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Superimposition

FUNCTION OF THE 3 BUILDINGS

Programme

Superimposition

The process
SUPERIMPOSITION ON PLAN
VERTICAL SUPERIMPOSITION
SUPERIMPOSITION OF DESIGN ELEMENTS OF THE BUILDING

Evaluation

4.1 Superimposition

Concept 4: Superimposition

When Bernard Tschumi approached Jacques Derrida to confront his work. Derrida responded thus:

> " But how could an architect be interested in deconstruction? Deconstruction is anti-form. anti-hierarchy, anti structure – the opposite all architecture stands for". Tschumi's retort: "Precisely for this reason". (Tschumi 1997:18)

The concept of de-structuring was interpreted as an interrogation of the physical structure of the building. That is to say if we were to question structure in general, it can imply the structure of many things. The word structure can be conceived as the questioning of construction, organisation, formation, arrangement, building, shape, etc. This lends itself to a particular debate in contemporary architecture, namely deconstruction.

Dualism and the Hierarchy in Philosophical/ Architectural History

Western thinking is based on dualist thought and the various movements, in architecture and philosophy. These movements can be distinguished and categorised according to the specific position the movement has on dualism.

Modernism and Modernist Post Modern thought Modernism is based on a dualist mindset with an acknowledgement of hierarchy. The most common dualism found in modernist thinking is the preference for the abstract over the figurative. Purity and hyper functionality are of extreme importance. Modernist Post Modern has a preference for the figurative over the abstract. Modernist Post Modern attempt to do away with dualism but the dualism is reinstated again by trying to do away with it, creating another dualism.

Dualisms found in traditional architecture include: form/ Deconstruction function and abstraction/figuration among others. The implied hierarchy would be for example: form follows function or ornament is subservient to structure. Deconstructive thinking is based around the space 'in between' the dualism, acknowledging the dualism but not preferring the one concept to the other. This is an attempt to do away with dualism and the implied hierarchy by destroying it from within. Deconstruction is true to its own willingness to be 'in between' or else it would be creating another dualism.

The 'in between' is the precondition for the dualism to exist or else it will be impossible to distinguish between the two. The space 'in between' makes dualism possible and simultaneously makes it impossible to exist. With no in between there would be a collapse of identity.

Tschumi (1997:17) discusses the application of deconstruction theory and superimposition is used as a key device to acknowledge both dualisms and neither nor. The dualisms between, structure (frame), form (space), event (function), body (movement) and fiction (narrative); are blurred by using superimposition, collision, distortion and fragmentation.

Dualism: According to the Collins English Dictionary dualism is defined as a two fold division; the belief that two separate elements co-exist in the universe, namely spirit and matter; the belief in the existence of good and evil as separate entities.

Deconstruction dismantles concepts and it becomes a remarkable conceptual tool for the architect.

Tschumi's own work grew out of a critique of architecture, and the nature of architecture. The Collins English Dictionary defines architecture as 'the art of building according to certain well-defined principles of proportion and symmetry so as to form a harmonious whole; a distinct style of designing buildings'. Deconstruction is wrongly called a style by some, as it was exactly what the architects tried to avoid.

Notes on Deconstructive thought derives from challenging the idea of a deconstruction single unified set of images, the idea of certainty and the idea of an identifiable language in architecture.

> The principles of *geborgenheit* that the Post Modern mainstream was trying to promote, lead to the questioning of those principles by a small number of philosophers and later architects.

> Multiple interpretations are given to deconstructive theory, readings and architecture among which are: dissimulation, fragmentation and displacement. Nietzsche is quoted as saying: "there are no facts, only an infinity of interpretations" (Tschumi 1997:17). Deconstruction challenges any single interpretation, crossing the boundaries between film, literature and architecture.

Function, programme The role of fiction and narrative in architecture has fascinated and proper historical many architects. There are two interpretations of the role dimensions of of fiction in architecture. The 'historicist postmodernist' architecture saw fiction and narrative as a realm of metaphors, of a new

architecture parlante of form while the second group the 'deconstructivist neo-modernists' saw fiction and scenarios as analogues for program and function. (Tschumi 1997:18)

The formal properties of the buildings are not manipulated by the deconstructivists, but they look at what really happens inside a building and city relating to the:

- The function
- The programme
- Proper historical dimensions of architecture

Superimposition Superimposition will be used as a conceptual tool to juxtapose events relating to the function, the programme and the historical dimensions of architecture. The form of the sports administration building is not to suit a single function but a complex problem using crossprogramming and transprogramming. The interchangeability of form and function, will be considered during the design process.

Function From a theoretical point of view, form and function has been the topic of discussion among architects for many years. How do we decide if form follows function, or whether function follows form?

> If a building is designed for a specific purpose and fitted accordingly, that building becomes very costly to refit for a change in function, it being energy expensive or futile. The technology of the twenty first century is moving at an alarming rate and the way in which we use certain spaces has changed dramatically over the past years. In terms of sports development, a single apparatus has replaced numerous others by combining it into a single machine. As the World Cup event is only in 5 years' time, we have to investigate the technological advances, in order to design spaces that will only be utilised

Function implies certain actions that can change over time and can differ from user to user. Form implies something static that has a lasting time element to it. Deconstructive theory offers a solution: that the one cannot generate the other but that there should be interaction between the two.

It is possible to elaborate on the interaction of form and function in the light of Michael Faucoult's statement: "Here are events in the space we construct ourselves to inhabit: Heterotopia'''(Tshumi 1997:18). The phrase implies that the form is not generated by the event (function), and that there is no hierarchy between form and function. The phrase further suggests that we build places for ourselves where events can take place and that the building sets the stage for a rich collision between event (function) and space (form).

The function of the buildings is to aid the development of sport FUNCTION OF THE 3 in the north of the City of Tshwane. There are few facilities **BUILDINGS** towards the rural areas in the north, and the new 2010 Soccer World Cup developments will place sporting facilities in easy reach for all.

The functional concept for the facilities is to promote a healthy in 5 years time and of which the prolonged use will mainly be lifestyle in the community, and to create the necessary after the event. Robustness of buildings is of key importance in infrastructure for the development of sport on a community sustainable development. We can no longer cater for buildings as well as on an international scale. The facilities are divided that have been custom-made to fit a sole purpose. Buildings into three buildings. This dissertation focuses on the main things and an unstable unity appears.' (Frampton 1998: 52-53) need to be adaptable. administration building.

Heterotopia: a condition in which cohesion is achieved 'through adjacency, where edges touch, where the fringes intermingle, where the extremities of the one denote the beginning of the other, there is a hinge between two The Facilities: The main sports administration building, houses the formal components of facilities including conference facilities, lecture rooms, offices, sports retail and a restaurant that also caters for the dietary requirements of athletes. The facilities in the building will be contracted out to private institutions. This will make branding possible and it also increases the feasibility of the project. The administration building is on the main road, with the rear of the building having an interface with the sports grounds/park. This building is the focus of the dissertation.

> The sports rehabilitation centre: aids the recovery and rehabilitation of injured athletes. The rehabilitation centre is located between the main building and the Apies River. It is connected to the administration building and sports performance centre by a covered walkway.

> The sports performance centre: is there to aid athletes and teams in boosting their performances. The facilities include a gym and outdoor training, making use of the park that surrounds it. The centre is located closer towards the Apies River and is connected to the administration building and the rehabilitation centre by a covered walkway.

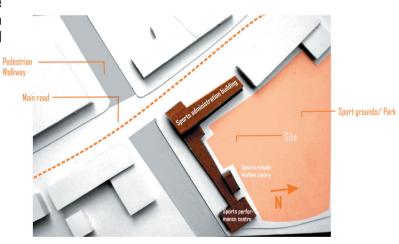
> The facilities firstly cater for young aspiring athletes, giving them access to professional sporting facilities, sports coaching and sports education. Secondly it caters for veteran athletes and teams to improve their performance and aid in the rehabilitation of injuries in an environment where they

can live, eat (according to their dietary requirements for optimum performance), practice and learn. Lastly, the facilities are contracted out, and the community can join and use the facilities, as they require. The facilities are located within the sports grounds/park to promote community interaction and integrate the facilities into the landscape.

American architect Louis Kahn held that the objective Programme organisation of functions were not enough in itself to produce a meaningful building. He aimed at transforming the program of a building into an essence which he called 'the builiding's will to exist."

> 'The nature of space reflects what it wants to be Is the auditorium a Stradivarius or is it an ear Is the auditorium a creative instrument keyed to Bach or Bartok played by the conductor or is it a convention hall? In the nature of space is the spirit and the will to exist in a certain way Design must closely follow that will' Louis Kahn





Program: A determined set of expected occurrences, a list of required utilities, often based on social behaviour, babit or custom (Tschumi 2000:13).

' In Kahn's view the building's 'will', regarded as the essence of the program, together with that of the building material, generates a form. The essence of the program not only reflects that which is required for efficient use but resonates with the deepest desires and wishes of people for freedom and security' (Leupen et al. 1997: 92).

THE PROGRAMME OF THE MAIN ADMINISTRATION BUILDING

Accommodation schedule (Although allocated specific functional names most of the spaces allow for crossprogramming)

Primary space

Ground Floor Sports Retail Restaurant with Patin Kitchen Café

First Floor Auditorium with Entrance Lobby 7 x Lecture Rooms Lounge Office Space

Total construction area of the building 2428 m²

Secondary Space

Ground Floor Toilets: Ladies Toilets: Gents Storeroom Small Kitchen

First floor Toilets: Ladies Toilets: Gentleman Circulation Space Reception area (Mezzanine level)

> 4.2 Superimposed Photograph of a Sectional Model





Superimposition

The first part of the Superimposition chapter explains the thinking behind deconstruction, there are however architects that are not slaves to these theories but use certain elements to inform their work. This dissertation similarly aims to produce a project, by using deconstructive concepts to free the designer's mind from pre-conceived ideas. Miralles and Pinos's are two architects whose work reveal a noble sensibility. 'Their work is different from their distant deconstructivist cousins in their understanding of the necessity of an underlying *qestalt* – which is then expressed through several formal hierarchies' (Curtis 1999:17). The result is that their interventions within its context is not as obtrusive as Zaha Hadid or Coop Himmelblau, their work is more communicative (Zabalbeascoa 1992: 158).

In retrospect, the sports administration building's form was continually influenced by the events (function) that will occur within the building. Simultaneously the form of the building allowed certain functions to happen within. There was a constant interaction between the two.

The process SUPERIMPOSITION ON PLAN At the conceptual stage, the programme of the building was translated to the relevant events that they could generate. These events were intentionally superimposed for unexpected events to occur between the various types of users in the building.

For example:

4.3 Hostalets Civic Centre, Barcelona by Enric Miralles and Carme Pinos

Accommodation translated to events that might occur:

Ground Floor

Shopping

Eating, meeting, relaxing

Cooking

Drinking, meeting, interacting

First Floor

Thinking, concentrating, learning

Relaxing, waiting, talking

Workina

Communicating

The design process involved a continual communication between the superimposition of spaces, design, intuition and physical requirements. (See diagrams for design development from concept to final product.)

The majority of the corridors were manipulated in section so VERTICAL SUPERIMPOSITION that the building could achieve visual superimposition. This was achieved by visually connecting corridors with other functions of the building. For example: a person arriving for a conference will be able to see people shopping or others eating, as he circulates through the building. A person waiting on the mezzanine level above the café will be able to smell the coffee

Ground Floor

Freshening up, chatting Taking a break

Storing

Taking a break, relaxing,

eating

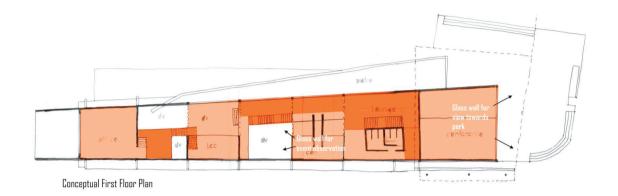
First floor

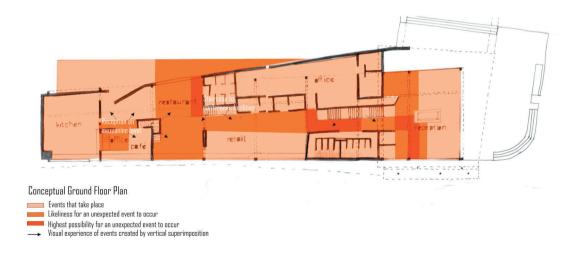
Freshening up, chatting Taking a break

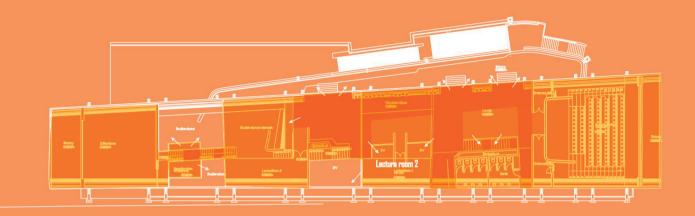
Moving, rushing

Waiting

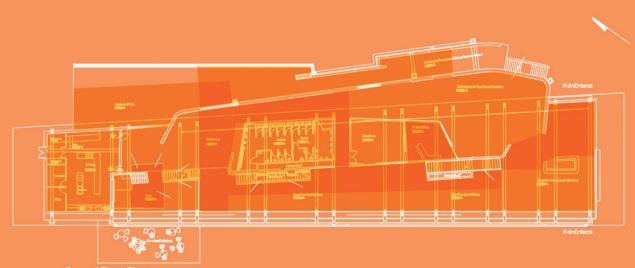
4.4 Conceptual Ground and First Floor Plans Used to Postulate the Possibility of Unexpected Events Occuring







First Floor Plan



- Events that take place
 Likeliness for an unexpected event to occur
 Visual experience of events created by vertical superimposition

4.5 Opposite Page: Final **Ground and First Floor** Plans Demonstrating Events within the Sports Administration Building

and hear the chatter from the café. He might even be able to catch a glimpse of a famous soccer star having lunch in the restaurant. Another example is the glass wall in lecture room 2, where shoppers or visitors will be able to see students learning. The glass will make the lecture space appear bigger. The students will face away from the activities so as no to distract them.

Through the application of superimposition in the design of the building, the 'in - between' nature of certain elements were emphasized. The structural steel structural frames are neither simply structure nor simply ornament. The frames are

SUPERIMPOSITION OF DESIGN ELEMENTS OF

THE BUILDING

simultaneously columns and beams, structure and ornament. The in-situ concrete slab on the first floor is not simply floor nor just wall or ceiling alone, the slab is all of them.

Superimposition has been a valuable tool for organising events within the building. In turn it informed the design of the building **Evaluation** through events, consequently creating a dialogue between the function and the form of the building. Each space created consists of a different set of images and experiences of the space.

