chapter 03

DESIGN DEVELOPMENT

Artists work in design processes that are non-linear, informal and highly interactive. They can draw inspirations from anywhere: from each other, the occasional visitor, their immediate surroundings, their city, and everyday life.

Artists switch between individual and collaborative work; they share knowledge and arrange spontaneous meetings. While working they circulate the space, expanding and contracting it according to their current needs (Atelier 2002 :5). They require environments that can instantly be transformed and re-programmed; an architectural space that is not static, but constantly changes with people.

Three design methods were identified that are able to respond to these conditions:

_ fragile architecture
_ event generators
_ flexible architecture

"Architecture is one of our most fundamental existential expressions, and it communicates simultaneously on several levels. We are usually affected only by the surface message and ignore the unintentional unconscious messages, but they are the most significant ingredient in a work of art" (Pallasmaa 2000:51).

fig 3.1 Wood and steel, nature and culture. Finnish Pavilion, Seville, 1990.

"Abstraction and perfection transport us into the world of ideas, whereas matter, weathering and decay strengthen the **experience of time, causality and reality**" (Pallasmaa 2000: 79).

Materials and surfaces have a rich and complex language that evolves and changes over time. But, the flat surfaces of the Modern Movement were incapable of dealing with time.

fig 3.2 (above) Pessac workers' housing, Le Corbusier, 1925.
fig 3.3 Unable to deal with the effects of time, Modernist buildings weather badly.

3.1_FRAGILE ARCHITECTURE

A strong image requires focused vision. This makes us, the observers, outsiders of our environment. But peripheral vision places us within our immediate spatial environment; encouraging participation.

In this fast-paced and visually dominated environment we need to understand and design for the intimate experience of a place. We have to re-embody ourselves in the world and encourage an intersubjective visual and tactile experience of the architecture. The intimate experience of space that engages both body and mind becomes important.

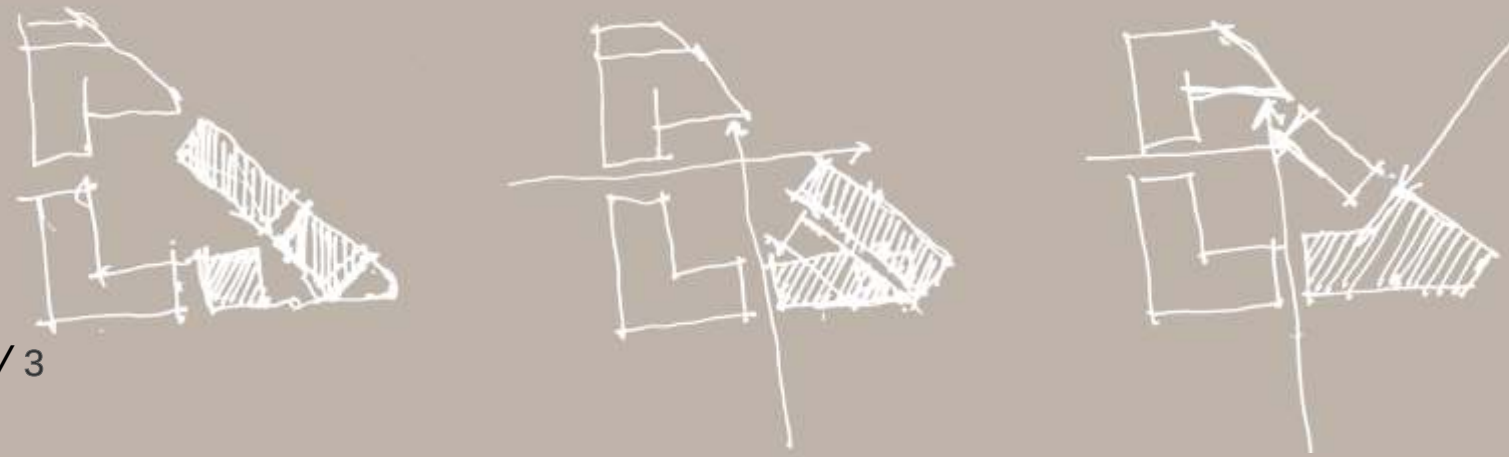
Any design denotes a primary, utilitarian function, while connoting a series of secondary functions or representations that communicate a particular worldview. According to Umberto Eco, "to function properly, objects must not only be functional but must communicate or denote that function and, second, that they can denote that function only on the basis of a code tied to established habits and expectations (i.e. worldview)" (Harries 2000:91). In the Cartesian representation of the Modern Movement form and outline are primary, constant qualities that we can grasp and hold conceptually, as opposed to secondary qualities which are constantly in flux. "…. in a world whose most fundamental characteristic is its fluxing relationships, these 'secondary' qualities become central" (McCann 2005). The secondary qualities of light, surface and experience are often resistant to language in a way that shape and symbolism are not.

Pallasmaa calls for a haptic and tactile architecture that promotes intimacy, engagement and experience. This 'weak' or 'fragile' architecture opposes the architecture of strong temporal images. Fragile architecture is responsive, contextual and concerned with the real sensory experience of our environment. By using peripheral vision, we can experience the architectural reality (Pallasmaa 200: 83).

Principles of experiential, fragile architecture was the first concern in the design development.

fig 3.4 Peripheral vision found in the Finnish Pavilion, New York, designed by Alvar Aalto in 1939.

fig 3.5 Movement vectors on site.



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The pedestrian movement patterns are vectors that cut into the solid building mass and shape the building. They split the building up into separate, but linked clusters.

The main element is the corner, which acts as a 'hinge' between the fragmented clusters. Two wings shape the eastern and western boundaries of the enclosed public square.

Each of the two wings has a different character. The southern wing on Struben Street, is the formal axis. The wing on Du Toit Street is freed from the city grid and represents the informal and 'lighter' side of the building.

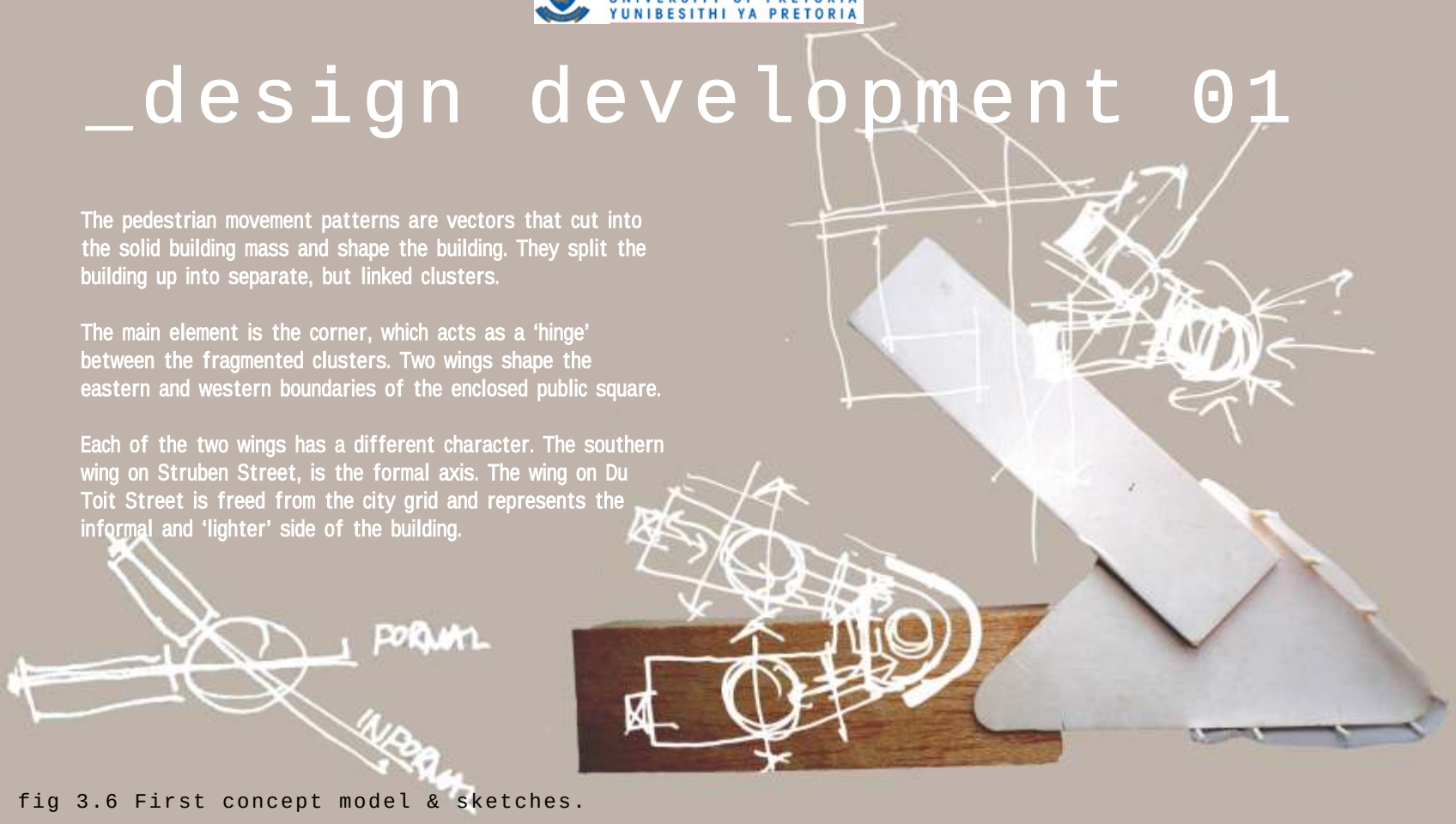


fig 3.6 First concept model & sketches.

"A movement diagram becomes architecture" (Tschumi 2000: 39).

fig 3.7 Development of building clusters.

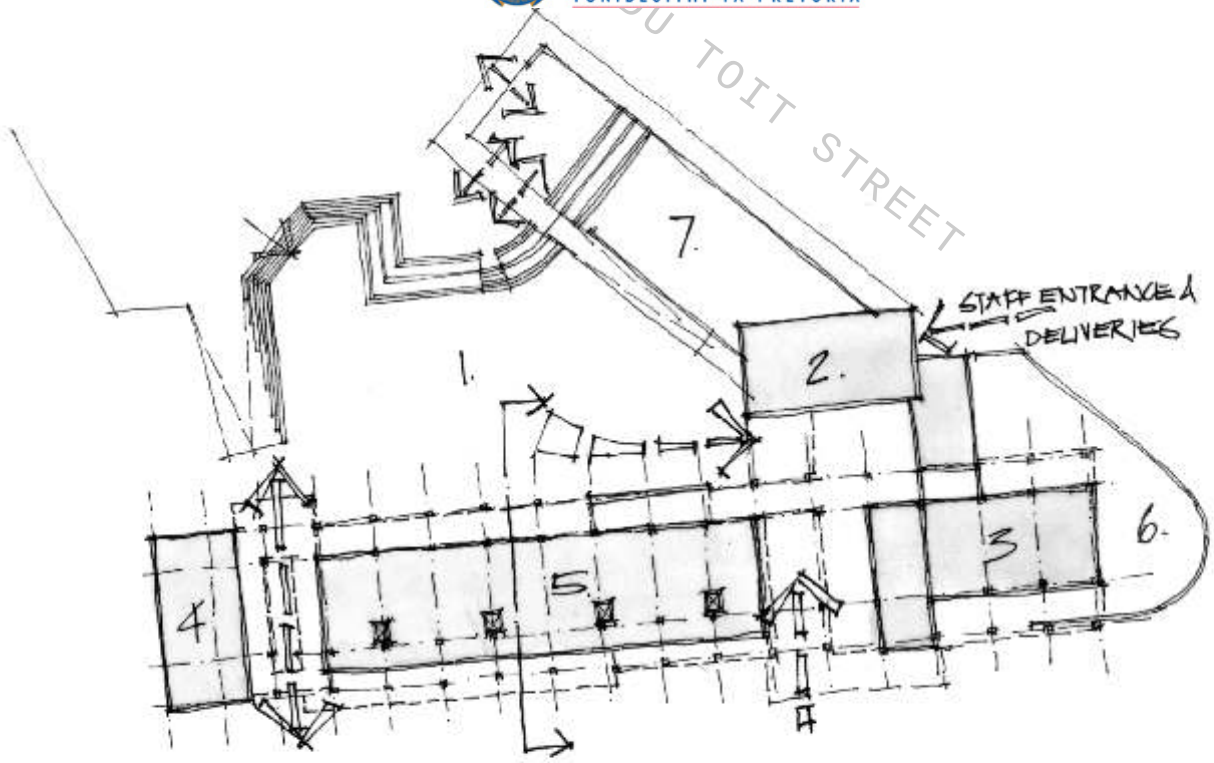


fig 3.8 Ground floor plan.

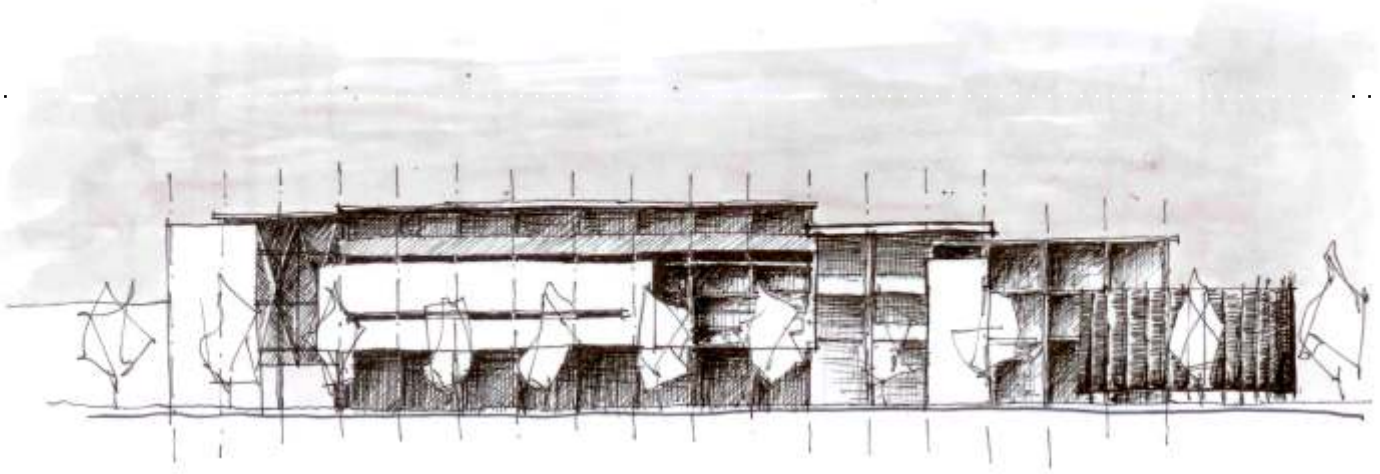
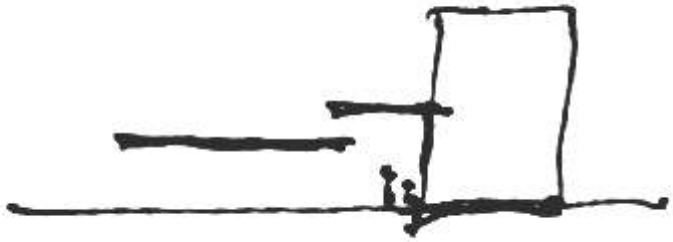


fig 3.9 Elevational study on Struben Street.

first concept:

1. public square
2. reception and main circulation area
3. café
4. secondary entrance
5. restaurants
6. semi-public courtyard
7. multipurpose hall
8. offices (third floor)
9. gallery (first floor)
10. digital gallery
11. studios
12. studios
13. archives (second floor)
14. residential



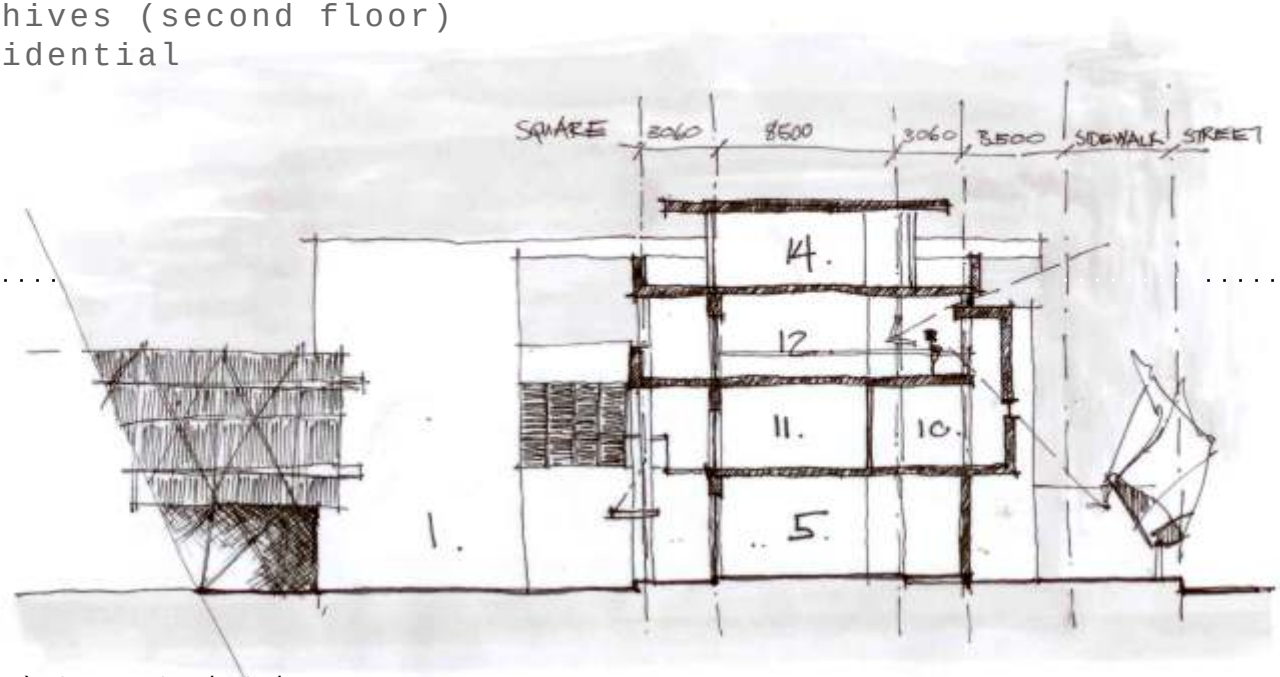


fig 3.10 (above) Concept sketch.
fig 3.11 Section through the southern wing, first concept.

In the first concept the basic layout of functions was established. The design caters for mixed-use activities. Commercial functions are located on the ground floor and the more private functions are located at higher levels within the building.

There is a clear division of the building into the two separate wings. The southern wing has a well established character that responds to the surrounding buildings. The informal, un-programmed studio spaces in the eastern wing are still undefined, but its 'lightness', in contrast to the southern wing, already becomes clear.

In the first concept the screened-off corner does not respond to the activities on the street. The connection between the two wings requires a more interactive streetfront; allowing people in the street to appreciate the activities within the building.

In order to realize the aim of pedestrianizing Pretoria, it became clear that underground parking had to be provided on this site. Parking facilities that are located at the important gateways into the city allow visitors to leave their cars and then walk and/or use the public transport infrastructure within the city. This required a new grid layout that could accomodate the underground parking facilities.

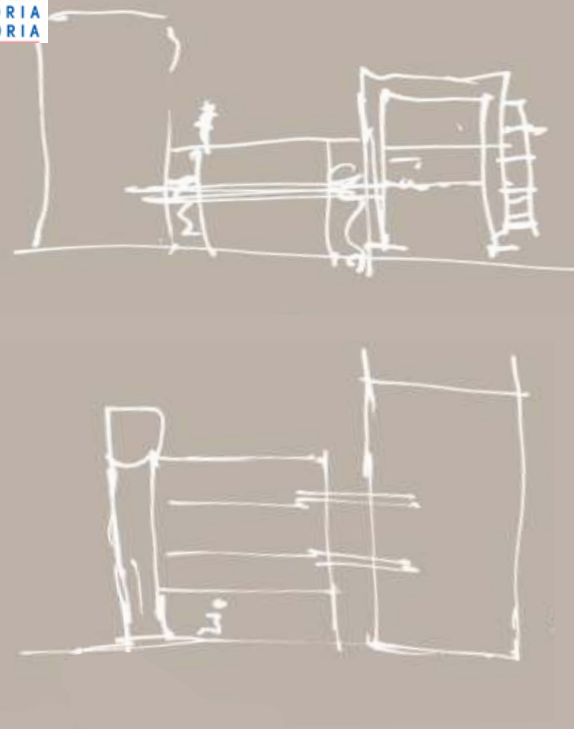


fig 3.12 Concept elevation sketches.

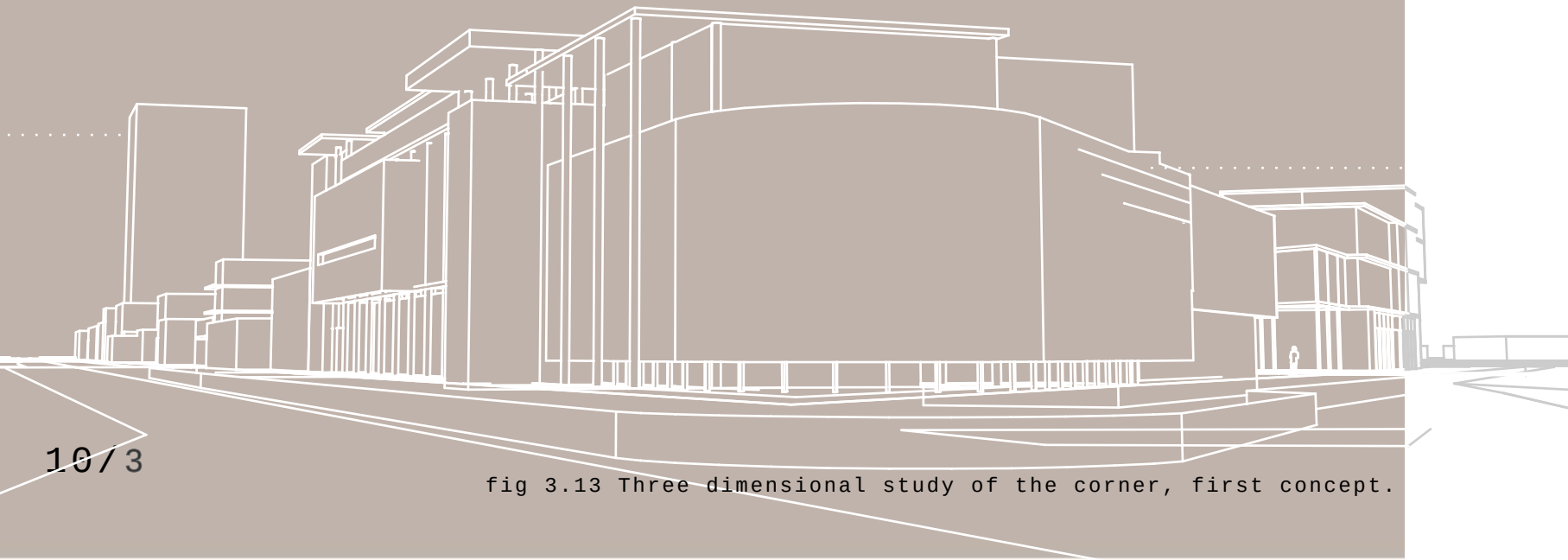


fig 3.13 Three dimensional study of the corner, first concept.

3.2_EVENT GENERATORS

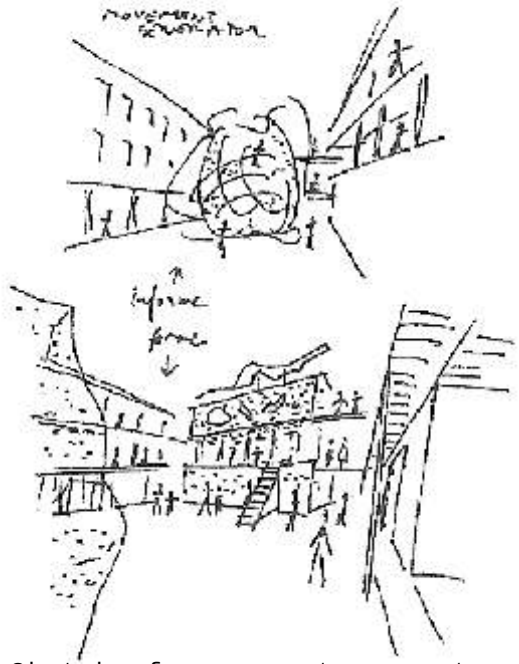


fig 3.14 Sketch of an event generator within a central public space.

"Revealing hidden potentialities or contradictions in a program, and relating them to a particularly (or possibly exceptional) spatial configuration, may create conditions for unexpected events to occur" (Tschumi 2000: 13).

An event is an indeterminate set of unexpected outcomes.

In his book, Event Cities 2 (2000), Tschumi identifies five devices that are generators of events. They act as condensers of the city, as much through their programs as their spatial potential. They accelerate a cultural or social transformation that has already started (Tschumi 2007: net).

1. SPACE, EVENT, MOVEMENT_ analysis of the interaction between space, event and movement.
2. VECTORS_ dynamic movement/flow/force; an organizing device.
3. VOIDS AND SOLIDS_ public and semi-public spaces 'carved out' in solids.
4. ACTIVATORS_ activate the void by intensifying the density of movements.
5. ENVELOPE_ an 'in-between', a double skin that becomes the unprogrammed space activated by the movement of the crowds, for instance walkways or balconies. The envelopes also can be animated through projection, reflection, or integrated screens and, therefore, become events themselves.

In two Schools for Architecture, one at the outskirts of Paris and one in Miami, Tschumi clearly demonstrates the application of the devices.

Both schools are similarly organized and feature dramatic social gathering spaces. In both a central unprogrammed space is defined and activated by two wings, the 'generators'. These wings contain the public functions, one providing space for studios and the other offices. The circulation corridors, which act as movement vectors, activate the public spaces.

In the Marne-la-Vallée School of Architecture, Tschumi compares the building to a small city that consists of small clusters. All programmed activities are arranged around an un-programmed large central space, the ‘event’ space. The building clusters are linked by promenades and walkways, which can have several points of departure (Tschumi 2000: 521).

The school features wide corridors that allow people to stop and chat, without blocking the passage. These informal 'in-between' spaces are thus cross-programmed, allowing different activities to take place within them. They are social and cultural gathering spaces, where one can see the constant movement of people, thus activating the space.

In the FIU School of Architecture the same concepts are applied, but they adapted to fit the new context.

At the FIU School the connections between the building clusters are located outdoors. The clustering of the buildings creates a new awareness of the surroundings, as well as a sense of community among the students (Pearson 2003: 104). This school demonstrates how the pavilions within the large un-programmed space, which Tschumi calls 'generators', are shaped by the movement of people. These generators are places of social gathering.

The outdoor void, the 'in-between' space, becomes as important as the inside spaces. “The void becomes a public space for appropriation, the potential place of 'events': the unprogrammed void is defined by the inner edges of a programmatic solid. The void is often an in-between – a place that falls between the stated requirements of a given program or a rigid urban context” (Tschumi 2000: 12)

In both of these projects Tschumi demonstrates how un-programmed space is activated by the density that surrounds it. It…”becomes the space for celebrations and balls, encounters and debates, projections and artists' installations, the most serious symposia and avant-garde exhibitions” (Tschumi 2000: 519). It therefore becomes the space for events.

fig 3.15 Walkways connecting buildings at the FIU School.

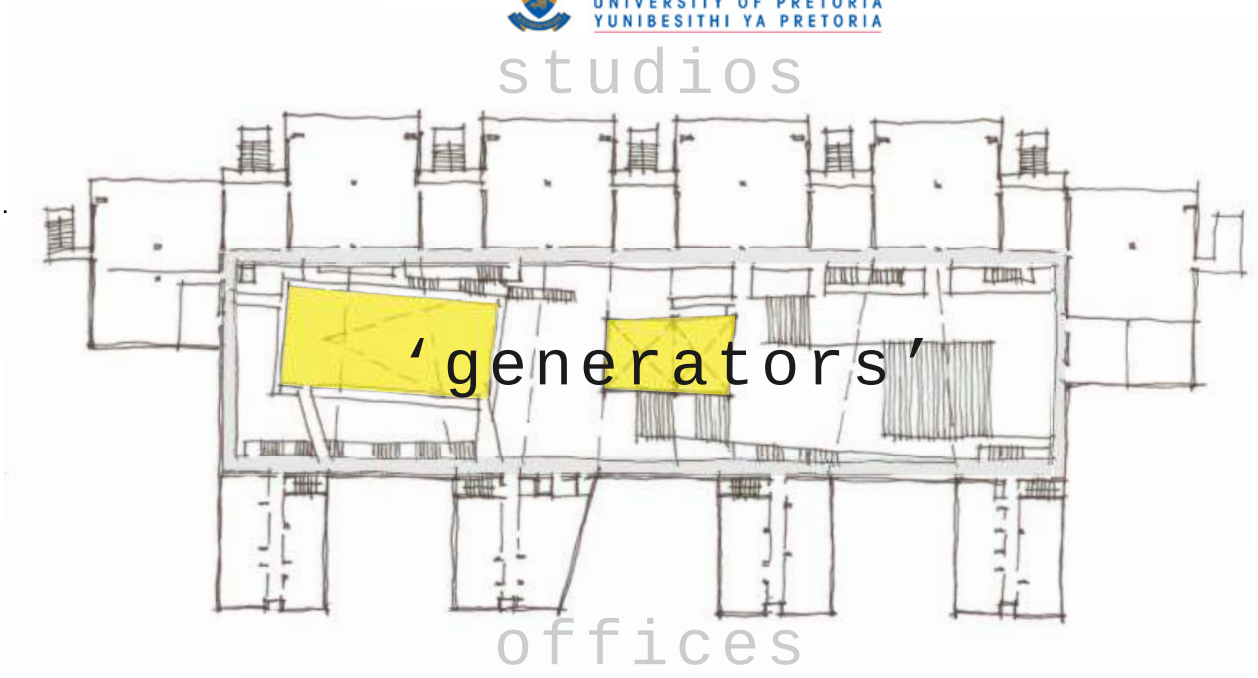


fig 3.16 Marne-la-Vallée School layout. The internal public space is covered a with glass roof.

“Tschumi creates a robust stage set for dramas“ (Slessor 2000: 66).

Tschumi also works with a flexible studio layout. The double volume studio spaces with mezzanine levels allow both individuals and larger groups to be accommodated.

fig 3.17 Flexible studio space with mezzanine level.

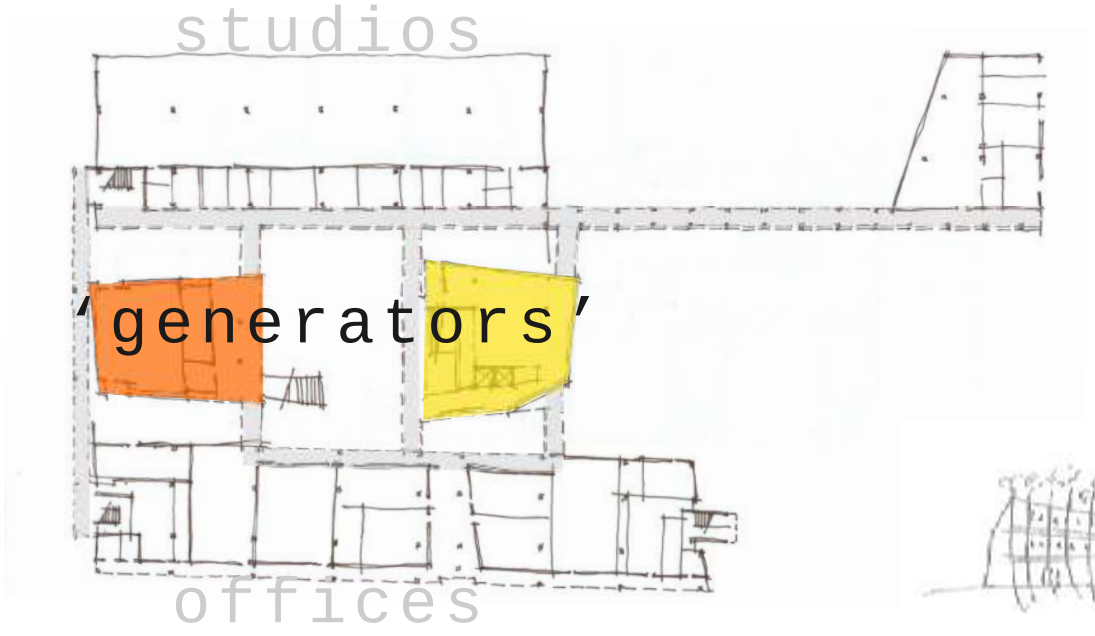


fig 3.18 FIU School. The internal public space is open.
fig 3.19 Sketch of ‘generator’.

fig 3.20 (left) Walkways connecting buildings.
fig 3.21 (right) View of the central lecture hall; a ‘generator’, which acts as a melting pot of cultures.

The 'generator' devices, as defined by Tschumi, have shaped the design in a number of ways; activating and shaping the building clusters:

fig 3.22 Plan diagram of the proposed design.

_design development 02

The building 'core' at the corner is shaped and defined by the movement vectors of the pedestrians. This central circulation core is the un-programmed 'in-between' space. It is activated by the density of the two wings and by the movement of crowds through the space. The activities within this space are visible at all times, informing the passer-by about the current activities within the building and within the artworld. This promotes participation and interaction between the art 'creator' and the viewer (see fig 3.23).

By clustering the buildings around voids the outdoor spaces become as important as the interior spaces.
The two wings have wide corridors and balconies, forming double skin facades. Movement through the building activates the 'in-between' space. This double skin thus provides social gathering spaces, and acts as a mediation system between inside and outside.

The building envelope is traditionally seen as a static, two dimensional surface, but by allowing the skin layers to be occupied it allows the user to reconfigure the interior program. The experiential qualities of the public space are increased by the use of animated screens. This allows the interior to spill out into the square; activating the outdoor space.

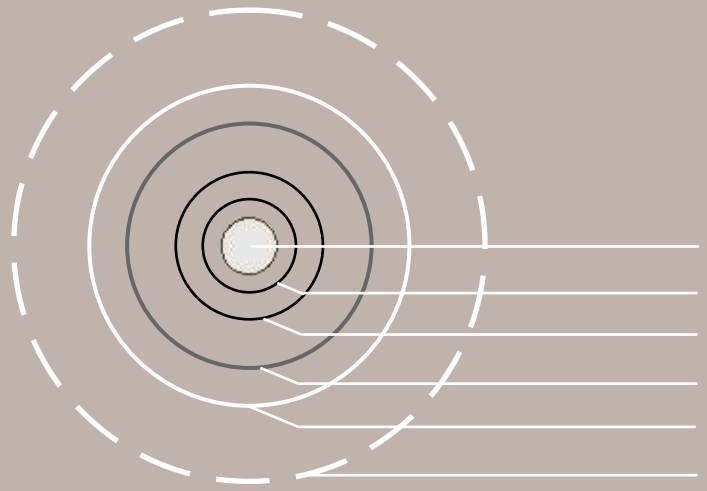
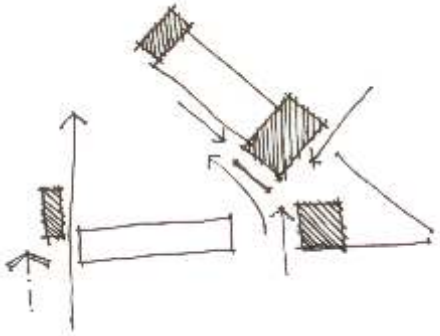


fig 3.23 Levels of participation in art events.

1.



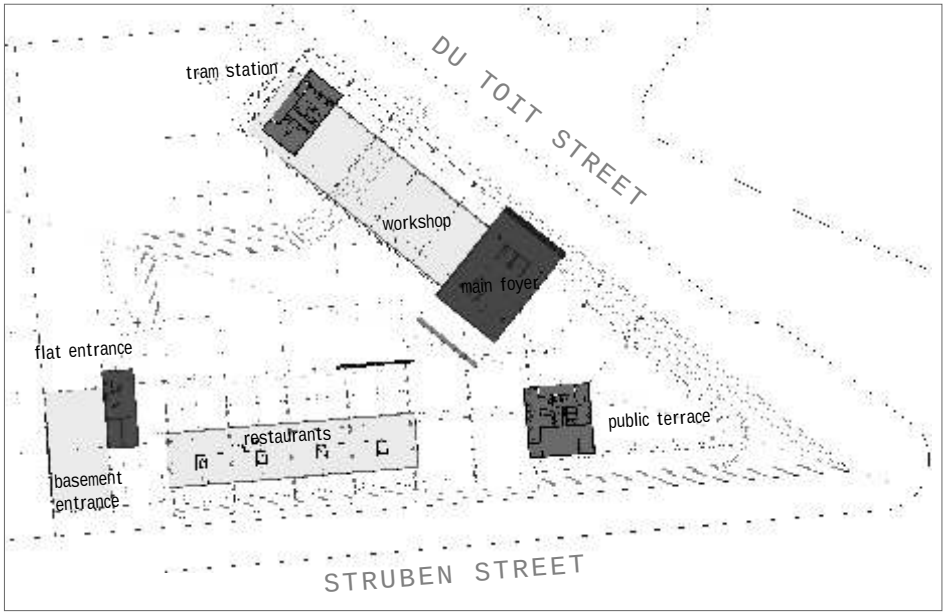
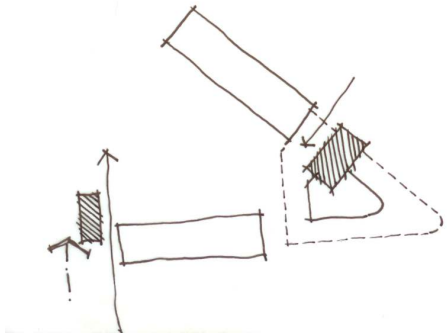


fig 3.24 Ground floor plan, 16 June 2007 concept.

2.



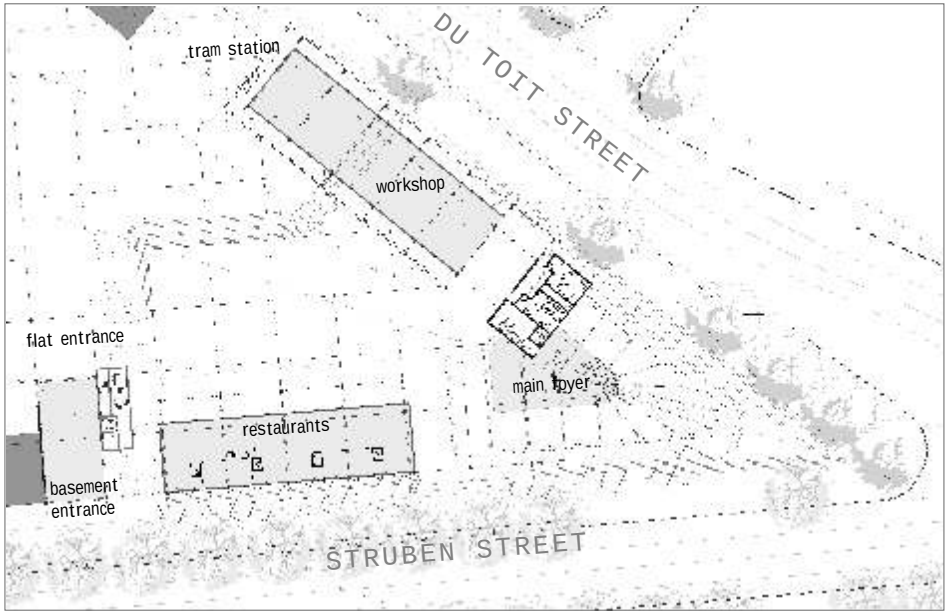


fig 3.25 Ground floor plan, 7 July 2007 concept.

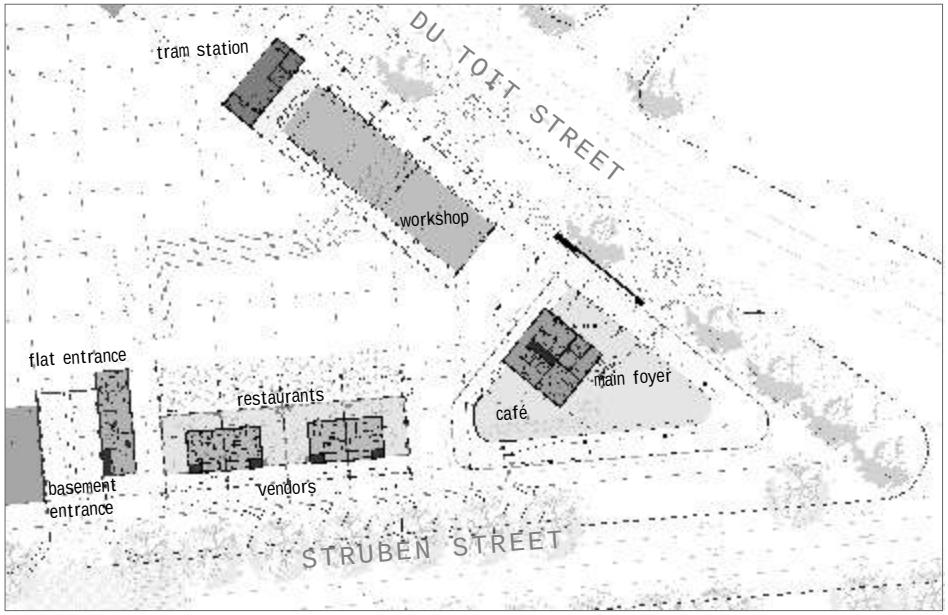


fig 3.26 Ground floor plan, 13 August 2007 concept.

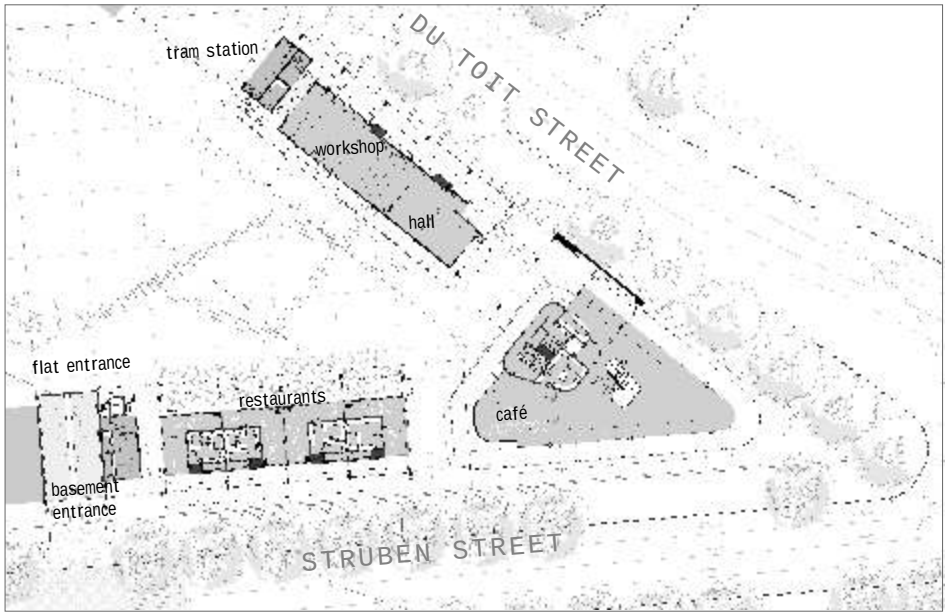


fig 3.27 Ground floor plan, 28 August 2007 concept.

1.

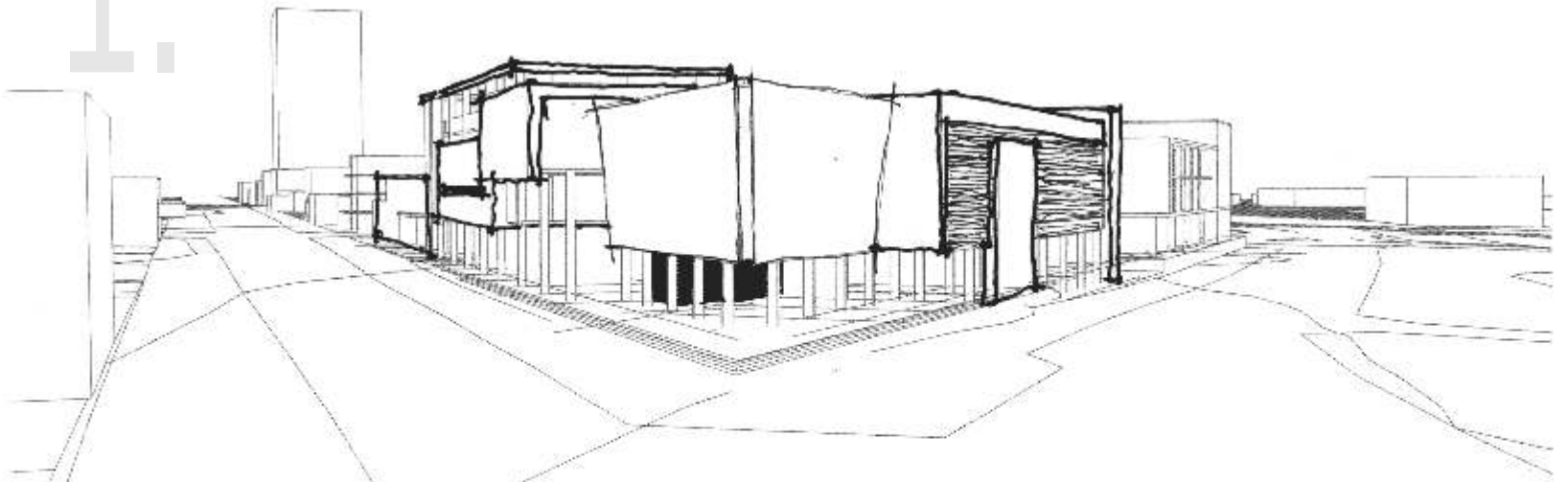


fig 3.28 Concept sketch (16 June 2007).

2.

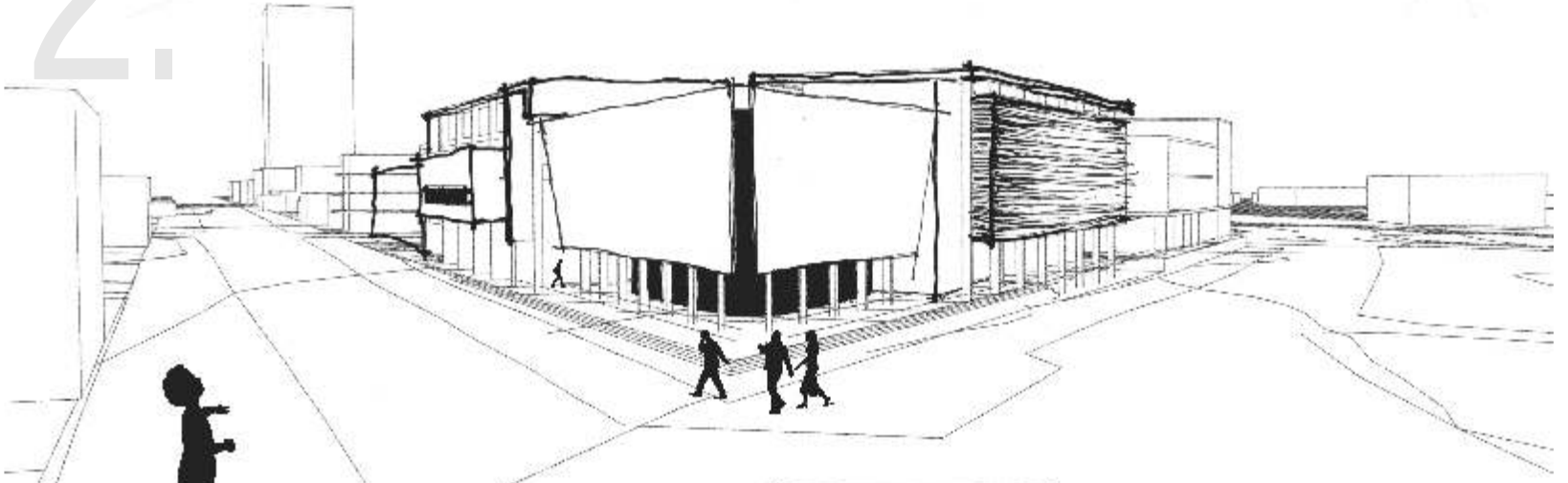


fig 3.29 Concept sketch (7 July 2007).

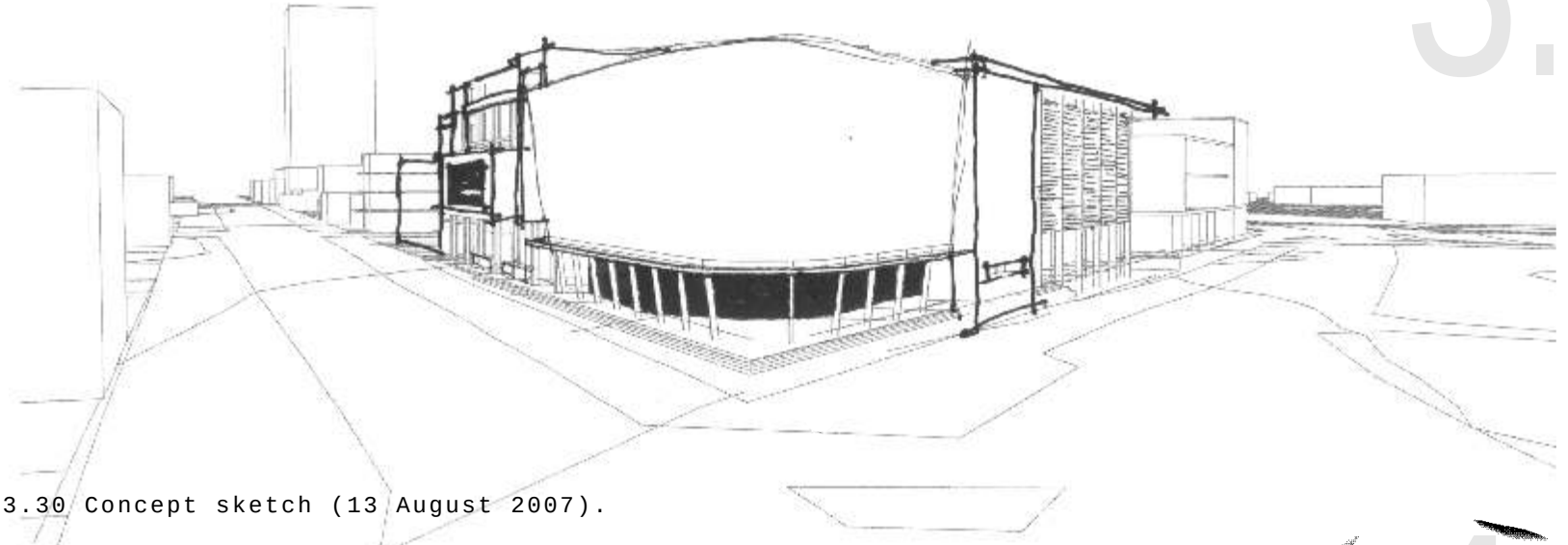


fig 3.30 Concept sketch (13 August 2007).

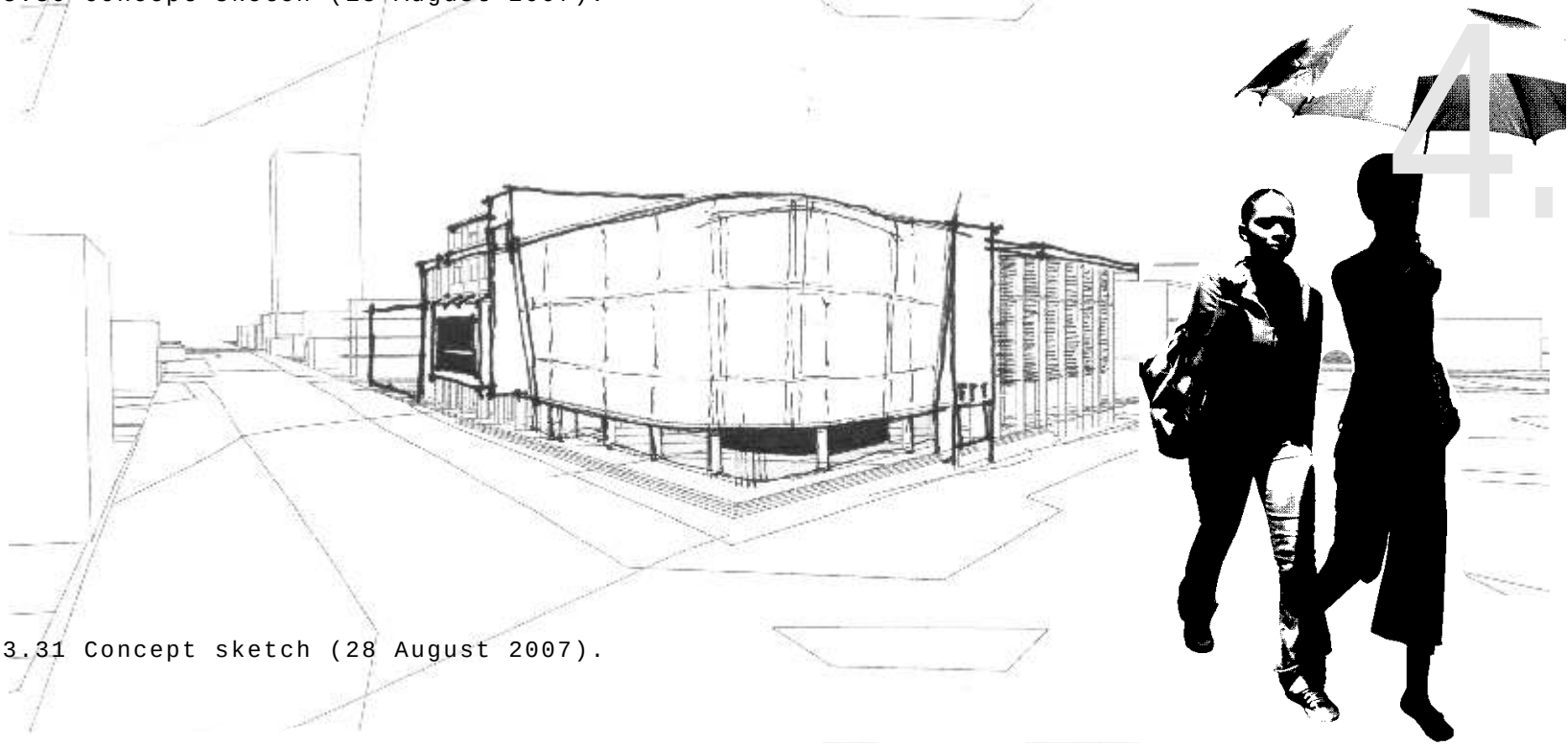
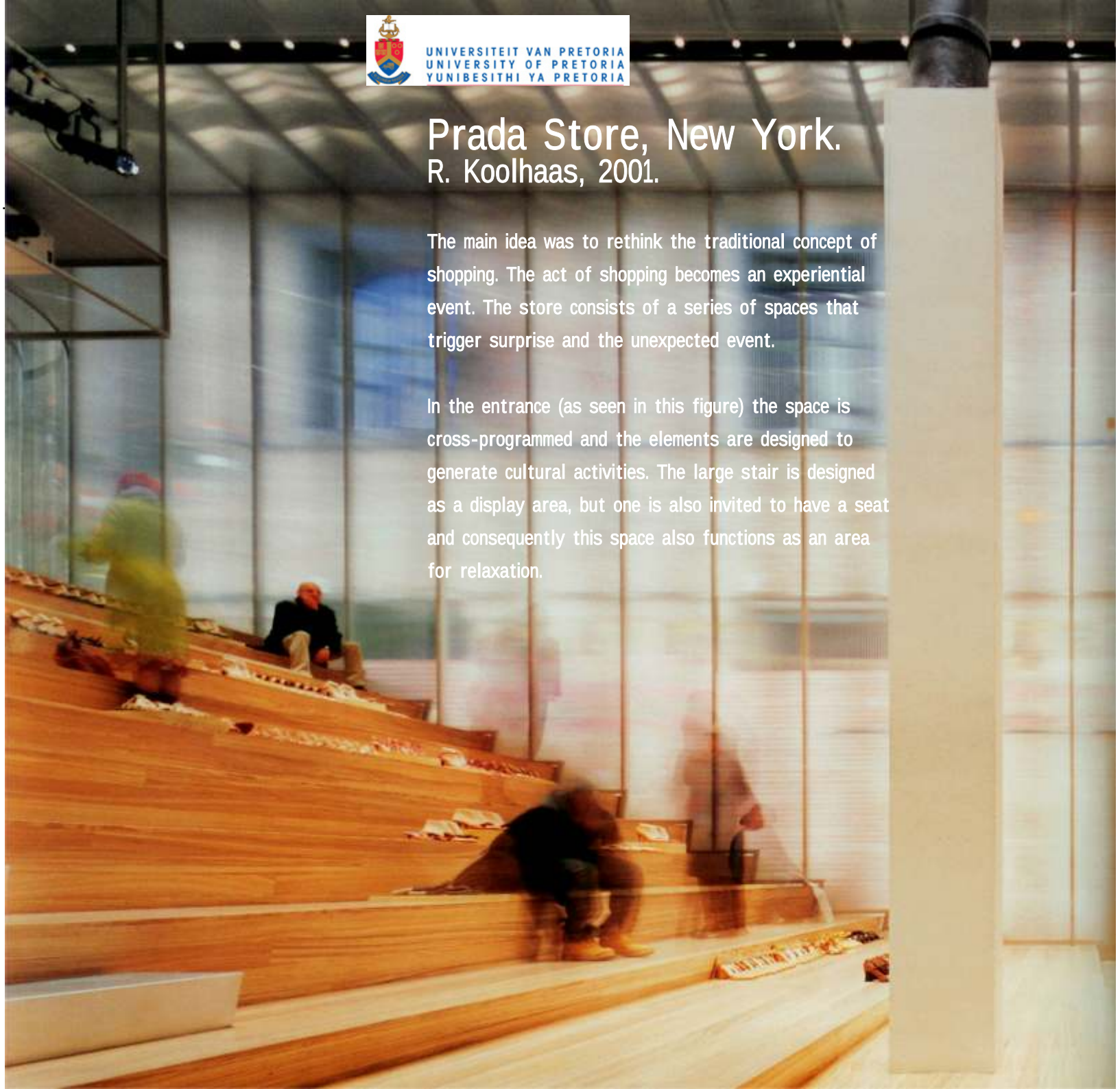


fig 3.31 Concept sketch (28 August 2007).



Prada Store, New York.
R. Koolhaas, 2001.

The main idea was to rethink the traditional concept of shopping. The act of shopping becomes an experiential event. The store consists of a series of spaces that trigger surprise and the unexpected event.

In the entrance (as seen in this figure) the space is cross-programmed and the elements are designed to generate cultural activities. The large stair is designed as a display area, but one is also invited to have a seat and consequently this space also functions as an area for relaxation.

On the other side the floor raises into a stage-like ramp. Metal boxes in the ceiling display products and run on a wire system that can easily be rearranged. This allows the space to be instantly reconfigured.

The communication between staff and the costumer is made as flexible as possible. Screens on clothes racks and built into furniture are part of an information system that displays video clips, drawings, fabric samples and images. This makes the shopping experience an interactive event.

The customer is given as much information as possible, allowing them to understand the new concept of shopping. The design successfully communicates its intentions to the visitor and he or she can immediately understands the space and participate in the event.

fig 3.32 The shopping event space.

CHANGE =

FRAGILE
EVENT
FLEXIBLE

This project aims to be a knowledge hub for artists and aspiring artists. It aims to provide a framework, an 'envelope', in which artists can work freely and insert a second 'skin'. In order to provide these flexible environments, various ways in which 'events' can be accommodated within buildings were investigated.

3.3_FLEXIBLE ARCHITECTURE

We are flexible beings. "The success of the human race lies in our ability to be flexible" (Kronenburg 2007: 14). We move about at will, manipulate objects and operate in a wide range of environments. Our more or less sedentary lifestyle is becoming increasingly flexible in the face of our rapidly changing social, economic and technological environments.

We now demand this degree of flexibility from our surroundings as well. Buildings have a permanent site with set services, but we seek architecture that adapts, rather than stagnates; transforms, rather than restricts; is dynamic rather than static; interacts with us rather than inhibits us. But "the vast majority of western architecture is static, of single purpose and with standardized fittings and furniture" (Kronenburg 2007: 16)

All buildings can accommodate some degree or level of change. We open windows, close doors and move furniture around. But the effort, inconvenience and costs required to release further long-term change makes it a flexible building or not.

"Flexible architecture consists of buildings that are designed to respond easily to change throughout their lifetime. The benefits of this form of design can be considerable: it remains in use longer, fits its purpose better, accommodates users' experience and intervention; takes advantage of technical innovation more readily; and is economically and ecologically more viable" (Kronenburg 2007: 7)

Flexibility can be varied on different levels. The infrastructure is usually relatively fixed, the building frame is stable, the building skin can easily be revised and internal partitions can quickly be relocated; "in this way we can create architecture that relates to the place in which it is located, but still allows for significant change in its use" (Kronenburg 2007: 100).

An adaptable building is "a magical stage that would allow dramatically different activities to occur within the same, but changing, space" (Kronenburg 2007: 14).

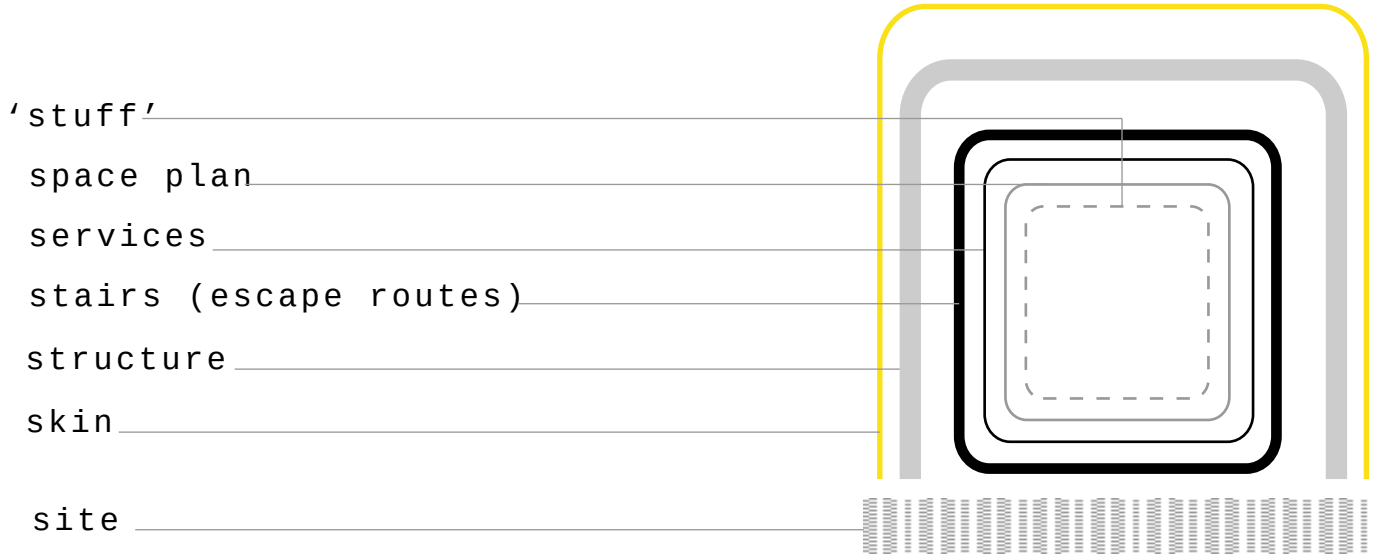


fig 3.33 Building layers of change.

"The contemporary designer's role, rather than creating a fixed setting for people's lives, can now be perceived as a sort of facilitator for the building user to create their own place that they can change as frequently as they wish. Instead of a fixed symbol of the taste and aspirations of the owner, the architecture becomes an indicator, though no more than that, of the meaning of the life and work that exists inside and also its possibilities for their future. Architecture still provides settings for the theatre of human existence. but these settings may now, if desired, be as variable as the occupants' moods or alternatively a fixed element in the changing pattern of living and working. Some changes may take place instantly ... others may happen over months, years or even decades, depending on the changing nature and activities of the building's users" (Kronenburg 2007: 109).

Flexible buildings respond to changing environments in terms of their use, operation or location. “It is a design form that is, by its very essence, cross-disciplinary and multi-functional; consequently it is frequently innovative and expressive of contemporary design issues” (Kronenburg 2007: 11).

The capacity to accommodate change could be one of the most important factors in economic and sustainability terms, but, according to Martin Heidegger, buildings have a more critical purpose, the act of 'Placemaking'. The object (building) is secondary to its existence within a place.

The act of placemaking can be permanent or it can be temporary. Placemaking as an event can be temporary, as used by many non-Western societies. It can be a ritual within the landscape or even consist of a memory. It could be architecture as an installation, lightly placed on the city surface, where it “interacts with the surrounding landscape in a less formal sense and becomes an event rather than an object” (Kronenburg 2007: 12).

One of the key principles in the generation of flexible architecture is that it only becomes complete once people inhabit and use the building. This does not mean that we now need to design loose-fitting, bland environments. Instead we should aim to design buildings that have integrated systems that can accommodate change. It has to communicate effortlessly to its user and offer opportunities to engage with events by providing meaningful settings that evolve over time.

“Through change driving its development, it must still respond in a balanced way to the constant theatres in which human activity take place – in our private and public lives, at home and in the community – each of which contributes to our sense of how we dwell in the world” (Kronenburg 2007: 19).

According to Robert Kronenburg, four characteristics define a flexible building. These are:

1. ADAPT
2. TRANSFORM
3. MOVE
4. INTERACT

fig 3.34 (above) Street entrance.
fig 3.35 (bottom) Ramped staircase.

Toyo Ito, 2004

Matsumoto performing arts centre, Tokyo

Matsumoto's program includes two theatres, rehearsal spaces, studios, workshops and a restaurant. The main objective was to create a building that could be adapted by its users and visitors, and that the building would be capable to respond to their changing and developing needs (Kronenburg 2007: 84). The resultant building is specific to its site and program, and it manages to communicate its adaptability to its users in a clear and direct manner, so that the user can understand it and develop it even further.

The long and thin site is within a nondescript area, with only minimal street presence. The building had the difficult task to establish a civic presence within its surrounding area. What made the design even more difficult was the fact that the site layout did not allow for the normal hierarchical layout of other theatre buildings. The entrance and back of house had to be placed together.

The designers placed the minor theatre and rehearsal rooms at the front of the building, acting as a buffer for the main theatre at the centre. A curved wall is used to encircle all public spaces in an organic form. Visitors are quickly swept from street level to the upper level by a large ramped staircase and escalator along this wall. The visitor travels through a gradually opening linear volume. The curved wall is constructed from glass-reinforced concrete panels with inlaid recycled glass blocks that let diffused natural light into the soft, amorphous and smooth interior.

The principles of flexibility are addresses in four ways:

Transformable elements allow spaces to be used for more than just one function. Ceilings can be lowered to give different acoustic conditions and spatial experiences. Stages can be extended, seating can be removed and the user has control over the amount of natural lighting. The building's floor surface provides for movable elements, different mobile components that can be located to organize and re-organize space or routes. Adaptable spaces express no particular function, but suggest many. Spaces are cross-programmed and different functions merge into one space. This is the space where events can happen; the 'in-between'. Visitors interact with artists in circulation areas, making public areas inviting and accessible.

"The building design actively encourages people to come in and see what is happening and then to use it in many different ways" (Kronenburg 2007: 87).

fig 3.36 Movable elements within the space; sketch of the plan layout.

1. adapt

Building frameworks that are designed to respond to different functions, patterns of use and users. Loose-fit space is used that can be fitted out as required by different participants. The building is not viewed as a fixed object, but as a process.

Adaptable architecture allows for the easy application of new technologies, for example by using a conduit or access flooring system. The plan therefore allows for different layouts, has fewer restrictions and allows the user to influence design decisions.

Service cores or 'control systems' that can service sub-divided and re-zoned adaptable spaces over time must be sophisticated to allow for ease of use. They usually contain the lighting control system, power supply and communication systems. These service cores can be complex and expensive, but they are able to accommodate both rapid and long-term change.

The only drawback is that adaptable spaces cannot accommodate a close fit for specific dedicated functions. Compromise may be necessary. Fluctuating space is thus applied, in which these dedicated spaces are linked with buffer zones that allow for the unplanned activities to spill out onto if required. These cross-programmed fluctuating spaces are most often the circulation areas and lobbies within a building. The fluctuating space becomes the 'in-between'; the event space.

The only drawback is that adaptable spaces cannot

adapt

proposed design implementation:

Because the proposed building has to support many diverse uses and users, the access to service points has to legible. Throughout the building the easily accessible service cores are located at easily identifiably areas. These cores vertically distribute the necessary services. A low profile access flooring system is used to distribute electrical services horizontally. This ensures that new technologies can easily be installed and used when needed.

These service cores are located at the center of the building, making the plan layout as flexible as possible. This flexibility allows users to reconfigure their spaces according to their own individual needs.

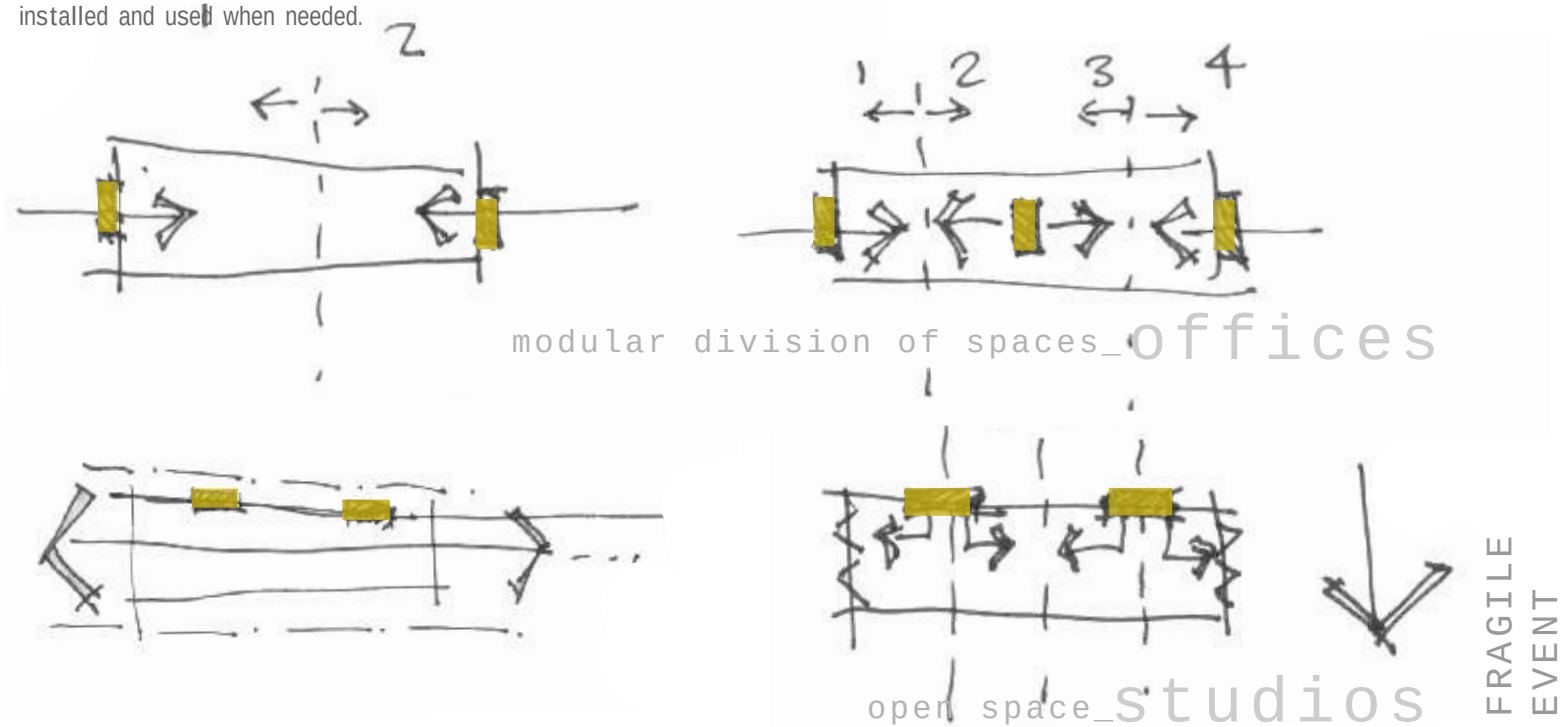
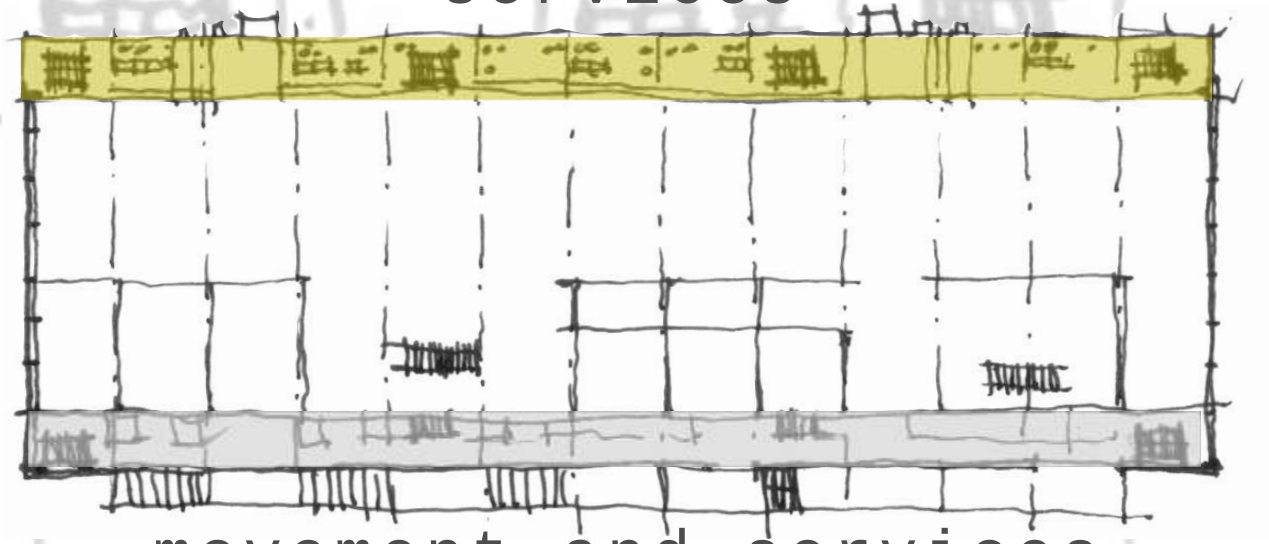


fig 3.37 Investigation sketches of service core layouts.

services



movement and services

fig 3.38 Modular plan layout.

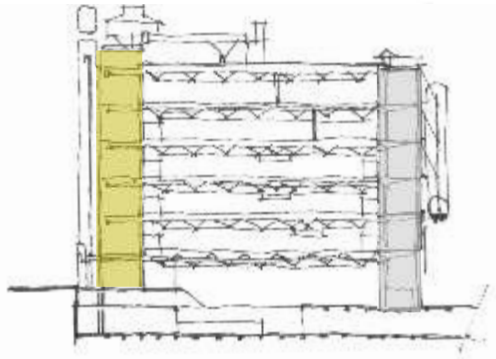


fig 3.39 Section.

Renzo Piano and Richard Rogers, 1977.

Pompidou Centre, Paris

The Pompidou's original brief was to provide a 'Cultural Centre for Paris', a museum of modern art, a reference library, a centre for industrial design and a centre for music and acoustic research. The architects expanded the brief to a 'Live Centre of Information and Entertainment' with the aim to design not only for the art specialist, but to include the visitor, local resident and tourist.

They created "a truly dynamic meeting place where activities would overlap in flexible, well-serviced spaces, a people's centre, a university of the street reflecting the constant changing needs of users" (Kronenburg 2007: 69). It was to express change and be practical at the same time.

The building and its new open spaces had a great effect on its urban environment, acting as a catalyst and regenerating its surrounding area. It changed the neglected area into a desirable and vibrant community.

The flexible layout of the building was a key concept. Services and access routes were incorporated around its perimeter, communicating its flexibility to outsiders. The resultant internal open floor area or 'plated' could be re-arranged in any way, allowing for multiple functions. Internally there was a hierarchy of flexibility. Small, light-weight partitions allowed for instant change while larger museum partitions could be moved within an hour. Even firewalls were bolted in place to allow for longer-term change. The services also allowed for a great degree of flexibility, being located at floor and ceiling levels.

Pompidou centre: "showed how modern technology could offer ways of integrating a huge gallery into the heart of an ancient city, at the same time, enhancing the life of both." (Evans 2001: 250)

2. transform

Buildings that change shape, space, form or appearance by the physical alteration of their structure, skin or internal surfaces. It is architecture that is altered by opening, closing, expanding and contracting, dramatically changing the appearance and ambience of a space.

Problems that usually need to be addressed are: moving mechanisms, the joining of internal and external surfaces, and the operation of services under the different conditions. Mechanisms should be easily operable, reliable and robust.

Transformable buildings give the user more control over

Transformable buildings give the user more control over his/her environment and enhance the connection between the building and the external environment. It changes the human engagement with architecture, where the building becomes a dynamic object that people can interact with directly. It also makes the transformation of a building's image and identity possible, depending on the nature of activities inside.

transform

proposed design implementation:

By applying a mediamesh/illumesh, images can be projected onto the screens, thereby changing the outer skin from a static medium into a dynamic façade, thereby activating the public space.

With the installation of a dynamic medium it becomes necessary to design it mot only as a one-off event, but to organize and design its ongoing program.

The presentation must be an ongoing artistic program, implemented and curated by the organization.

Technical aspects of these screens are discussed in the technical investigation.

fig 3.40 Mediamesh screen.

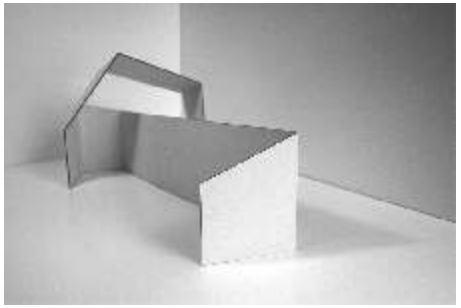


fig 3.41 Model of the transformable white cube.

Pleinmuseum is a mobile exhibition pavilion. Constructed of steel tubes and canvas, a hydraulic mechanism unfolds the structure and transforms it from a white cube into an illuminated sculpture. Its white walls become projection screens that absorb colours and lights of a show, continually taking on new appearances.

Rene van Engelenburg, designer and initiator, aims to illustrate issues about the changes within the international artworld. This 'migrating museum' is an alternative to the 'white cube' view of the standard exhibition space. As a representation of the model of the modernist museum the structure remains closed during the day. But at sunset it becomes an open and flexible museum that is easily approachable (pleinmuseum.org).

Pleinmuseum becomes part of urban life, activating public space. It reconfigures the relationship between art and the public. It is an accessible tool for artists across a variety of disciplines that invites the audience to participate in events. This temporary stage becomes a dynamic platform for discussions on the new emerging means of visual representations within the accelerated globalized culture.

Rene van Engelenburg, 2005.

Pleinmuseum

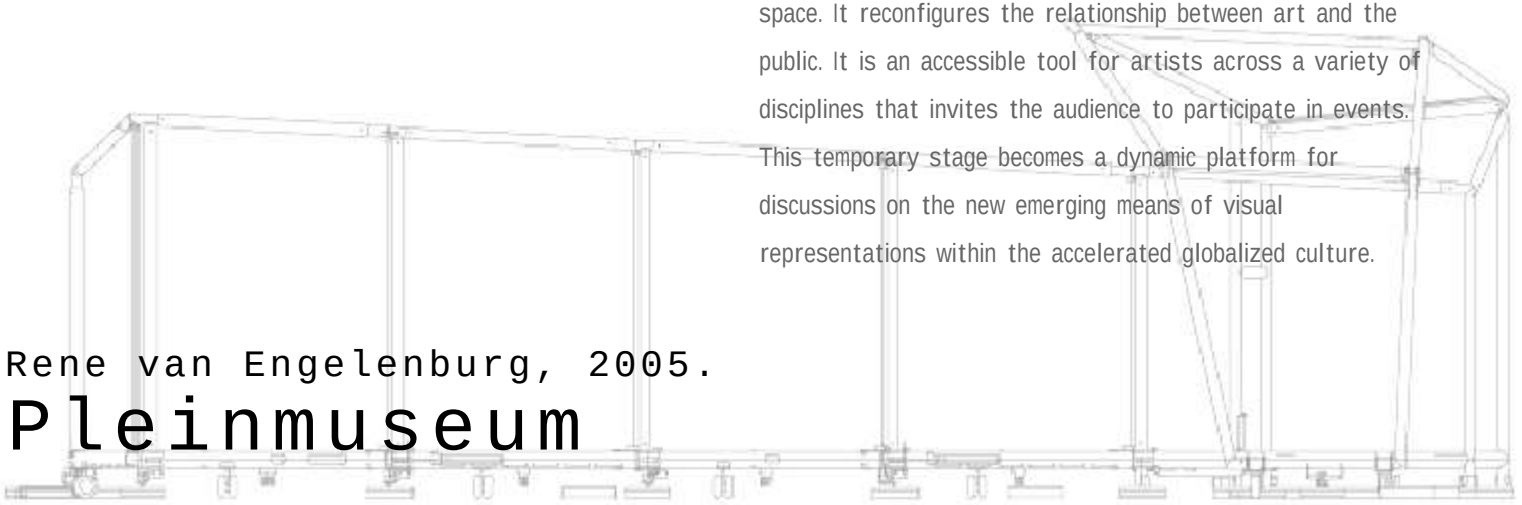


fig 3.42 Elevation.

fig 3.43 The ‘chameleon’ museum.

3. move

Buildings, usually prefabricated, that relocate from place to place in order to fulfil their functions better.

Movable buildings can be portable, demountable and modular. These temporary buildings can be used to change the nature of public spaces.

move

proposed design implementation:

The proposed building is not a movable building, but a permanent structure. However, movable elements are implemented in the design that contribute to the flexible nature of the design.

fig 3.44 Movable screen elements.

A sliding screen system is applied to the eastern and western facades. Their main function is to protect the interior space from the direct morning and afternoon sun. These screens can be opened and closed according to the users' required level of light and level of privacy. Screens can be opened to expose activities inside up to the outside, inviting the spectator, or they can create private working spaces. By using a buffering zone, additional outdoor space is created, which also functions as the in-between event space.

Elements within spaces can be moved in order to change the nature of the space. Sliding doors allow open spaces to be sub-divided. The sliding doors can even be used as exhibition panels. These elements support the cross-programming function of the spaces.

This is an installation

(which poses questions):

What is the programme?

Programme =
Spaces
for architectural exhibition (of images)?

and/or

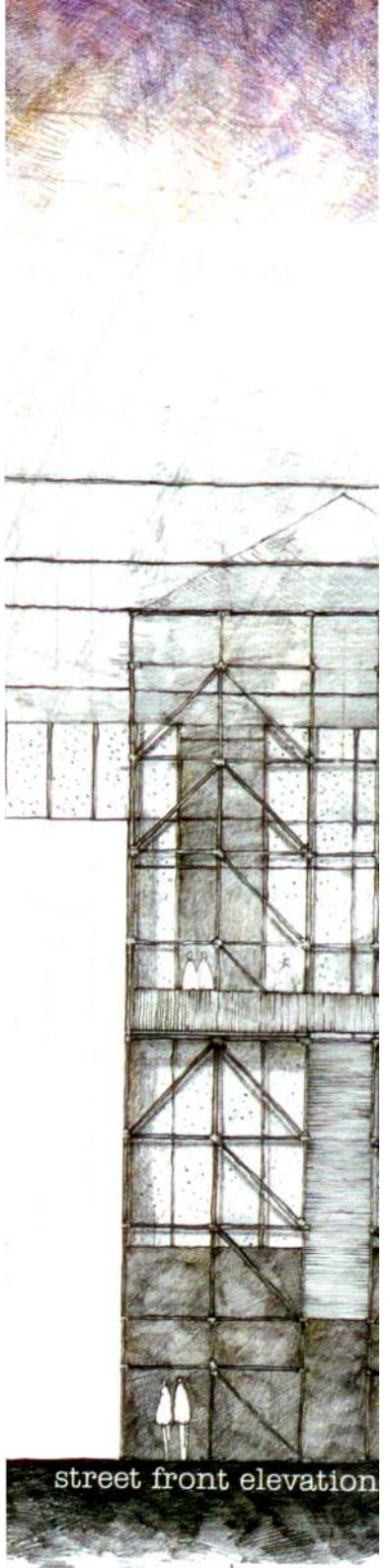
Programme =
Spaces
where architecture (a tectonic argument) is exhibited?

and/or

Programme =
An architectural framework
that exhibits spaces?

This is an installation
where real and perceived tectonics
may collide
or, at least, co-exist

This is an installation.



D. Kiratzidis and A. Hofmeyer

UrbanPlayMobile

This was the winning project of the UrbanPlayMobile Design Competition, launched in February 2006. The aim of the competition was to create a vehicle to promote urban culture, and to invent a new use and demand for public space.

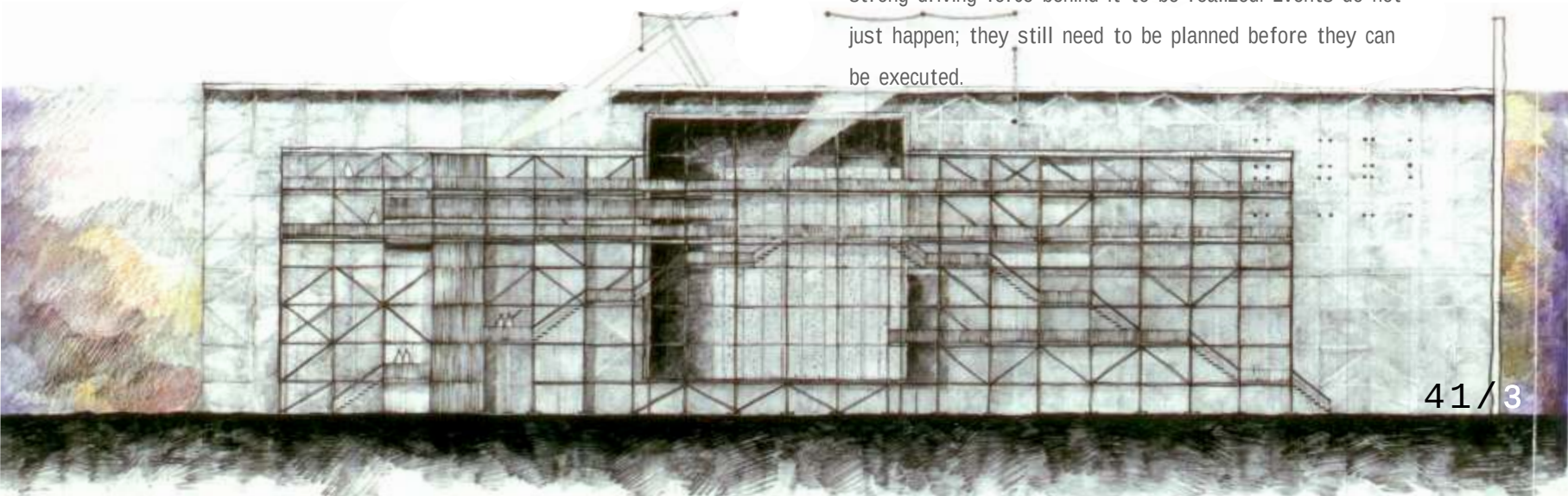
This design is an example of flexible/mobile architecture as an event generator. The primary framework consisted of scaffolding that would be attached to existing buildings. It would be a cultural exhibition space that would bring new life into public spaces within cities, provide fun and entertainment, and act as a platform for education. Most importantly, it would change the perceptions that users have of their neglected urban spaces.

The proposal consisted of a modular framework that is site-specific and has minimal impact on its environment. The scaffolding skeleton would provide the structure onto which prefabricated concrete panels could be fixed. Alternatively, taken a step further, it could provide a backdrop for images projected onto attachable canvas screens. From a 'non-space', this placemaking tool could be used to generate events and activate space. The possibilities are almost endless.

A scaled-down version if the proposal came to fulfilment in May 2007 at the historic Drill Hall, Johannesburg. Unfortunately, the lack of funding resulted in the project being revised extensively. But it still achieved its aim by activating its surrounding public space.

What became apparent is that the project required a strong driving force behind it to be realized. Events do not just happen; they still need to be planned before they can be executed.

fig 3.45 (left) Program investigation.
fig 3.46 (below) Elevation sketches.



4. interact

Buildings that respond to users' requirements by using intelligent systems.

These buildings' systems react to environmental comfort, safety, security, privacy, communication, entertainment, ambience, energy-use and efficiency. These systems react to users' requirements in automatic or intuitive ways. These systems can be highly technological, or just uncomplicated *brise-soleil* systems. They communicate to the outside world and show that architecture is active.

It is important that visual interactive systems truly function as interactive elements. Viewers should have a degree of control over their visual environment. If the building is not interactive, it becomes a continuation of the "pre-determined architectural forms of the past" (Kronenburg 2007: 214).

interact

proposed design implementation:

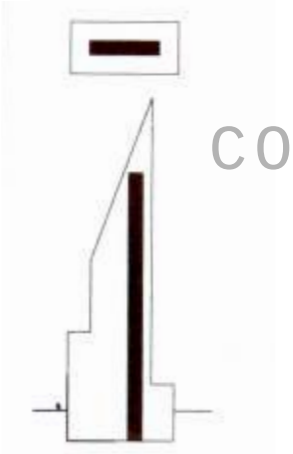
fig 3.47 SPOTS, Potsdamer Platz, Berlin.

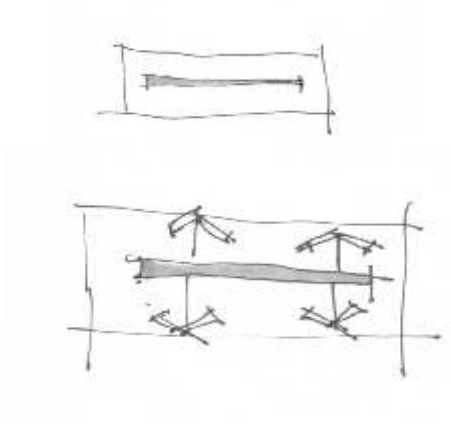
Art interventions on the public square will contribute to a positive and creative atmosphere, and will invite people to participate and congregate in the space. There must be a balance between individual artists' work, commercial advertising and the public's desire for a democratic public space. The public should not be 'bombarded' by an individual or a small group's aspirations.

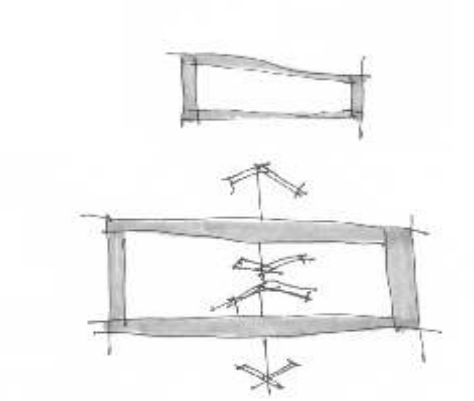
The screens on the façade are thus fragmented into smaller screen elements. These separate screens can function in isolation, or they form part of a larger image; as pixels forming a whole image.

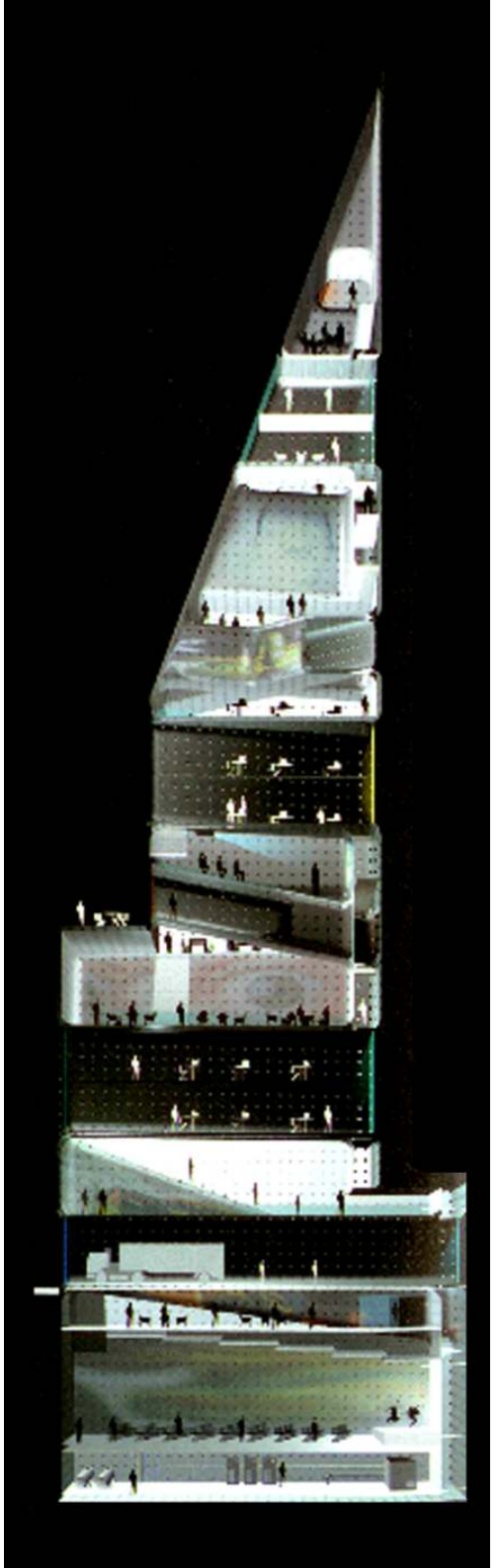
The SPOTS installation for the Kunsthaus Graz, makes use of a Monday system. Throughout the week artistic shows are presented, and Mondays are set aside for advertisements. The income generated from advertising is used to finance the artistic work (realities:united).

Viewer participation is encouraged in the design. It is proposed that a cellphone system be implemented, whereby viewers can have personalised messages or images displayed on the screen.









MVRDV proposal, New York, 2001-2002.

Media Galaxy

fig 3.48 (above) Core vs. skin layout.
fig 3.49 (right) Section.

Founded by John Johnson in 1997, Eyebeam is a hybrid non-profit organization that offers educational programs, media production facilities, exhibitions and performances. Their mission is to support the research, production and distribution of the new media arts. Residency programs enable the public to interact with the participating artists.

In 2000 a competition was launched for the design of their new building. The Eyebeam building will house a museum of art and technology, artist-in-residence studios, an education centre, multi-media classrooms, a theatre and a digital archive. MVRDV was one of the finalists in the competition with their 'Media Galaxy' proposal.

MVRDV's proposal compared concepts of media and architecture. "Media and Architecture form a contrasting combination: quicksilver versus inertia, melting pot versus traditionalism. However both deal with 'space,' imitating or mimicking new media does not seem the direction for architecture: no project ages faster than an 'ultra-modern' media based architectural image. A practical approach seems more rewarding" (MVRDV 2005: 794).

With the introduction of computers in the workspace the traditional office space layout had to be re-thought. The traditional office layout consists of a central distribution core with office spaces on the perimeter, resulting in shady and flickering zones. But by reversing the plan, central work spaces are created, surrounded by stairs and walkways. This results in "an open shady plan surrounded by a 'communication wrap': an accessible skin" (MVRDV 2005: 795). It forms a 'hollow beam' with an external double skin that houses all communications, services and the structure. Interior voids become important collective zones: "an endless interior, in which all functions can be addressed" (MVRDV 2005: 796).

By placing the 'hollow beams' in the hollow tower, the combined 'in-between' spaces become open communicative environments. They are the meeting spaces that provide spaces for different users and programs.

fig 3.50 Media Galaxy plan layout sketches.