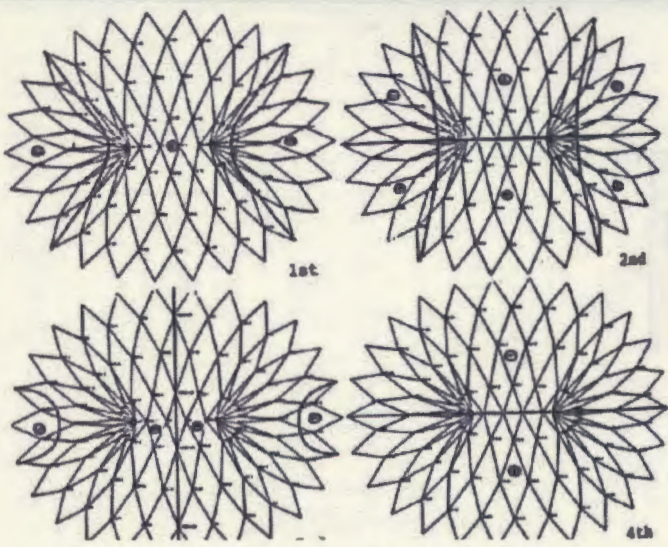
Snelson, a student of Buckminster Fuller claims that Fuller took credit for Snelson's discovery of the concept of tensegrity. Fuller gave the idea its name, combining 'tension' and 'structural integrity.'

The geodesic domes which Fuller popularized are the most commonly known structures whose composition depends on tensegrity.

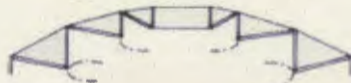
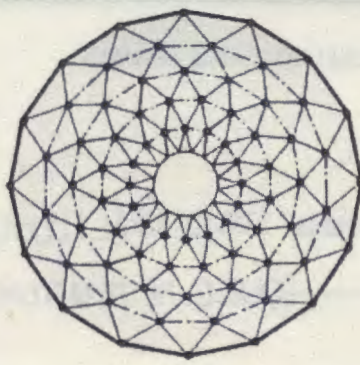
The height and strength of Snelson's sculptures, (image below) which are often delicate in appearance, depend on the tension between rigid pipes and flexible cables. This is achieved through "a win-win combination of push and pull." Tensegrity structures are based on the combination of a few simple design patterns, comprising of structural members in pure compression or pure tension only.

Google Image; Tensegrity Kenneth snelson; <http://jcs.biologists.org/content/vol116/issue7/images/large/JCS00359F1.jpeg>, accessed on the 10th September 09

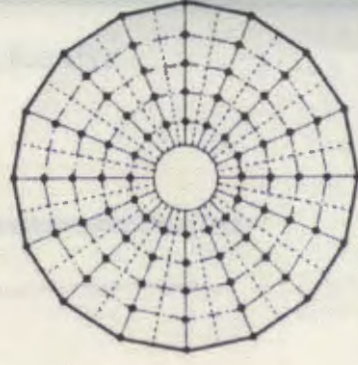




Google Image; Tensegrity structure; <http://www.geigerengineers.com/images/techfigs/roofdiagramfig1.gif>, accessed on the 10th September 09



Fuller's tensegrity dome



Geiger's cable dome

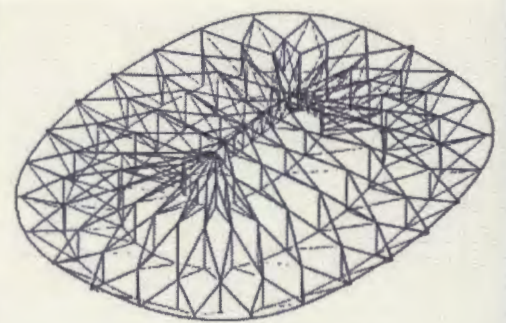


Fig 1. Hyper-Tensegrity Dome

Google Image; Tensegrity structure; <http://www.columbia.edu/cu/gsap/BT/DOMES/SEOUL/sol-31.jpg>, accessed on the 10th September 09

Google Image; Tensegrity structure; <http://www.columbia.edu/cu/gsap/BT/DOMES/GEORGIA/geo-23.jpg>, accessed on the 10th September 09

A conceptual building block of tensegrity is seen in the 1951 Skylon tower (shown above left). The long tower is held in place at one end by only three cables. At the bottom end, exactly three cables are needed to fully determine the position of the bottom end of the spire so long as the spire is loaded in compression. Two cables would be unstable.

Due to the arrangement of rods and cables in a tensegrity structure, no members experience bending moments. This produces exceptionally rigid structures for their mass and for their cross-section. A simple three-rod tensegrity structure (shown above left) builds on this: locally, each end of each rod looks like the bottom of the Skylon tower. The angle between any two cables must be smaller than  $180^\circ$  as seen looking along the rod, the position of the rod is well defined.

What may not be immediately obvious is that all six rod ends are connected to another rod end three times. The structure as a whole is thus sectioned. The structure can only fail if the cables yield or the rods buckle.

(the rods would have to be an exceptionally weak material with a very large diameter to yield before they buckle or the cables yield)

Visual transparency and lightness of material are an important aesthetic quality of these structures.

Kenneth Snelson calls weaving the mother of tensegrity due to the duality which occurs at every crossing in weaving. According to Snelson; the crossing of one object over another teaches us the first lesson about the nature of structure, and plays a vital role in determining how things get connected together.

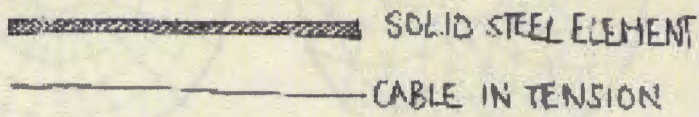
Aesthetically the light, spiky tensegrity structures and domes would make an exciting and appropriate protea dome for the meeting of cultures. (see image below)

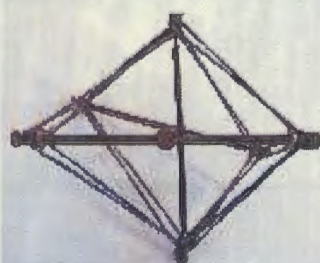
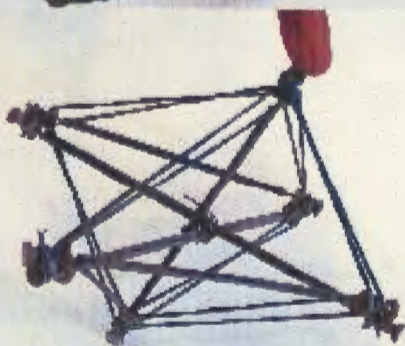
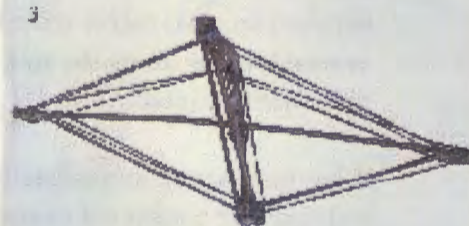
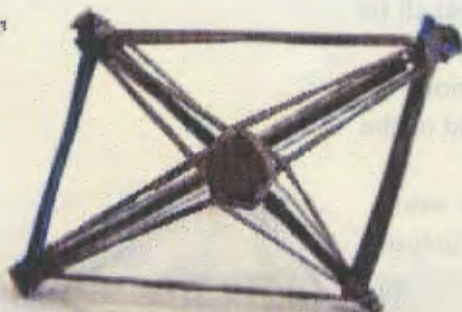
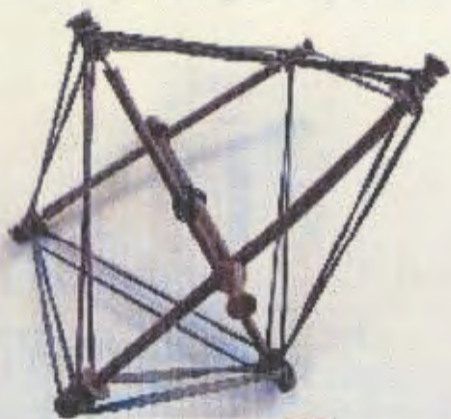
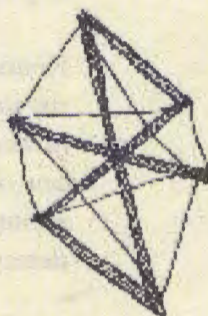
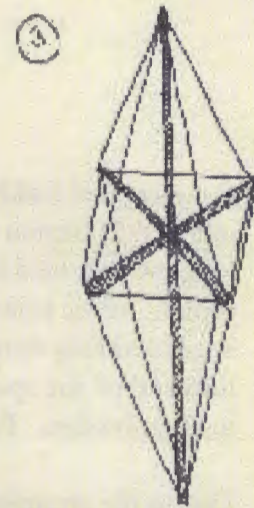
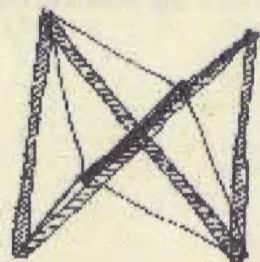
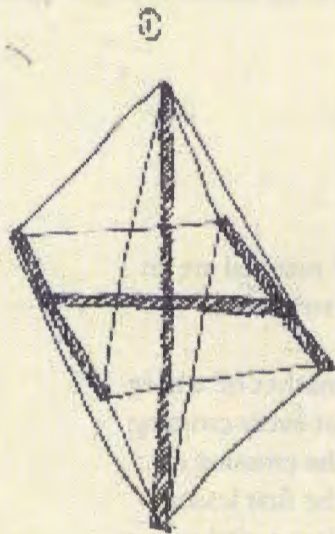
**BUCKMASTER FULLER'S TENSEGRITY DOME WHICH RESEMBLES BOTH WEAVING TOGETHER OF STRUCTURAL ELEMENTS AS WELL AS A BEAUTIFUL PROTEA CROWN**



Google Image; Protea dome; <http://www.columbia.edu/cu/gsap/BT/BSI/TECHFIGS/23/fuller.jpg>, accessed on the 10th September 09

TENSEGRITY EXPERIMENTAL MODELS


 SOLID STEEL ELEMENT  
 CABLE IN TENSION



Using elastics as the tensile cabling element and doul sticks as the rigid steel element, I built 3 prototype tensegrity structures. Number 3 was the most successful model because of its high strength compared to the others as well as aesthetic simplicity. In tensegrity model 3 there are three steel elements, each at 90 degrees to each other (X, Y, Z, planes), the rest is pulled into tension with cabling (elastics in the model). On the following page is a model whereby I have joined up a large number of tensegrity 3 models so as to make up a dome.

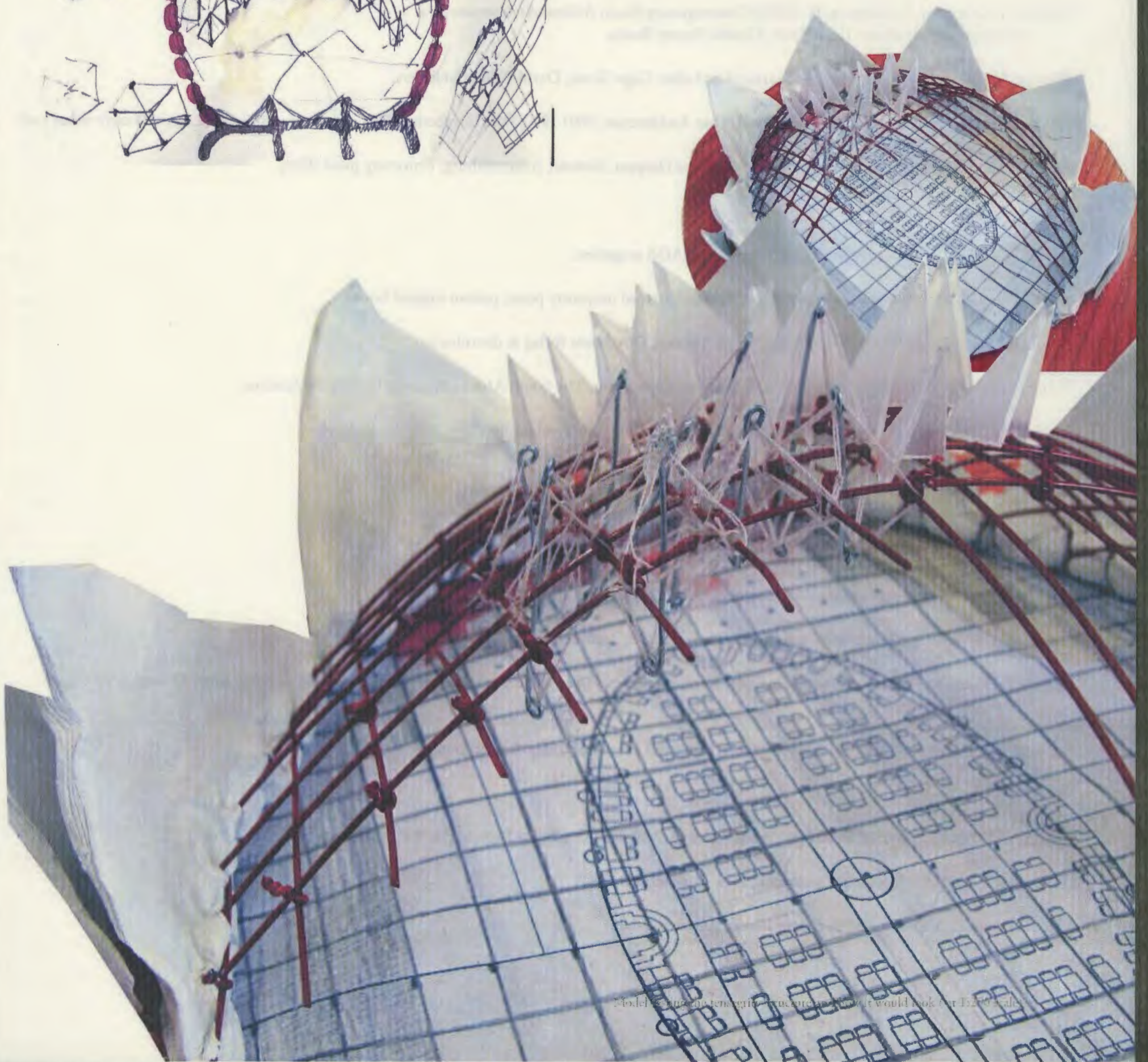
## EARLY IDEAS FOR MAKING PROTEA MARKETS



Light from above:  
Diffused sunlight enters the market large volume, giving the space a heavenly glow

Tensegrity spiky dome structure  
(steel, cables and ETFE structure)

ETFE cushions in a hidden steel structure  
These cushions will give the protea a puffy, rounded, soft, and comical look. The cushions are to be diamond shaped, pointing upwards, so as to reinforce the diamond-shape of the petals.  
To protect the building from vandalism the ETFE cushions will begin at level 1 of the structure 4m above ground floor.  
The steel petals will be bolted to a chunky concrete base. The edges of this concrete base is also to be rounded.



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## **LIFE IS A FLOWER**

by Ace of Base

PoP band from Sweden

*We live in a free world  
I whistle down the wind  
Carry on smiling  
And the world will smile with you  
Life is a flower  
So precious in your hand  
Carry on smiling  
And the world will smile with you  
When every race is run  
And the day is closing in  
I don't care about the world  
I'm living for the light  
Don't cry for me today, ah-ah ah...*

*We live in a free world  
I whistle down the wind...*

*I can not be your judge  
Mr. Jailer is your host  
He's keeping you inside  
And hides you from the world  
No catcher in the rye  
Can help you from yourself*

*We live in a free world  
I whistle down the wind...*

*Please Mr. Agony  
Release them for a while  
Learn them the consequences of  
Living without life*

*We live in a free world...  
[repeat & fade]*