PROJECTOUTLINE

A B S T R A C T

The city of Pretoria faces a multitude of impending changes on a monumental scale involving the city in its entirety. The establishment of Pretoria as the identifiable capital of South Africa and as the intended capital of the African continent has pushed government to revise its plans for the city. The approaching 2010 FIFA Soccer World Cup due to be hosted by South Africa has also presented a unique economic and social opportunity with which to rebuild the city.

Yet high demand for safe housing has resulted in rife developments of sub-standard quality architecture, both in respect of construction build and design with the overruling concern of economy and profit dictating most decisions.

In an atmosphere such as this, concern over the massive changes due to be performed in Pretoria, is growing. This project seeks to find a solution to these two problems by developing a public interface between the professions of the built environment and the general public. This facility will inform the public on all new developments in the city, allowing for public comment and critique and providing resources for the development of critical thinking on architecture amongst the public.

This project aims to develop the city in partnership with its people who will remain to inhabit and use the city long after any international event has ended. To guard against the possible estrangement of the people from their city once alterations have been implemented, involvement of the public during the development stages will ensure the city remains functional and loved by its people.

PROJECTOBJECTIVES

In order to develop both awareness and interest in the built environment by the people living within Pretoria, this project recognises the need to engage with the public realm on several levels to maximise the influence of the facility.

The problem that generated the need for this facility is the lack of a sufficient public interface with the designers responsible for the development of the city of Pretoria. The project thus targets public involvement as the principle design objective in the development of various networks of interaction into the culture of our built environment design.

The solution proposed by this project aims to deal with this matter in a very pragmatic manner through the development and installation of an interface structure with the motivation of reconnecting an understanding through communication between a profession that has isolated itself, and the public domain where the influences of design decisions are felt.

In order to stimulate public awareness in the built environment, the interface will need to access the public domain at multiple levels, as proposed. The following items outline the initial practical concepts to achieve the envisioned public involvement.

M E T H O D S

01_ The Council Headquarters for the professions of architecture, landscape architecture, urban planning, town planning, interior design and quantity surveying as well as the over-arching Council for the Built Environment (CBE) to be moved into the CUBE facility. These representative bodies seek to protect the public interest within the built environment. To locate them within the public interface will enhance the public awareness of such bodies as well as generate a more efficient inter-working relationship.

- **02_** The Built Environment Network will establish enhanced communication between the various governmental public works and planning departments and the private profession of the built environment by combining both into the interface. Urban and town planning, public works and private development of the city can thus be planned and managed in a symbiotic manner.
- **03_** Future Development Plans of the city of Pretoria and surrounding areas will be housed and displayed for public viewing to promote awareness of the ideas and proposals aimed at implementation within the city. Public opinions can be polled and suggestions or reactions to any proposals taken into consideration through the development of city projects.
- **04_** University Study Partnerships with the University of Pretoria will seek to pair Masters and Honours students directly with the planning authorities to give creative input into the future city proposals. Designs undertaken by the students will in return be founded on an informed, practical and reliable base.
- **05**_ The Education Network seeks to established an appreciation for culturally significant and historical architecture in the education process of learners in primary and high schools. Excursions to the CUBE facility will aim to develop an understanding of the practical and theoretical considerations in the profession of the built environment.
- **06_** Construction Methods area will give visitors to the building a practical insight into architectural practice and the physical considerations required in the field. This will connect with the Education Network and enable school children to learn to build and develop an interest in construction. University students in their first or second year of study will explore architectural thinking through construction of either historical or contemporary architectural elements such as groin

vaults or tent tension structures. These projects will form part of an ever-changing public display.

- **07**_ A Research and Information Hub for the Built Environment will be created in CUBE to archive historical and contemporary architectural planning theories and works in a library from which planning professionals and students can learn. Scale models and working drawings will be available for perusal.
- **08_** The Historical City Network will consist of a network of publicly displayed markers throughout the city, forming historical pathways in a connect-the-dots fashion, indicating historical and culturally significant buildings in the city. These networks are seen as an aid in generating awareness in the public and become informative pathways through the city for visitors and tourists to generate an understanding of the historical context of Pretoria.

DESIGNOBJECTIVES

Architecture, as seen by the author, remains the timelessmannerinwhichastructure imparts experience to its user. No definable element or composition can be isolated and identified as 'Architecture', for the presence of architecture is created through the connections and inter-relationships between smaller, individual parts which equate to something greater than the sum of the elements. Architecture is the spirit which connects us to the habitable voids we pass through.

It is this idea of architecture that this project seeks to promote amongst the public. Presently there exists a mystical distance between the profession of architecture, including to some degree the entire built environment industry, and the general public. Architects and building designers have as a result begun to see a shift in the development and construction processes of the industry whereby

property developers have begun to disassemble the role of the architect amongst various other professions. Due mainly to the mysterious nature and indistinct definition of what role the architect fills in the public eye, this has been allowed to continue. The resultant quality in architecture leaves something to be desired through the lack of synthesis that would ordinarily be provided by the professional architect but has now been disseminated amongst the other professions.

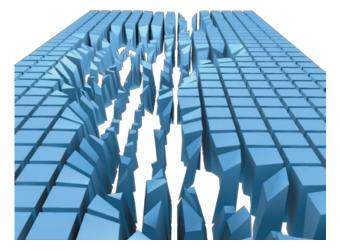
A single work of architecture can change the way people think; this cannot be denied. In a time where the dogmatic concerns of economy and cost determine virtually all aspects of architectural designs, this project returns to focus on architecture as experience. The final design will attempt to ignite passion and inspiration in the people of the city, leading by example and crystallising the idea that functional buildings need not consider purely financial objectives.

The three core design objectives are presented in order.

- **01_**Create a multitude of variations of spatial experiences through the structure to stimulate the visitor.
- **02_**The permeability of space must remain readable or made as tangible as possible.
- **03**_The physical structure must observe economical issues yet also allow the variations of experience sought for.

The three ideas presented here are possibly best understood through the principle conceptual image which identifies the regular, economical structure, the variation of spatial experiences and the permeating nature of space through structure.

Fig.1_01.Concept image 1



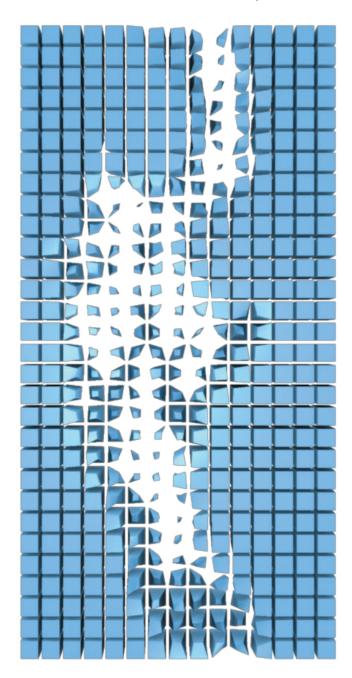


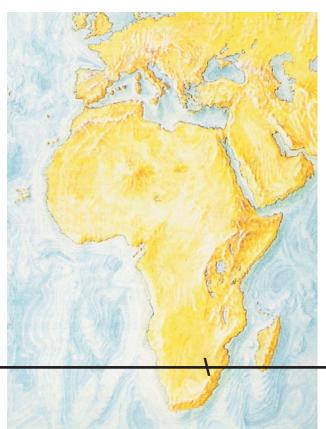
Fig.1_02.Concept image 2

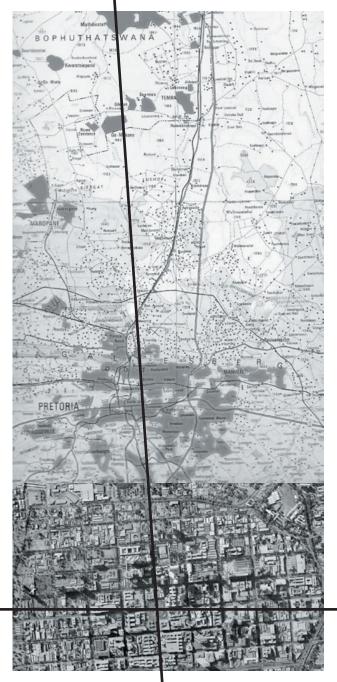


C O N T E X T

The chosen city within which this project operates is Pretoria, the capital city of South Africa which can be found at the southern most tip of the African continent. The co-ordinates for Pretoria are 26° south, 28° east, locating it in the 'highveld' or Northern Steppe climactic zone.

Fig.2_01.African map, Readers Digest, 1984 Fig.2_02.Pretoria City map, Readers Digest, 1984 Fig.2_03.Aerial photograph of Pretoria City





SOCIETALCONDITIONS

Pretoria has seen a vast number of changes to the way the city operates since the end of apartheid in 1994. Since then the city's structure has been in constant fluctuation due in part to the new activities being brought into the city with the large number of people coming to Pretoria to seek employment and a better life.

The outlying settlements of Soshanguve. Atteridgeville and Mamelodi as well as a multitude of smaller "squatter camps", are slowly becoming more connected to Pretoria through the upgrading of infrastructure. Large numbers of people commute between these settlements and Pretoria daily since these towns were established by the apartheid government to act as "sources of labour" (Fisher, 1998:163). As an indication to the numbers being spoken about, "In 1983, they recorded 400 000 African commuters were focusing on the Pretoria core" (Fisher, 1998:163).

This number will have changed since a large percentage of these people chose to relocate to the city to be closer to their employment. The influx of outer lying populations into the Pretoria area has had the effect of an increasing crime rate, shortages of housing and lack of employment.

In response to this, a significant number of Pretoria's residents have chosen to move out from the city, extending development of the city far into the eastern suburbs, mainly to escape the apparent rampant increase in crime. The shift in population movement together with the lack of safety in the neighbourhoods, has generated a demand for high security, high density housing. The prolific establishment of these "lifestyle estates" is a direct reaction to these social conditions which explains the reason for their success. Estates now can be found throughout the south-eastern corner of the city, extending off to the east and southwards towards Centurion.

Centurion itself is comprised mostly of these 'security

estates' where a working population resides between commuting to either Pretoria or Johannesburg. As can be seen from the articles in the previous section, there are massive plans to establish Midrand, the relatively undeveloped area of land between Pretoria and Johannesburg, as the housing centre for the two major cities. The development focuses on the large scale erection of housing estates which have grown to incorporate golf courses, wildlife sanctuaries, spa facilities, shopping malls and gymnasiums. The increased size and diversity of the estates has two immediately recognisable consequences. Firstly, the erection of secure, impenetrable perimeter walling around estates on this larger scale will prevent any kind of movement other than vehicular occurring in the area. Pedestrian routes between suburbs, neighbourhoods and houses will cease to exist. Secondly, the increased diversity within these estates will reduce the reliance of the user population on the surrounding areas, possibly to such an extent that the only time residents may ever leave the estate will be to go on holiday. Whilst this aspect may still remain a future vision, it does further highlight the problem of a self-imposed segregation.

The ability of a people to use their cities and suburbs depends on access. Restricting access will only alienate the people from parts of their own city, reducing the effectiveness with which a city can serve it's people.

Expansive developments outside of the city centre require significant amounts of infrastructure to be put in place in order to connect with the city's services. In contrast, empty spaces within the city already have connections to required services and are far easily connected if not due to the extensive framework of services within the city already.

These are the social forces and problems the project seeks to tackle through its establishment. In terms of the pragmatic concerns of functionality and site, residual space in the city will be targeted for development as the project location. Through the



facility, a greater understanding of the benefits of our city as well as the possible problems faced with its continued expansion and current development trends, is sought.

EXISTINGFACILITIES

Architectural education in South Africa remains an exclusive field which one can only access through the universities and technical colleges found in the main cities. The general public do not have a way, other than texts in public libraries or exhibitions in galleries, to access the fields of the built environment. Naturally if there is interest, an uninformed person can educate themself using these sources but this is the exception. Indeed the problem presents itself in attempting to inform people of their city without requiring dedicated interest for their part.

At present there is no such place or facility for this to occur within the public realm - were the architectural departments to be opened to the public perhaps this would suffice. But this is unlikely to ever happen being the privately funded institutes universities are which require their students to pay for their education.

At present the Council for the Built Environment (CBE) is the highest administrative power in the field. This Council has six smaller, specialised sub-councils which report to it on the various professions within the built environment field. All were established by various Acts in 2000 to act as public serving entities, reviewing all laws pertinent to the operation of the various professions.

But as mentioned previously, the CBE and the subcouncils remain only administrative entities, operating within the realm of the built environment professions. There is no connection to other fields outside of the construction and technical professions and certainly no manner in which the councils can bring education of the built environment to the general public. Seminars and lectures are organised which are open to the public which attempts to perform this service but meant mainly for the professionals in the field. It is interesting to examine the following diagram which is posted on the CBE website. It gives a step-by-step breakdown of all interested and affected parties, their functions and how this is achieved. Note the section dedicated to public involvement under the stakeholders section. According to the CBE then, the public only serves to inform two of its functions: to bring about the discipline of professionals and review appeals arising from disciplinary actions. This merely serves to re-iterate the fact that the CBE and the councils are administrative bodies, establishing the need for a central educational interface which is founded in the public realm.

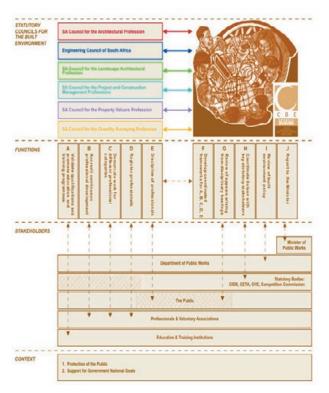
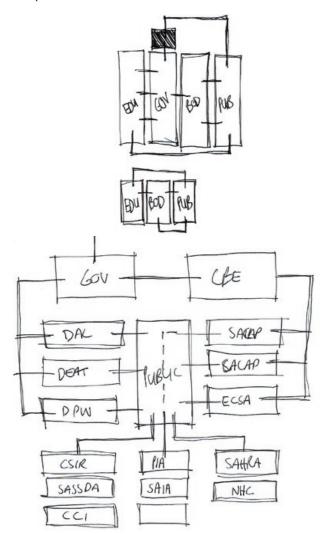


Fig.2_05.CBE structure, CBE website, 2006



PROJECTMOTIVATION

Taking initial inspiration from the previous diagram, a process of mapping the various entities within the built environment fields was undertaken, in order to validate the premise that a public educational interface was required. The following diagrams explore the many stakeholders and contributors to the professions.



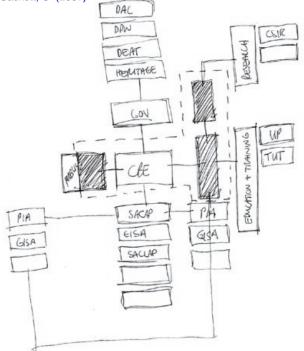


Fig.2 07. Exploring project integration

In concluding this process, the original motivation for this project begins to find its footing in the real world. The need to bridge and develop a connection between the public and the built environment professions finds its position in relation to the various other bodies involved.

From a personal perspective, it is the author's wish that a project of this nature be developed in Pretoria to showcase the great possibilities of South African cities and the great architecture of both past and present times.

The planned investment of billions of rand towards the upgrade and establishment of Pretoria as the identifiable capital of South Africa will seek to place Pretoria as the capital of the African continent as a whole. The implementation of national public transport routes and infrastructure to prepare for the 2010 FIFA

Soccer World Cup to be hosted by South Africa and the complimentary urban framework changes; all these projects are massive in scale. Yet there is very little information allowed into the public realm where the effect of these projects will be most felt.

The project facility will thus act as the vehicle for information between public and built environment realms, conveying to the public the ideas the government has regarding the development of Pretoria. In turn, the public can become involved, approving or dismissing proposals made by the government and in so doing, form a future for the city with the people who will continue to use it for many years to come.

CLIENTREQUIREMENTS

VISION

To be an appropriate regulatory body for a dynamic, robust and ever-evolving architectural profession that is in the forefront of the development of the built environment.

MISSION

To guide, facilitate and promote a high standard of competency and responsibility in the architectural profession and to increase public awareness of the range of architectural services offered. To ensure the profession fulfils its total role in the development of South Africa.

SACAP Annual Report, 2006

To develop towards a viable project, the CBE and the six statutory councils are the principle clients to use the facility. In order to develop an interface which represents the fields of the built environment, it is deemed suitable that the ruling administrative bodies be present. Additional layers of functionality will need to be incorporated to expand the ability of the public to

access and harness the information provided through the project facility but this will be developed in detail to follow.

A broad overview of the CBE and its council's functions and processes will be formed at this stage, for further analysis and breakdown to occur in the latter development stages.

The idea to combine the CBE with the six subsidiary councils makes excellent sense when considering the day-to-day activities and overall administrative processes involved. All bodies operate in a very similar manner, due not only to the similar nature of the fields each is focussed upon but to the composition of each of the councils.

All the councils require a certain number of full-time staff, working professionals and public individuals as laid out in the Acts establishing the councils. This translates to similar working environments due to the part-time nature of some of the members.

The following requirements were identified:

01_adaptable office space

02_private and public meeting areas

03_temporary workstations/ hot-desking

04_administrative areas (filing, telephone exchange, computer rooms)

05 common facilities (toilets, kitchenettes)

The ability to share facilities will become a core component of the design in order to reduce redundancy of spaces.

The overall process of reporting to the CBE on issues relating to the various fields will also be enhanced through the collection of the bodies into a single location. At present, different councils are based in different cities in S.A. Communication between these councils would be greatly improved and allow for possible cross-field support between councils, were they to be incorporated into a single building.