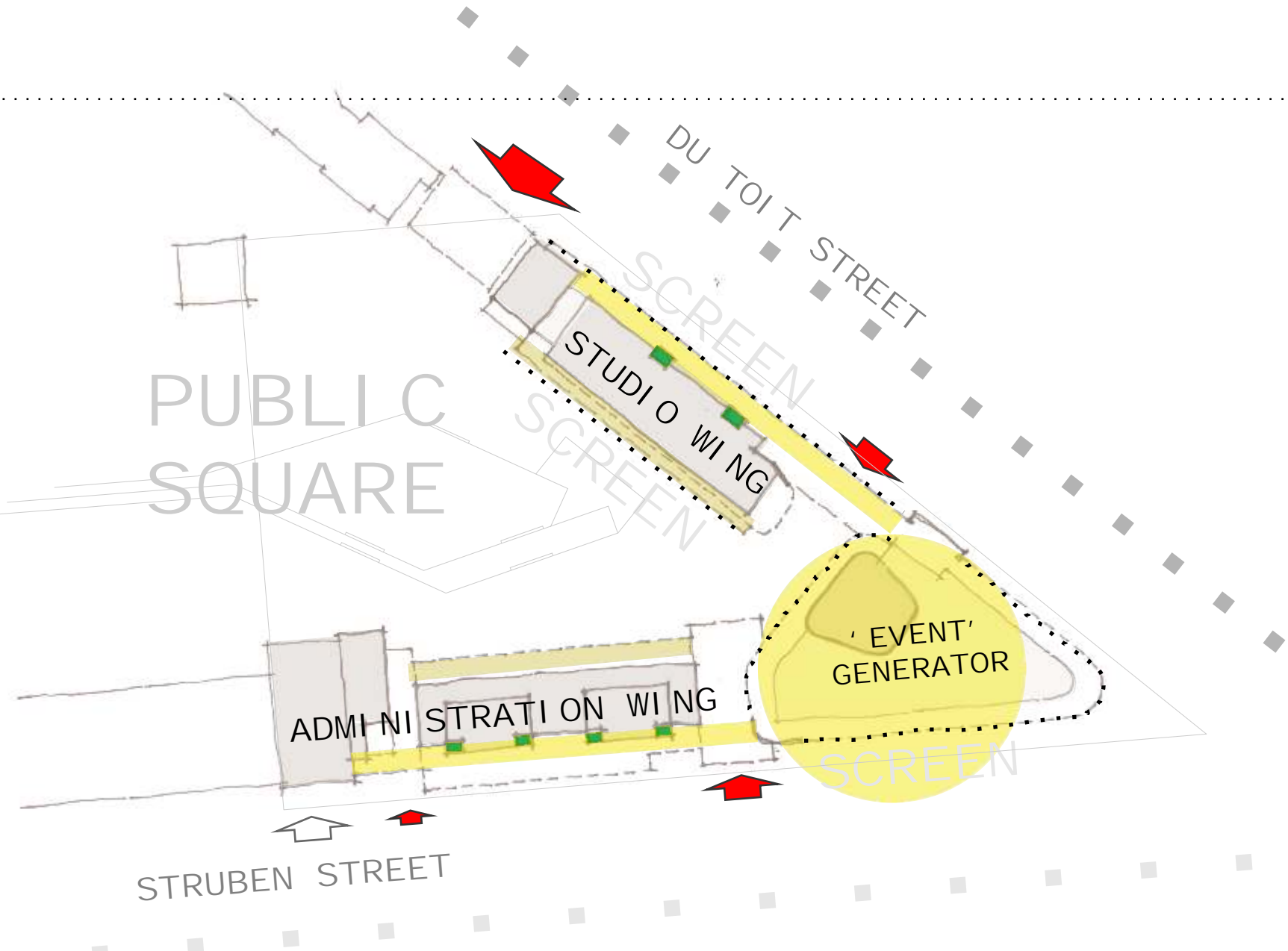




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.....T H E D E S I G N

chapter 04



This is the new cultural hub in Pretoria. It supports multiple functions and it is activated by the buildings along the edges. It is a place of the potential meeting, a resting place or the event space. It is a stage of everyday life, with the city acting as its backdrop.

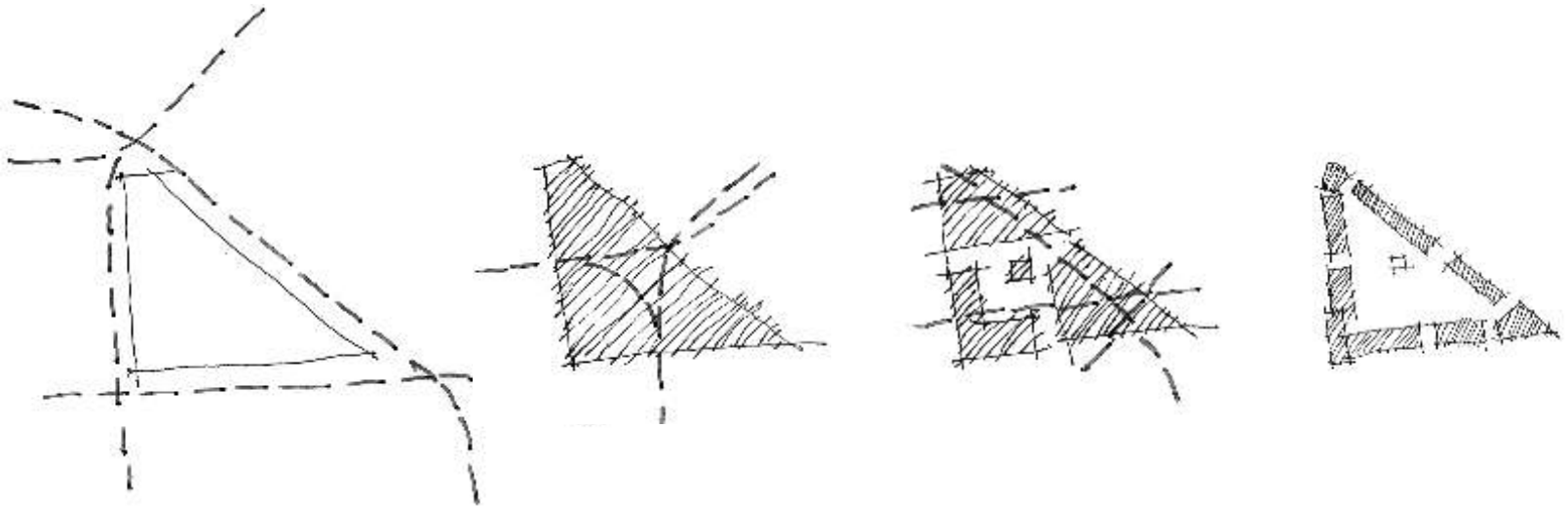
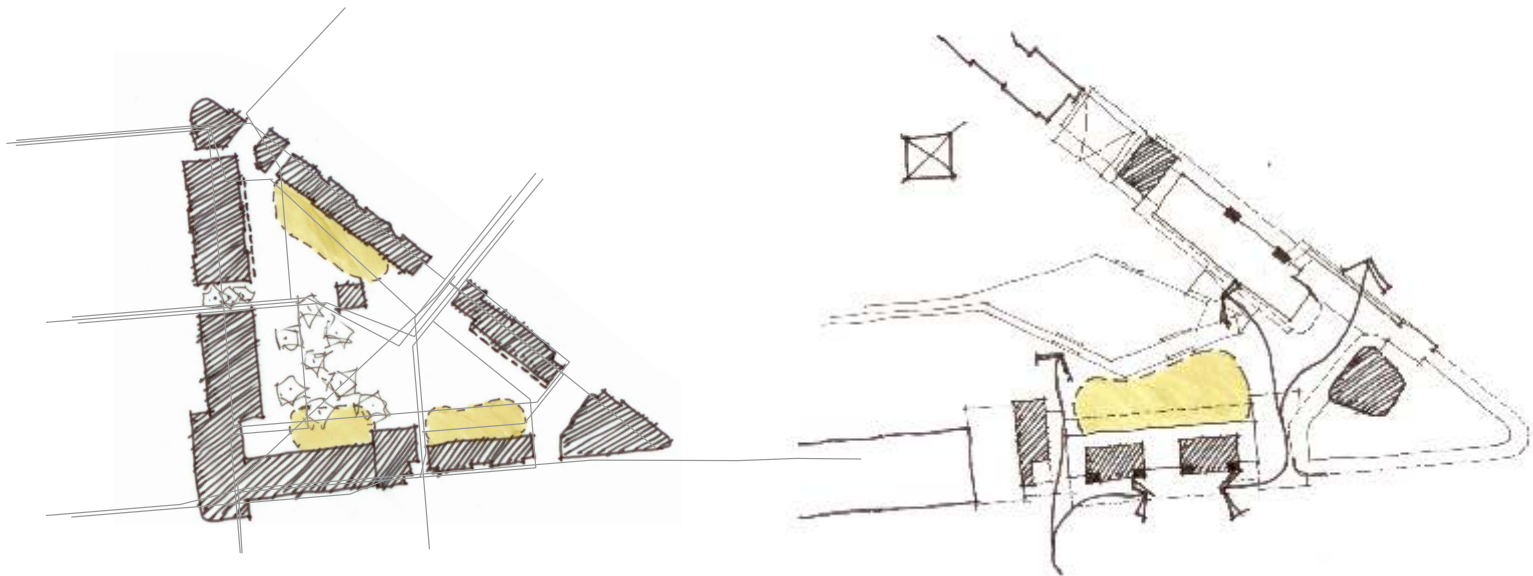


fig 4.2 Movement patterns shaping the square.





1. the square:

Public activities on the ground floor of the buildings spill over on to the square. Activities in a public place naturally form along the edges (Alexander 1977: 600). These edges are formed by the three proposed designs and together they form a continuous edge, punctured only by the pedestrian paths leading into the square.

Restaurants occupy the southern and northern edges, shops on the western edge bring commercial activities to the square, while the workshop areas on the eastern edge act as 'stages' for different events. The square is activated by the movement of people through the space, by the unpredictable activities within the square and by the use of digital screens on the building façades.

The entrance from the basement is through a centrally placed circulation tower, which also acts as an air-inlet for the basement. The tower is the focal point of the square and is placed in a position that is visible from all access points into the square, thus drawing people towards the center.

The stairs and ramps divide the square into a hierarchy of smaller areas, each with their own identity, making the spaces legible. These stairs also function as seating areas, from where activities in the square and in the buildings can be viewed. People naturally gravitate towards raised and easily accessible areas in public places (Alexander 1977, 604).

Different materials and textures are used to mark routes and thresholds. Brick is used to mark quieter areas, giving it a soft and inviting appearance.

All the activities on the square promote a safe, 24 hour environment.





Lab architecture studio and Bartes Smart, 2002.

Federation Square, Melbourne

Federation square is the new civic square in Melbourne. The project consists of nine cultural and commercial buildings, covering a whole city block

This project has a number of similarities with the proposed design. Both define a city edge while connecting the river area with the city; both projects form a gateway and both create new civic spaces within the historical city fabric.

At Federation square this was achieved by providing open public spaces and permeable buildings along the edges. These buildings support the square by providing lively programs. "Federation Square, now built, has healed some of the urban wounds of modernity. It has re-covered a ground and folded it back into the city, with a high-culture mall." (Crist 2003: 1).

A finer grid system that was applied over the existing street grid. By reflecting the new triangular pinwheel grid on the building facades, the grid binds the different buildings together and forms a visual coherence.

The design's geometry supports various configurations and uses. During the day the square acts as a series of individual outdoor spaces. During the night the individual cafe and restaurant spaces are compounded and become a large public festival space. The square becomes an outdoor amphitheatre, underneath a network of lights.

"Federation Square is a contextualist building in that it not only has a familiar scale, and achieves some interesting connections with its context, but it also seeks to imitate the experiential parameters of Melbourne's nineteenth-century structure of streets and lanes" (MacArthur 2003:1).



fig 4.5 The experiential qualities of interior spaces.

Federation square is a system of patterns and forms. The non-classical geometries of the facades have a high degree of complexity, blurring edges between the buildings and the city. The aim of the architects was to devise a language of form, but unlike Modernists buildings, these forms manage to remain vague and indefinite (MacArthur 2003:1).

Unfortunately the design “stops short of rethinking the idea of the free facade and 'thickening of the wall' beyond the architectonics of the decorated-shed” (Hartoonian 2003:1). Instead of designing the façade as a skin that covers the architectural body, it has a 'dressed-up' quality; “it operates like a mask that has nothing to do with all that is behind it” (Hartoonian 2003:1).



fig 4.6 The use of screens in the public square.



Federation Square has two art galleries; the Ian Potter Centre: NGV Australia and the Australian Centre for the Moving Image.

The Ian Potter Centre's brief to the architects highlighted the need for flexible gallery spaces. These gallery spaces should be able to contain Australian Indigenous, colonial and contemporary art, as well as temporary exhibitions. Lab and Bates Smart approached the concept of a 'white cube' gallery with a new perspective.

Movement routes through the spaces form an important aspect in the design, becoming part of the building's internal drama. Large rectangular galleries are connected by a series of walkways that span the interior voids between the galleries. These corridors allow a direct chronological route through the building, but because the routes always lead back towards the centre, different routes can be followed. This allows each user to create their own frame of reference.

As the visitor progresses through the different gallery zones, entrance points into the spaces stretch and perforate the white cube.

“This is an architecture that encourages the viewer to establish personal perceptual and conceptual connections with the art – reinforcing the context created within each gallery, and in some places between and across galleries and through internal windows, or beyond to the city glimpsed outside”
(Stanhope 2003:1).

The large rectangular galleries are sub-divided into smaller areas by partition walls below the ceiling height. These elements provide flexibility, but need to be reconstructed with each new exhibition and thus have an impermanent appearance. However, the responsibility to create dynamic exhibitions and new engagements now lie with the gallery's curators and exhibition designers, and ultimately with the user (Stanhope 2003:1).



ground

basement
entrance
tower

1.

10.

workshops

5.

pedestrian
arcade

restaurants

2.

vendors

basement
entrance

pedestrian
arcade

pedestrian
arcade

4.

THE CORE



2. restaurants & vendors:

The restaurants that spill out onto the more quiet areas of the square can be entered from the sidewalk or from the square. From there, people can observe the events in the square. Deliveries to the restaurants must be scheduled to occur early in the morning from Struben Street, as not to disrupt the movement of pedestrians.

Passing pedestrians are catered for by the small informal stalls on the sidewalk. Throughout the area these informal stalls sell anything from cooldrinks, sweets, clothes, music, etc. Storage is provided, allowing vendors to safely leave their wares there overnight. These vendors provide a level of control over the sidewalk and offer an important security observation point.

3. sidewalks:

The covered edges of a building play a vital role in the way people interact with the building (Alexander 1977: 581) and they provide the gradual threshold between inside and outside.

Along the eastern wing, next to the public workshop area, pedestrians moving along the sidewalks walk through a colonnade shaped by the cantilevered walkways above. Pedestrians are made aware of the movements and events in the building. Shaded seating and resting areas are provided along this edge, serving as a spill-over waiting area for the tram stop. The beautiful London Plane trees provide an enjoyable street environment. A concrete ramp leads pedestrians to the main entrance of the building. Alternatively pedestrians follow the route between the core building and the community hall towards the southern wing.

The corner building has a rounded corner with a cantilever, which resembles the bazaar-era corner shops in Pretoria. The building edge can be opened up, letting the café and exhibitions spill out on to the corner. These activities will activate the currently dead and unused public space.



first





4. the core:

The main entrance is placed at a point that is immediately visible from the various access routes. The bold and visible shape draws visitors to the building. Here all circulation routes merge into an un-programmed 'event' space.

The main entrance and information desk on the ground floor level are easily accessible from all directions. The café area is a cross-programmed space that can be utilized for various functions and exhibitions. The concrete walkways cantilever over this central space, expressing a sense of fluidity and movement. From there the activities and 'events' in the building can be observed, giving the spaces a theatrical feeling.

At night the building becomes translucent, hinting at the activities inside and drawing visitors to the building and the square.

5. workshop area:

The workshop area and multi-purpose hall can be used together or separately. Access to the multipurpose hall is from the internal pedestrian route, next to the main entrance to the building. It is thus easily accessible from the street and the main building, and it is located in close proximity to the public facilities.

The workshop area can be accessed through the multi-purpose hall or alternatively from the sidewalk and the square underneath cantilevered walkways and balconies. The area can also be accessed from the secondary entrance and circulation route to the north, where the store rooms are located. The service cores are easily accessible from the multi-purpose hall and the workshop area, thus providing a flexible layout allowing for different functions.

The stairs from the square are pulled through to the workshop space, providing an informal seating and street theatre area. When the tip-up glazed doors along the edge are open, activities in the inside spaces spill out onto the public space. The boundaries between inside and outside are thus blurred, providing a continuous surface.



second





6. office areas:

The office areas provide the administration space for the organization. The central service cores allow the open plan spaces to be easily re-configured and sub-divided. The space can thus contract and expand according to the organization's current needs.

The remaining office space is rented out to other creative industries businesses. These work together and strengthen each other in the creative environment. Income generated from the rented office spaces will be used to support the artists.

The office areas can be accessed by the public from the main circulation space at the corner and a more private entrance is provided at the western side, which also serves as a fire escape route. Wide corridors and the balconies act as meeting points, while the narrow corridors that connect the offices to the common rooms allow for more intimate encounters. All edges blur the boundaries between inside and outside.

7. visual material centre:

The visual material centre provides a flexible computer workroom and library area. Within our technological age, all information can be accessed over the internet, diminishing the need for large library spaces.

In this area visitors can access the global network of information, while other visitors sit and flip through magazines for inspiration. Small group meetings are accommodated for in the meeting rooms. Desks also act as mobile workstations for visitors.

_media theatre:

Films and electronic presentations play an ever increasing role in the contemporary art world. The small screening room is available for the presentations of digital media by resident artists. It can also be used for lectures and it is rentable for private use. The screening room is located close to the main circulation core of the building. It has 64 built-in seats and provides for people with disabilities. The shape is easily distinguishable in the building mass, cantilevering over the community hall entrance.



third





8. studio spaces:

Robust services are provided in order to create an inspirational and flexible work environments. These are highly interactive areas, where residential artists constantly switch between individual and collaborative environments.

Interior spaces can easily be reconfigured so that larger groups can be accommodated, while artists next-door personalize individual spaces. A sliding door system facilitates the sub-division of spaces. These doors also provide surfaces for exhibitions and projections. Suspended ceilings are fixed at different heights, thus shaping and lending certain characteristics to various spaces within the larger spaces.

Artists are thus able to insert and adapt a second skin within the larger spaces.

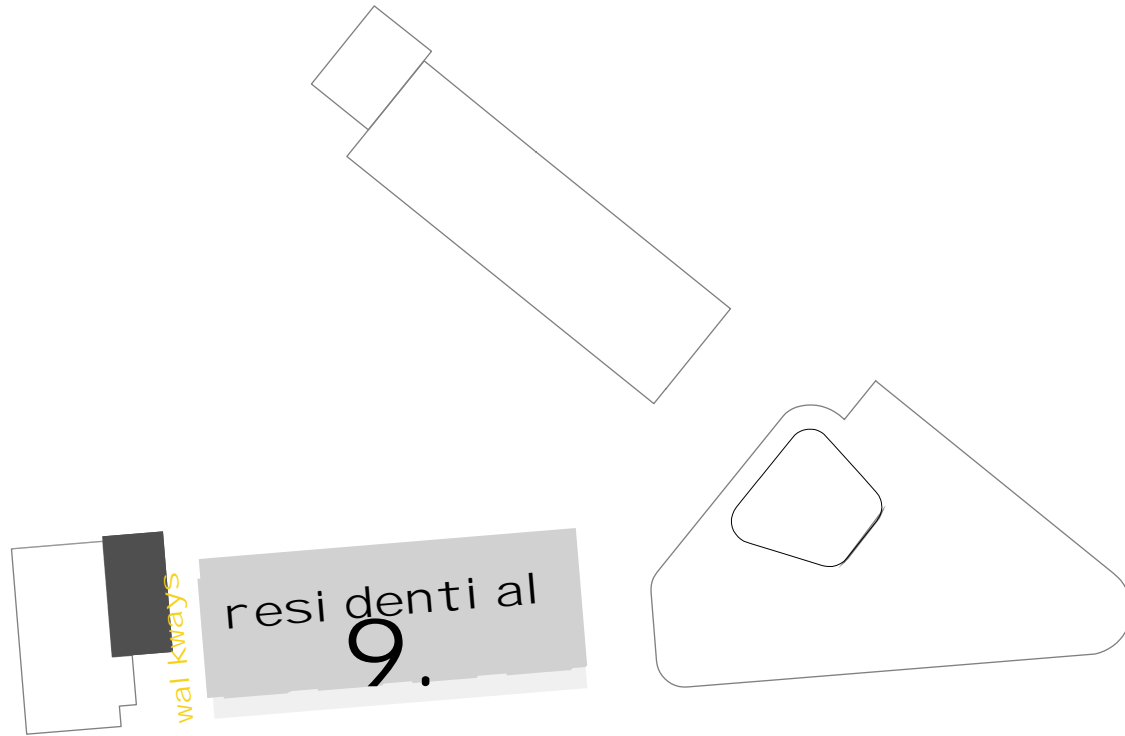
9. residential component:

Seventeen new flats provide housing for the students within the area. Sixteen flats are one-bedroom units and one is a double-bedroom unit. The flats all face north, ensuring adequate natural light and a comfortable indoor environment, while the flats' dimensions and layouts allow for natural ventilation.

The residential compartments cantilever over the restaurant areas and the office balconies, ensuring the residents' privacy. Balustrade walls and screens provide further privacy, but still allow views over the square, thus establishing passive observation.



fourth





10. tram stop and ticket sales:

The tram ticket sales office functions independently of the main building. It is located at the main entrance to the square from the east and also serves as a security point. Ticket vending machines issue tram tickets and an office space is provided for the attendant.

The ATM machine is located on the side of the busy Du Toit Street, next to the secondary building entrance. This ensures that it is a secure area and not hidden away in a quiet corner.

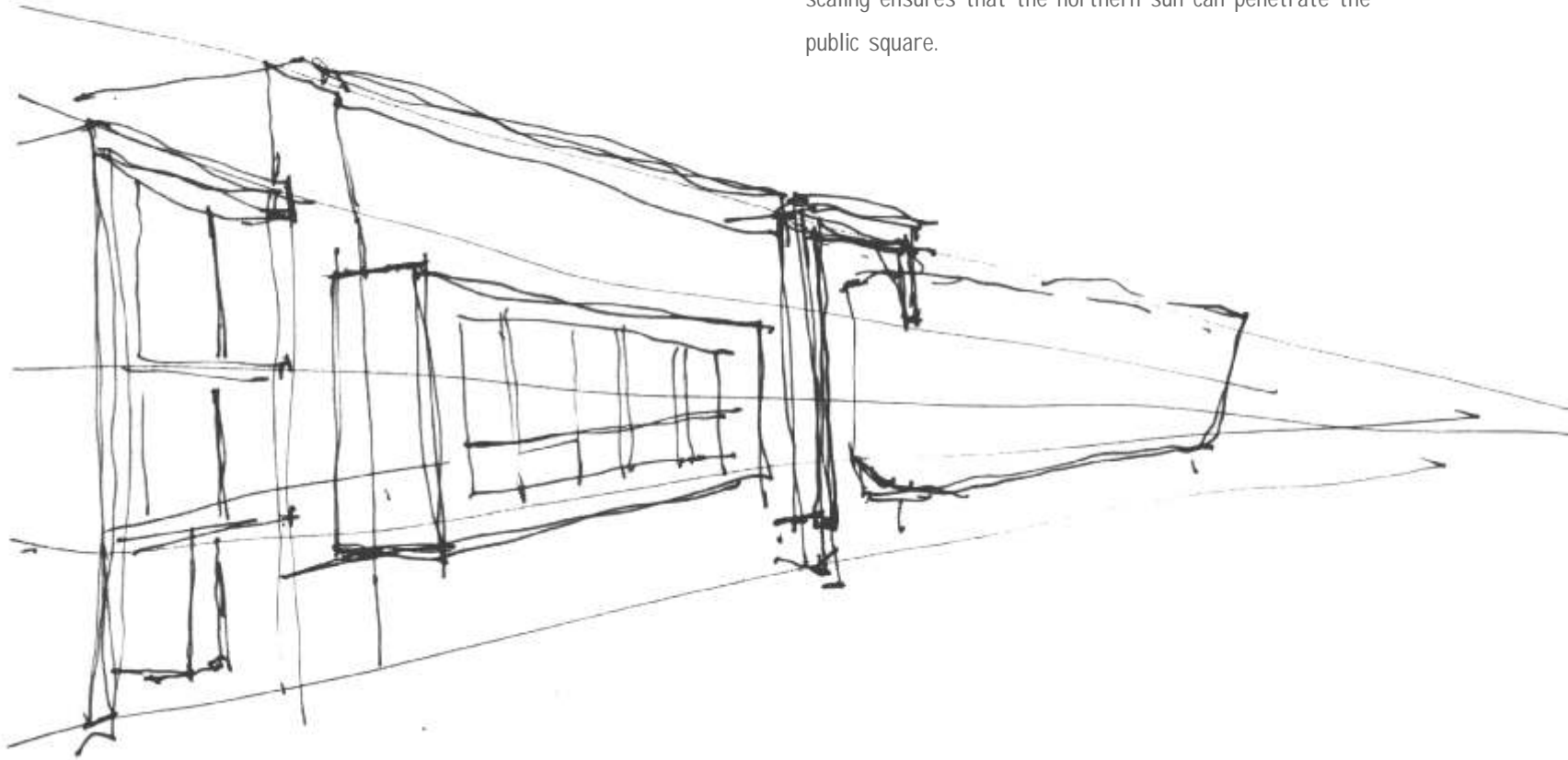
11. basement:

The new basement will provide public and private parking facilities. The basement is shared with the other two proposed projects on the site (see page 16/1). Management of the basement is thus divided into three areas.

From an interview with a civil engineer (K. Vermooten, 13 June 2007) Struben Street was chosen as the access side into the basement. The quiet nature of Struben Street, and the fact that it is a one-way street, will ensure the ease of access and exit of visitors. The proposed design requires 46 secure parking facilities (appendix_02), leaving 76 parking spaces rentable to the public. The basement also provides spaces for storage, workrooms and plantrooms.

12. scale:

The scale of the building clusters reflects the reduction of the city scale from the centre towards the lower scale of the TUT Arts Campus and the Apies river. The Southern wing is thus at a level higher than the eastern wing. This scaling ensures that the northern sun can penetrate the public square.



13. elevations:

The corner articulation is an important concept throughout the proposed design. Its visual prominence on the street intersection is emphasized by the design. An Illumesh screen provides an active skin for the organic concrete walkways structure at the main circulation core. The screen provides sun protection for the eastern façade. Its transparent nature allows passers-by a glimpse into the current art world. Alternatively the digital nature of screen is used to project digital artworks and advertisements.

The southern wing has a formal and 'heavy' character, but the use of tactile surfaces and recessed balconies and cantilevers lend it a fragile appearance. The variety of window types creates rhythm on the façade and expresses the building uses. The set-back of the upper level on the southern side breaks the verticality and defines the top of the building. On the northern side the cantilevered residential component ensures privacy for the residents and shapes the public space beneath it, protecting that area from external elements. Vertical concrete fins add rhythm to the façade and articulate the balcony spaces.

The 'light' and transparent character of the eastern wing is articulated by the application of a variety of sun screens and the use of the double skin construction. Throughout the design the incorporation of awnings and cantilevers creates a human scale to the building.

Pedestrian gateways into the square and circulation cores in the building are articulated through the use of different materials, colours and the built form. The building communicates its dynamic functions and flexibility as an 'event' space to its users, increasing occupant awareness and ease of use.

The facades are designed with the appropriate scale, rhythm and proportion that respond to the local character and reflect the environmental conditions. It is not a free-standing object in the city, but the proposed design forms part of the city fabric.





fig 4.13 South elevation on Struben Street.