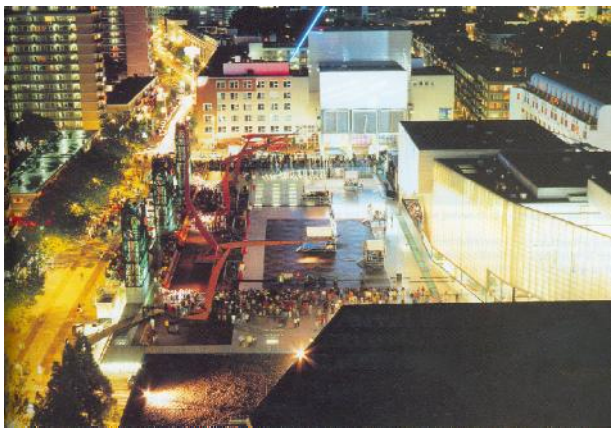
>>design implementation

West 8, a landscape architecture/urban design firm in the Netherlands, undertook an urban project in Rotterdam, the Schouwburgplein, which was initiated in 1991 and completed in 1996. It was the re-design of a public space in the inner city.

The Schouwburgplein is strategically located in the centre of Rotterdam. It is near the train Station, office districts, theatres and concert halls (HOLDEN 1998: 33). Yet despite its location, in the 1980's the square had become a dilapidated cheerless place, a typical product of commercial development. The space needed to be revived. West 8 re-interprets the square as a city stage and raised the plinth of the square by 300mm. The planning of the square reflects the changing paths of the sun and the different seasons. This is done through the material use in the square. The materials vary from epoxy resin, Robinia wood, to perforated steel panels (VAN CLEEF 1998: 44). Ultra light materials were used in order to avoid costly renovations but also to alleviate the weight imposed on the 2 level parking lot below. The cinema complex, designed by Koen van Velsen, lies on the western edge. It was designed to be an extension of the public space. Its foyers and café are open to all. By day the transparent, corrugated plastic skin lets in light and in the evening the building transforms into a gigantic lantern (L'architecture d'aujourd'hui 1996: 94).

As Robert Holden observed being in the square," You are in full autumn sun and you begin to see the urban choreography. There's a tall jogger totally clad in white going to and fro across the square. Eight or nine people sit talking on the varnished, orange timber-slat benches. Later people come to eat sandwiches. There is an intermittent diagonal flow of mothers and children from the two eastern corners of the square to the white, translucent block clad in plastic corrugated sheet which is the Pathe cinema in the centre of the western side."



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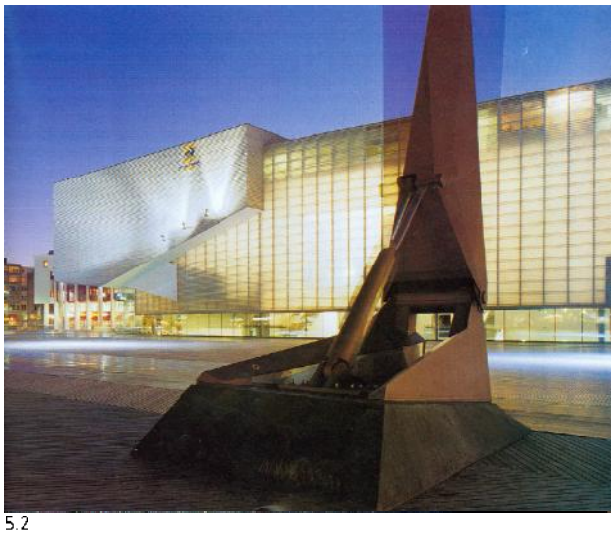
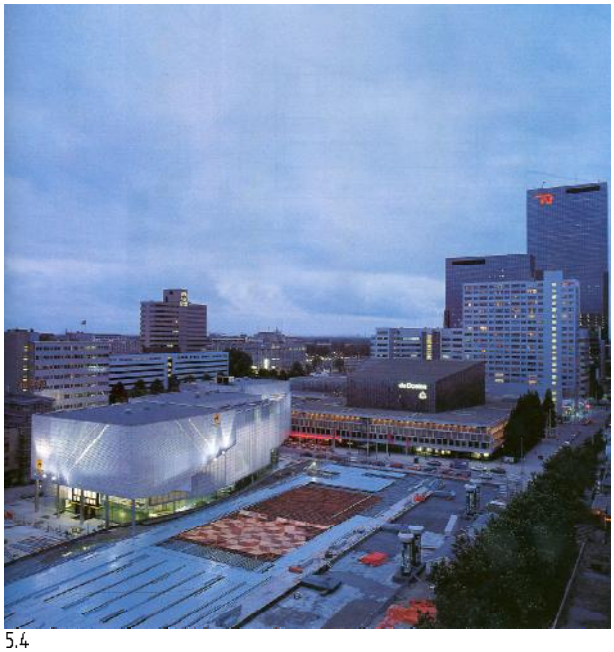


5.2

5.3

Fig 5.1 elevated view from the north of Schouwburgplein
Fig 5.2 view of cinema complex on the west side of the square at night
Fig 5.3 raised plinth
Fig 5.4 elevated view from the south-east of Schouwburgplein
Fig 5.5 timber seating

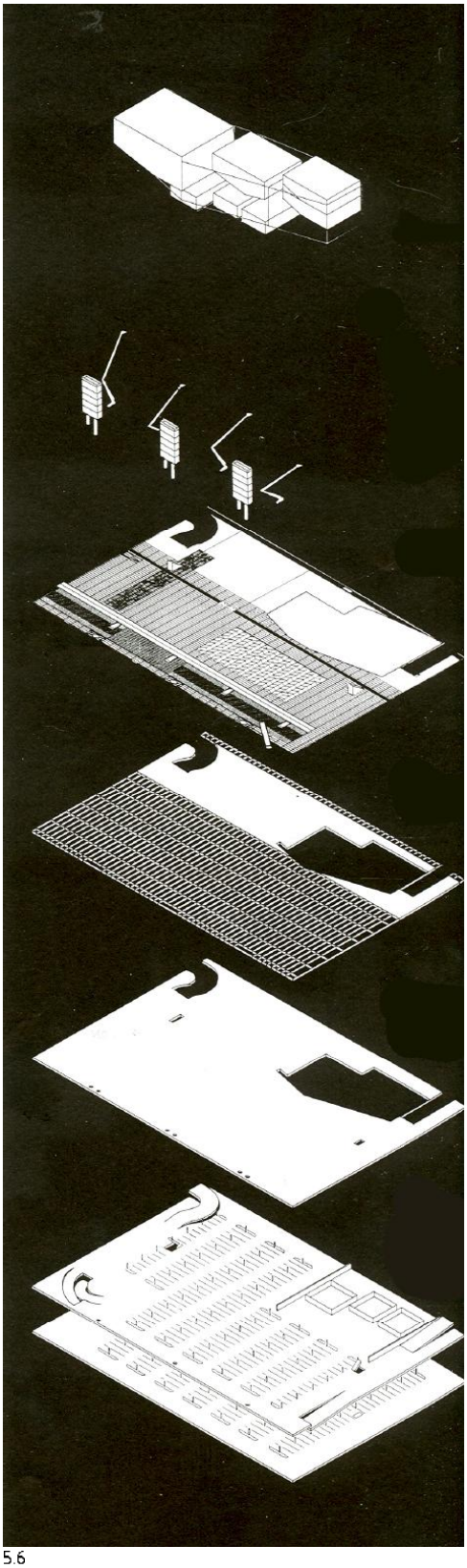


5.4

The similarities that exist between the Schouwburgplein and the Strijdom Square are quite significant. They both have an open square, a road running adjacent to the square, the cinema/ theatre complex and a third building enclosing the square. Both sites have underground parking lots, which need to be ventilated to the surface. Not only do the ducts in Schouwburgplein ventilate the underground parking but they also provide large advertising platforms. The two sites are completely mirrored i.e. the theatre complex of Schouwburgplein is on the western side of the square whereas the State Theatre on Strijdom Square is on the eastern side. However, this makes the solar orientation of the two squares identical due to their differing hemispheres.

5.5

The project is described below by the firm: "The Schouwburgplein is situated in the heart of the city and is surrounded by shops and flanked by the City Theatre and the City Concert Hall. The design emphasizes the importance of a void, which opens a panorama towards the city skyline. The square is designed as an interactive public space, flexible in use, and changing during day and seasons. Its appearance is a reflection the Port of Rotterdam. All of the necessary ingredients were present; it only had to be brought to life. By raising the surface of the square above the surrounding area, the void was retained and the 'city's stage' created. The layout of the square is based on the expected use at different times of the day and its relationship to the sun. These sunlight-zones are reflected in the mosaic of the different materials used on the floor. The west side of the square is a poured epoxy floor containing silver leaves. The east side (with more sunlight) has a wooden bench over the entire length and warm materials including rubber and timber decking on the ground plane. Geraniums are also placed seasonally within this warm zone. Fifteen-meter high ventilation towers from the underground parking are strong vertical elements on the square. Each of these lightweight steel structures is activated with LED displays. Together the three towers form a digital clock. At night, the towers are lit from the inside spreading a soft filtered light. The centre of the square is finished with a deck of perforated metal panels and a wooden play area. The perforated metal panels are lit from below with white, green and black fluorescent tubes. Connections for electricity and water, as well as facilities to build tents and fencing for temporary events, are built into the floor. Fluorescent lights, form a radiant Milky Way at night. The whole square seems to be floating because of the linear lights that are mounted under the edge of the raised deck. The last major features of the square are the four hydraulic lighting elements. Their configuration can be interactively altered by the inhabitants of the city." (http://www.west8.nl/W8_Archives/archive.html: 4th April 2006).



5.6

What can be learnt from the Schouwburgplein is:

>> The theatre/cinema complex has not created a hard edge between the square and the building. As mentioned above, the theatre complex allows interaction between itself and the square. The ground floor of the complex is seen merely as an extension of the public space. This creates a connection between the built fabric and the open space.

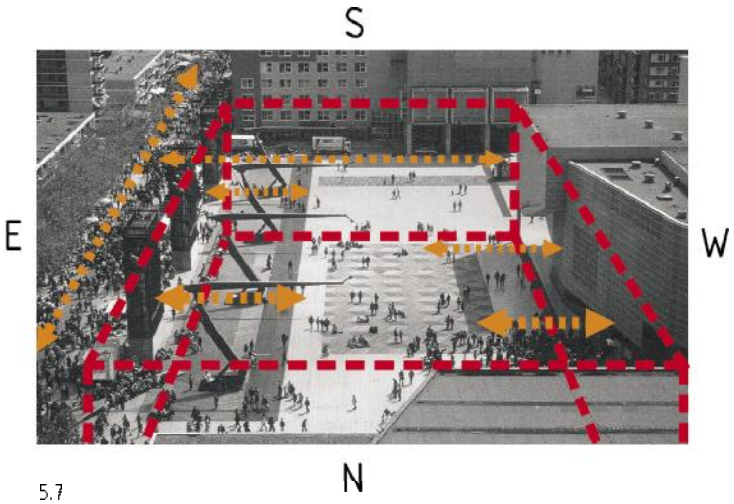
>> The solution of ventilating the underground parking lot was turned into an architectural design solution.

>> Providing seating along the edge of the square. This emphasizes the stage idea of the raised square by allowing people to either be spectators (seated watching the people and activity) or to become part of the theatrics (by moving or participating in activity in the square).

>> The square level is of such a nature that it allows easy access in and out of the square. Also the movement across the square is not hindered in any way and it is easy to orientate oneself once in the space.

>> The scale of the surrounding buildings is the correct ratio. The buildings do not overpower the square and the square is not too large so that someone would feel isolated in the space.

>> The square accommodates a constant flow of people, but can host large gatherings of people as well.



5.7

Fig 5.6 exploded isometric view of Schouwburgplein

Fig 5.7 analysis of Schouwburgplein indicating height ratios, interaction between building and open public spaces and pedestrian movement through and around the site

The intention of this dissertation, in terms of re-designing an urban public space, is not to create a place that is constantly filled with people so that it feels as though it is a continuous festival. That would be difficult to achieve and would not be the test of whether or not the space has become successful.

The success of the space will be tested on whether:

- >> Accessibility (in the physical sense) to the Strijdom Square is on a level that all users, including the physically challenged, do not feel (within reason) a significant effort on their behalf has to be made in order to gain access to or through the square.
- >> Accessibility (on a conscience or sub-conscience level) is on such a level that all users feel welcome, comfortable, not threatened or overwhelmed by the space.
- >> Legibility is on a level that the user does not feel disorientated, that they can maneuver through the space easily in order reach another destination.
- >> The distinction between the built fabric and the open space is on such a level that the user is not consciously aware of inside or outside.
- >> The existing movement across the site is not impeded and is enhanced to a level that benefits the space and users.
- >> The existing economic and social activity is retained, added to and enhanced in such a way that it will benefit the regular users and visitors of the city.
- >> The square is of such a nature that it is defined by edges and boundaries on a physical and psychological level.
- >> The architectural intervention is merely a continuation of the city floor.
- >> The square becomes easy to use and satisfies basic needs for a public space i.e. provisions for shelter (shading), seating, access to ablutions and access to food and drink etc...
- >> The square can accommodate a mass gathering of people for concerts, public announcements etc... as well as be a comfortable space when there are few people in it.

Fig 5.8 first concept model indicating a form diagram

First Concept

In addressing the issues above, as well as the physical constraints (as discussed in the previous chapter) a desirable 'form diagram' evolves on an urban scale. Public spaces need not have structures or buildings in them in order to enhance them. A public space needs to be open so it allows people to take ownership of the place and make it their own. The open space will acquire its own identity through continual use by the people of the city. An intervention is still needed to address the problems of the square as well as enhance the space.

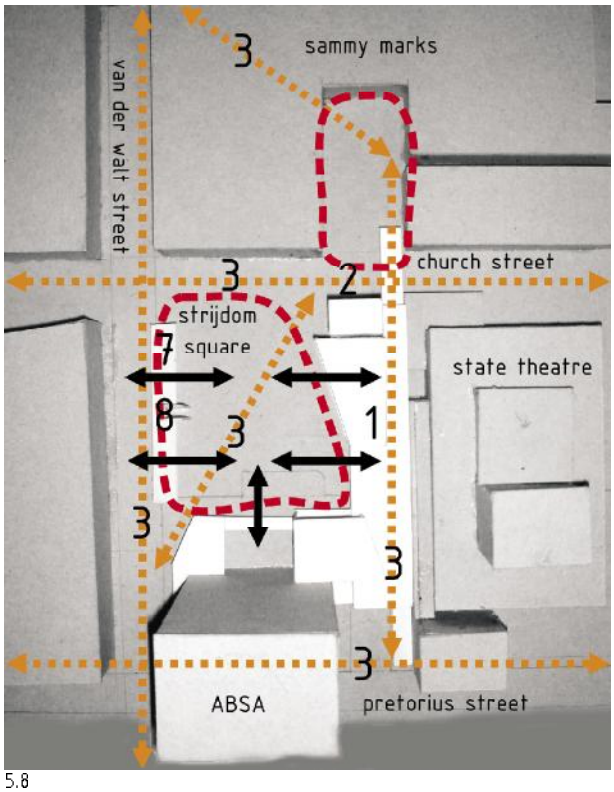
Several design solutions evolved.

>> A parasitic structure attached to the western façade of the State Theatre. A parasite building by definition would be a building which would attach itself onto an existing building and feed off the current activity, use and location for its own benefits. The word "parasite" has a negative connotation attached to it. Only the parasite benefits in relationships and tends to weaken its host. The design needs a solution that would benefit each party involved in the re-programming of Strijdom Square. A "symbiotic" building is needed, where the contribution made by both the existing building and the symbiotic building is mutual. Attaching a symbiotic building onto the western façade of the State Theatre will add another layer to the square. Where previously the State Theatre did not respond to the square, the new symbiotic building will interact with the square. The symbiotic building will be the transitional area like the foyer and café spaces in the cinema complex of Schouwburgplein. This symbiotic building will take the shape of a linear slender building. This will be so that the least amount of intrusion into the square will take place.

>> The symbiotic building will also create a northern edge where is meets Church Street. This will be to define the boundary of Sammy Marks Square.

>> The symbiotic building will tap into, and enhance the existing pedestrian flow through and across the square.

>> The symbiotic building will address the height ratios of the surrounding buildings in order to reduce the square to a more human scale.



5.8

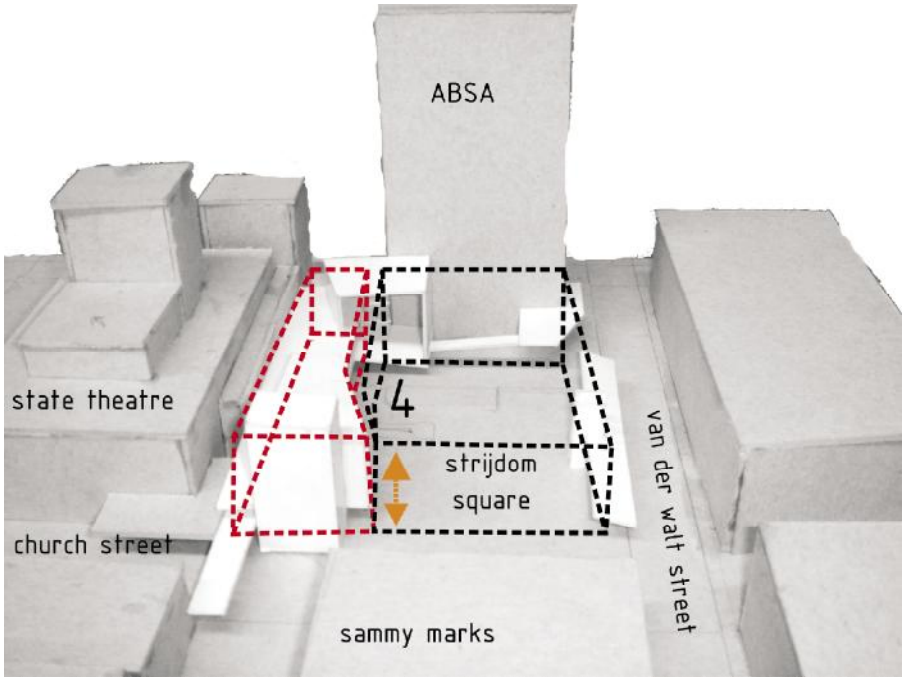
The symbiotic building will be the main focus of the thesis as an architectural intervention. The re-design of Strijdom Square and the various other factors (interventions 5 – 8) that go with the square will be solved on a more conceptual level

>> The accessibility into the square will be dealt with by reducing the level difference on the van der Walt Street side and from the ABSA side by the introduction of specifically placed staircases and raising the floor of Strijdom Square.

>> The square will be re-designed in such a way the surface will be manipulated to deal with the existing and new pedestrian movement across the site. The square will become a more stimulating space to be in i.e. introducing shading through vegetation; areas of seating; places to play and rest. Lastly, it is to be designed to accommodate large quantities of people for live performances, public announcements and entertainment.

>> A structure along the road edge of van der Walt Street will be designed to create a boundary or peripheral edge to the square. This edge will not only be perforated to allow access in or out of the space but will be designed with the intention to benefit the current informal traders already trading there. They will be able to use the space for their trade and gain maximum exposure for their stores due to the current pedestrian movement along van der Walt Street as well as the new pedestrian movement that will occur due to improved accessibility into the square from the side-walk.

>> The existing underground arcade that takes you to the Standard Bank Center will be upgraded to allow access to the staircase from the square level. This will allow easier movement to and from Strijdom Square and the Standard Bank Center.



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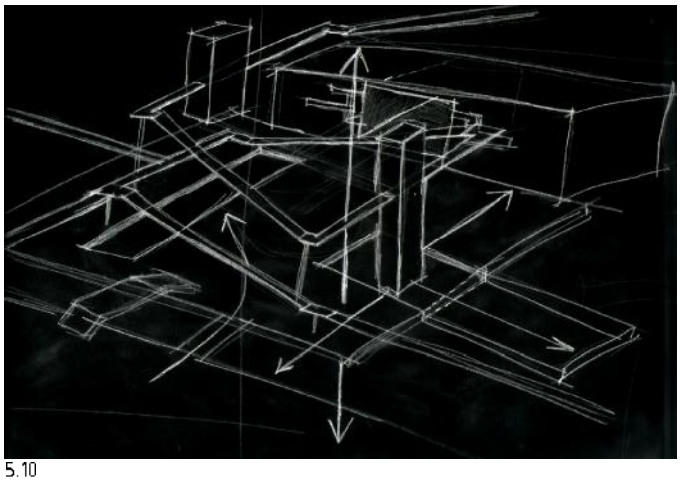


5.10

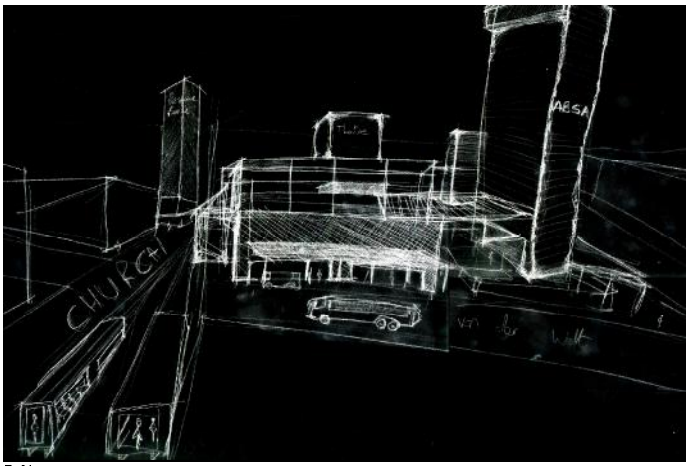
The Symbiotic Building

The symbiotic building's primary intention/function is to layer the harsh and non-interactive western façade of the State Theatre. When conceptualizing what needs to occur in this public space, accessibility and perforation of the square became important. Inserting a new layer, attaching it and even punching into the existing urban fabric became the main generating factors. The initial concept sketches were ambitious as they were trying to express ideas of breaking down the envelope of the built fabric and revealing the very "guts" of their interiors and by doing that, creating an environment that became transparent, interactive and honest. To draw the character of the city out into the open rather than the city functioning inwards and not responding to its surroundings was the key idea in the concept sketches.

Fig 5.9 first concept model indicating how new symbiotic building reduces the height ratios of existing buildings to a more human scale

Fig 5.10 initial concept sketch indicating ideas of movement and punching into the existing urban fabric

Fig 5.11 concept sketch indicating initial ideas for attaching a symbiotic building onto the State Theatre



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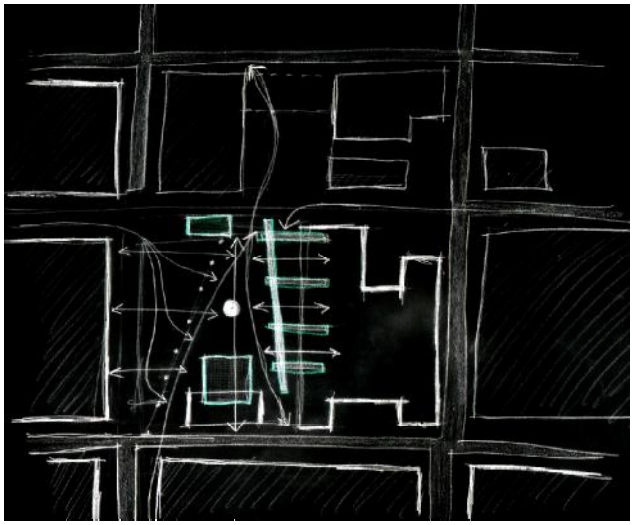


5.12

The linear shape of the building comes about for various reasons. Firstly, as mentioned before, it is to be a symbiotic building attaching itself onto an existing building. Therefore it must assimilate the length of the State Theatre. However, to be non-obtrusive, the width of the building is to be minimised. Secondly, the new building is to tap into the existing pedestrian movement which runs in a north-south direction next to the State Theatre. It can thus take advantage of existing energies and create new activity into the space.

5.13

Fig 5.12 initial concept sketch showing the idea of attaching a symbiotic building onto the State Theatre's western facade. The sketch indicates the attempt to layer and create a transitional space between the State Theatre and Strijdom Square

Fig 5.13 perspective concept sketch of Fig 5.12

Fig 5.14 table by Jan Gehl indicating how the quality of environments affects activities

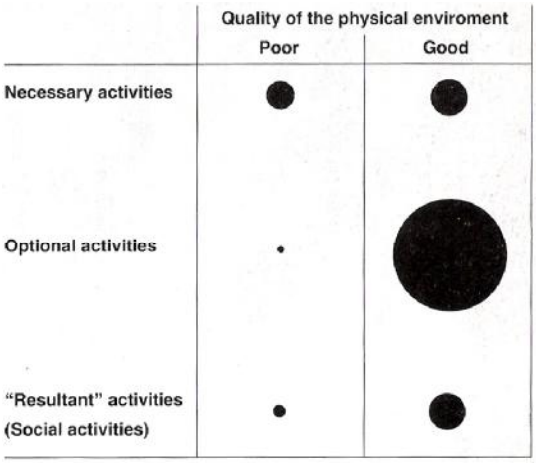
According to Jan Gehl there are three types of outdoor activity that take place:

1. Necessary activities
2. Optional activities
3. Social activities

Necessary activities include those that are more or less compulsory-going to school or work, shopping, waiting for a bus or a person, running errands, distributing mail. In other words, all activities in which those involved are to a greater or lesser degree required to participate. In general, everyday tasks and pastimes belong to this group. Among other activities, this group includes the great majority of those related to walking. Because the activities in this group are necessary, their incidence is influenced only slightly by the physical framework. These activities will take place throughout the year, under nearly all conditions, and are more or less independent of the exterior environment. The participators have no choice (GEHL 1987: 11).

Optional activities are *(only under favourable exterior conditions)* those pursuits that are participated in if there is a wish to do so, provided exterior conditions are optimal, when weather and place invite them.. This category includes taking a leisurely walk, standing around enjoying life, or sitting and sunbathing. . This is particularly important in physical planning because most recreational activities pursued outdoors are found in this category. These activities are dependent on exterior physical conditions (GEHL 1987: 13).

Social activities depend on the presence of public spaces. Social activities include children at play, greetings and conversations, communal activities of various kinds, and finally, the most widespread social activity, passive contacts- simply seeing and hearing other people. They can also be termed "resultant" activities because, in nearly all instances, they evolve from activities linked to the other two activity categories. People in the same space, meet, pass by one another, or are merely within view. Social activities occur spontaneously, as a direct consequence of people moving about and being in the same spaces. This implies that social activities are indirectly supported whenever necessary and optional activities are given better conditions in public spaces (GEHL 1987: 14).



5.14

These three types of activity are going to be discussed here in their influence on the design of the symbiotic building.

Currently, Strijdom Square does not provide a framework for optional and social activity, but only facilitates necessary activity for its users. That is mainly the use of the State Theatre by its employees and movement across the site in order to reach intended destinations.
These include the retail stores in Church Street, the retail stores in Sammy Marks Square and the use of banks around the site, namely the ABSA Bank and Standard bank. The people who work within the inner city in the surrounding offices use the area to move to and from work. On lunch breaks the people move through the square to go to places to purchase food. There are also the students who walk along Church Street to or from Pretoria Technical University, either to the west of the city to their accommodation, or down Paul Kruger Street to reach the train station for public transport if they live outside the CBD.

The intention of the design is to harness that necessary activity and transform it into optional and social activity. People are already moving through the square. Creating optional and social activities requires getting people to pause and stop in the square. Sitting, eating or using the square so that it is not just a corridor through which people move. This can be achieved through providing a good framework on which this activity has the opportunity grow. The symbiotic building has the correct form on which to facilitate and deal with the western façade of the State Theatre, adding a new layer to the existing fabric. It now becomes important how the building facilitates interaction between the State Theatre and Strijdom Square.

Ground Floor (square level/public space)

The portion of the building that is going to be on square level or ground floor has to respond to the square in terms of its program. The square is a public realm and so too must the ground floor level also be. A ground floor food court area can address the lack of basic facilities that are not catered for around the site. In this area you will be able to get something to drink or eat and then sit and enjoy it in the public space. The food court is designed in such a way that it can accommodate various types of food preparation, from take-away meals to a restaurant sit down meal. The food court is located in the pedestrian thoroughfare area of the building. People moving in a north or south direction through the building will be engaged with the food court area where they can buy something to drink or eat and then either continue on their path, or find a place to sit and watch the urban choreography of the people walking or using the re-designed square. They can also walk by without purchasing anything at all.

Next to the food court area on the western side, trees have been introduced with table and seating elements for people to sit under in the shade. The tables are to be designed in such a way that they can also be used as seating and are at a height that a person can stand and eat their food.

To the northern end of the food court are ablution facilities for the public, regardless if they are using the food court or not. This is another element that is needed for a public space, but unlike the ablution facilities provided underneath the ABSA building, they are visually more apparent, not hidden away in an area where you could feel threatened. The new facilities will be maintained by the owners of the food court stores in order to promote an area that is hygienic.

Also on ground floor level will be access to staircases and elevators (public and service) allowing movement to the upper floors. The ground floor is designed in such a manner that movement through the building on this level is as if there were no building at all. In other words the ground floor level is merely an extension of the city floor- not impeding the movement of people through the space, but enhancing activity on the square level. The food court thus uses "necessary activity" (pedestrian movement and purchasing of food) to generate optional and social activity (choice to sit and eat or drink and to do so in the company of others even if they are strangers).

As Jane Jacobs observed in her study of American cities, the activity generated by people on errands, or people aiming for food or drink, is itself an attraction to others. The sight of people attracting other people is something that city planners and city architectural designers seem to find incomprehensible. They operate on the premise that city people seek the sight of emptiness, obvious order, and quiet. Nothing could be less true. People's love of watching activity and other people is constantly evident in cities (JACOBS 1961: 47). This view is also shared by Jan Gehl as he states that we are inspired by seeing others in action. Children see other children at play and get the urge to join in, or they get ideas for new games by watching other children or adults (GEHL 1987: 23).

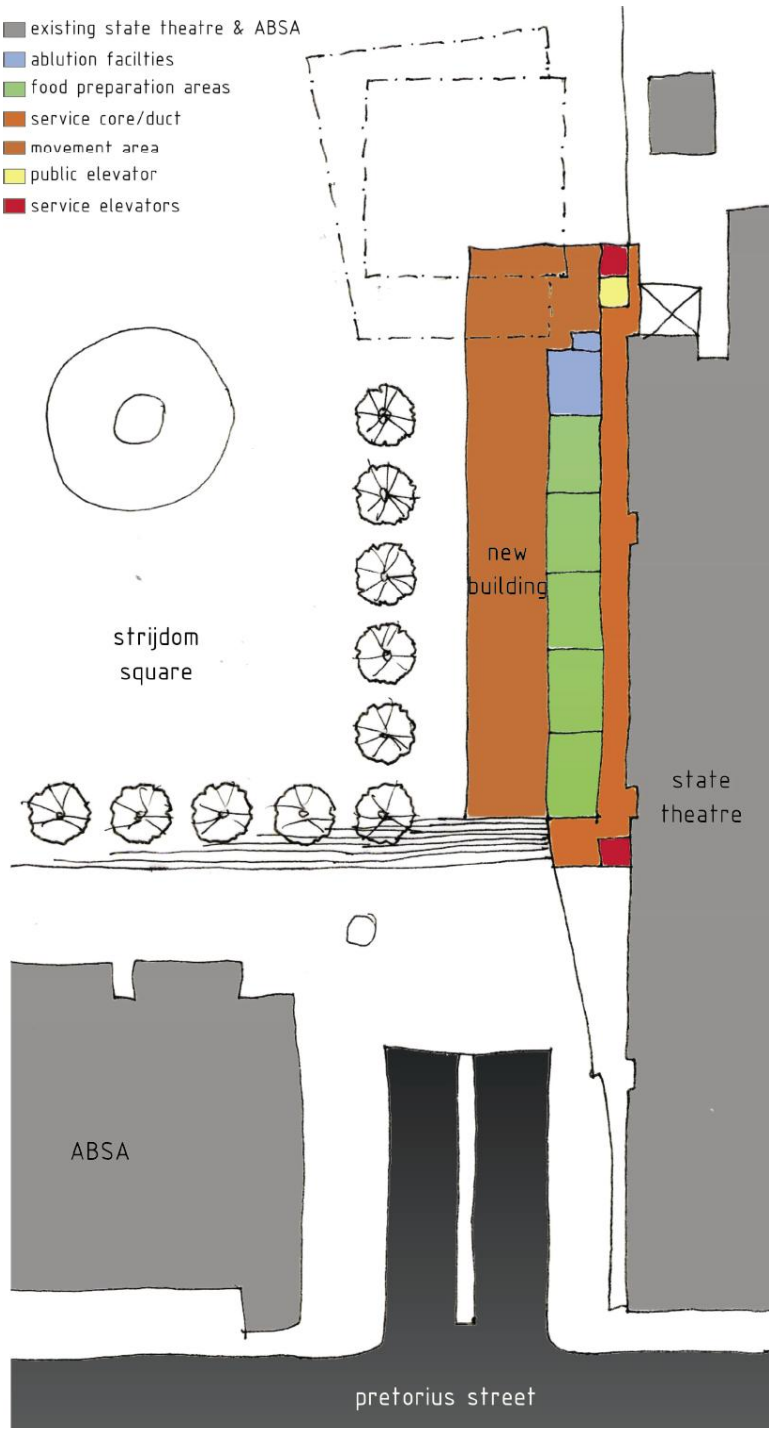


Fig 5.15 diagram indicating the ground floor accommodation

5.15

Levels above ground floor (semi-public/semi-private space)

The main program of the symbiotic building is theatre based. The theatre will be on the second floor of the building and the rest of the building forms the support mechanisms for the theatre. Thus I have not discussed the building program floor by floor as all the functions are related to the theatre. The question that will be asked is why design a theatre right next to an existing theatre? There are two main reasons for this:

1. The initial concept was to break down the barriers of the existing fabric and create spaces where the built environment interacts with the spaces between the buildings, thus exposing the insides of the existing fabric. In keeping with this train of thought, designing a theatre that is a re-interpretation of the current State Theatre and the way in which it functions will do just that. In order to achieve this, the program of how a conventional theatre functions will have to be re-designed.
2. To offer the people of the city choice. The State Theatre offers a very specific, traditional, form of theatre viewing. The new theatre will not be competing with the State Theatre, but rather offer a new take on theatre viewing. The State Theatre has the facilities to house large productions like "Phantom of the Opera" etc... but the new theatre will be able to accommodate a fresher more experimental theatre show. Just as when you go out for dinner or to purchase clothing, you are faced with numerous choices, so too will people be able to choose what type of theatre they feel like viewing. The new theatre will be part of a 'theatre precinct'.

Re-addressing and deconstructing the program of the theatre became the initial step in the design process of the theatre. Deconstructing the program is an interesting way of going about the design of a specific element and structure as the solutions often lead to simple form solutions.

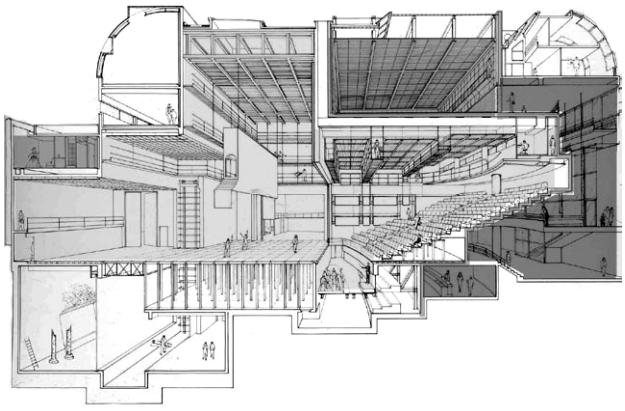


Fig 5.16 section through typical theatre. this theatre is an example of a traditional theatre indicating the how inwardly focused theatres are

5.16

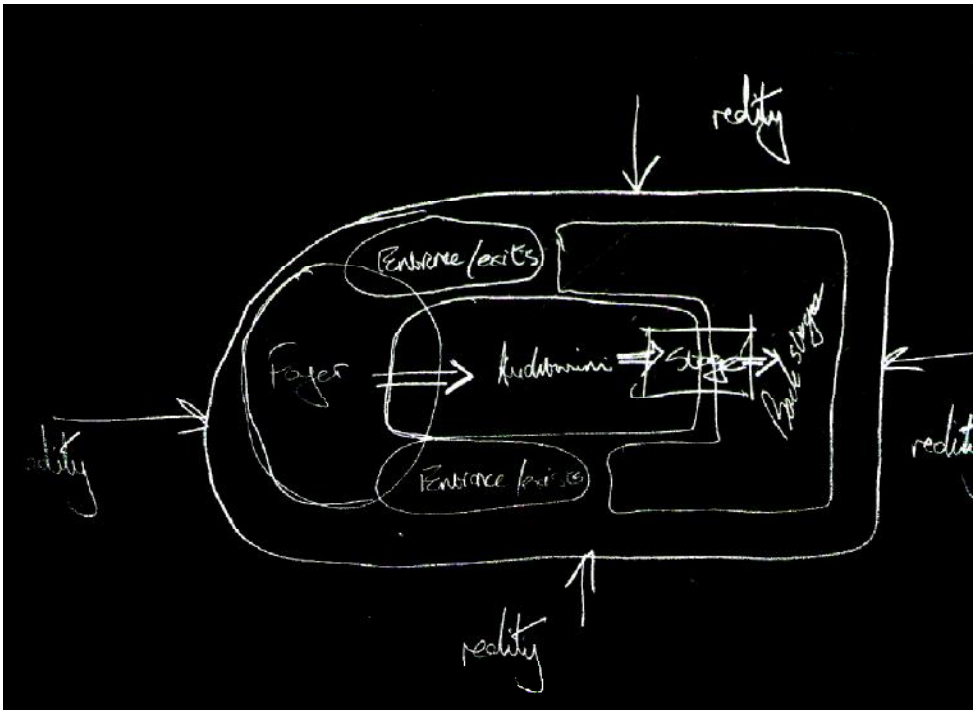
Deconstructing program

In order to deconstruct the program of a theatre, the typical theatre function needs to be understood first. Literature on theatre philosophy is abundant and the complexities that lie in the world of theatre are as interesting as the complexities that lie in the world of architecture. The major function of any building, theatre, or simple dwelling place, is to mark the distinction between inside and outside (MCAULEY 1999: 49). That is the initial function of a theatre building as it creates, in people's minds, a transition between reality and the fictional world. The theatre building or designated place of performance provides a context of interpretation for the spectators and performers alike (MCAULEY 1999: 41). While theatre can indeed take place anywhere (outdoors, in the street, on the bare earth), the point is that it must take place somewhere. If theatre involves communication between live actors and live spectators, then they must be jointly present within a given space (MCAULEY 1999:3).

Within the theatre there are normally a number of thresholds that the spectator must traverse: the purchase of a ticket, verification of this by uniformed staff in the foyer, further verification by ushers in the auditorium who identify the seat allocated. At this stage of the theatre experience the fictional world has usually not yet been activated, although the set may be visible. However, the spectator has been progressively further and further removed from the world outside, permitted to move further into the world within (MCAULEY 1999: 42-43). The experience of any theatergoer is one of penetration further and further into the building until reaching the point beyond which one cannot go. The traditional theatre building emphasizes this sense of inward progression (MCAULEY 1999: 50-51). The specificity of the theatre is not to be found in its relationship to the dramatic, as film and television have shown through their appropriation and massive exploitation of the latter, but in that it consists essentially of the interaction between performers and spectators in a given space. Theatre is a social event, occurring in the auditorium as well as on the stage, and the primary signifiers are physical and even spatial in nature (MCAULEY 1999: 5).

McAuley puts the stage and the auditorium into two different categories- practitioner space and audience space, but he states that there is a third domain within the theatre space, the place constituted by the coming together of the other two. Overriding, yet subsuming the division, the divided yet nevertheless unitary space in which the two constitutive groups (performers and spectators) meet and work together to create the performance experience, is the domain that he calls the performance space (MCAULEY 1999: 26). Manfred Wekwerth has described an experiment in which an actor with a neutral expression stood on stage and did nothing, but spectators nevertheless experienced this in a variety of ways and interpreted what they saw to be occurring. He used this experiment to conclude that "the primary player in the theatre is not the actor but rather the spectator" (MCAULEY 1999: 42).

If the performance event can be defined as that which takes place between performers and spectators in a given space and time, then the spectator has to be seen as a crucial and active agent in the creative process. The spectators are physically present in the theatre space just as the performers are (MCAULEY 1999: 235). The fact that the theatre does not really produce an object, that each performance is the only one possible combination of the variables that that particular production has conjured, and that any text can be staged in countless different ways has always rendered this kind of critical practice highly problematic. Under the influence of postmodern theory it has become possible to acknowledge that the processual nature of the theatre and the dynamic role of the spectator in the construction of meaning are not factors peculiar to theatre but is shared by many other modes of artistic expression (MCAULEY 1999: 16).

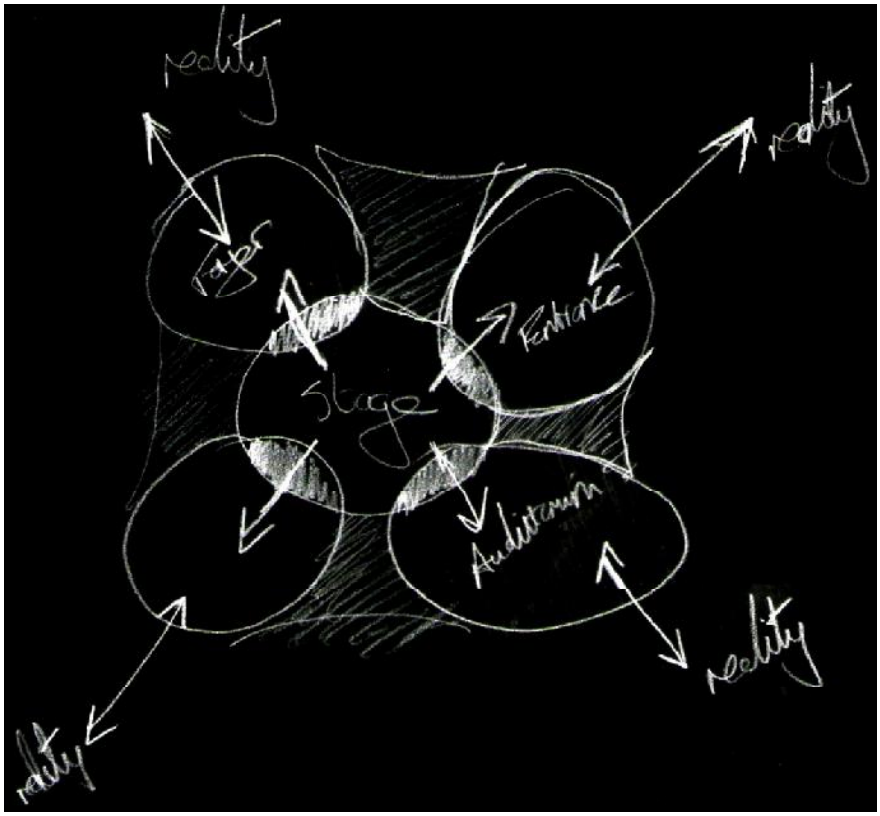


5.17

It becomes evident then that spectators become as important to a theatre production as the performers. The traditional theatre function can be deconstructed provided these two are present. The creation of a realm in which the spectator and performer meet in the fictional world of fantasy or the sub-conscious minds of the people involved become the essence of the theatre. To take the deep and hidden context in which theatre occurs traditionally, turn it inside out so that it can be exposed and viewed in a completely different way, is how theatre can be re-interpreted. Currently the State Theatre is not accessible. Can it not be ripped from the depths of the theatre building and revealed to the public? To take that inward progression of how McAuley describes theatre, and make it visible. The spectator-performer relationship becomes an important underlying design tool when designing the symbiotic building. To create a building that becomes a stage on which the functional choreography is played out to which the people in the square become the spectators of. And yet the roles can be reversed- the square becomes the stage and the people in the building become the spectators to the city's urban choreography.

Fig 5.17 diagram indicating the traditional theatre program. this shows how as someone moves through the different thresholds of the theatre they move slowly inward deeper away from reality.

Fig 5.18 conceptual diagram indicating a possible deconstruction of the theatre program. this diagram indicates a response and interaction with the surrounding environment. reality becomes part of the theatre and not hidden away



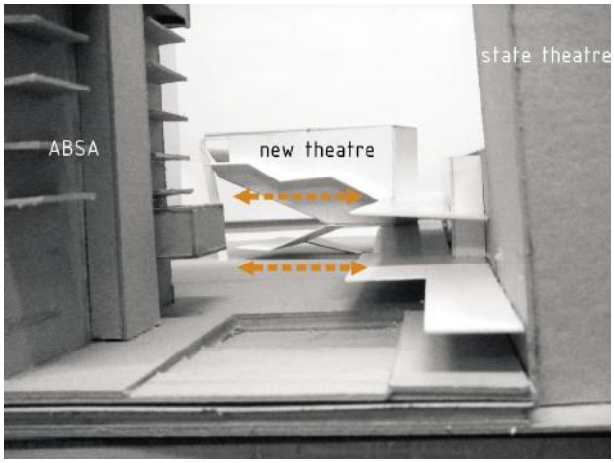
5.18

In an interview with Stephanie van Niekerk, who lectures and stages theatre productions, some interesting ideas emerged about the alternatives to traditional theatre viewing.

Van Niekerk studied drama at the University of Pretoria. She then left for New York where she studied method acting at the Lee Strasberg Theatre Institute. Van Niekerk is currently a lecturer at the University of Pretoria's drama department. In her opinion, as someone who is constantly staging productions with her students, an ideal theatre would be completely flexible, able to change its character. This could be achieved, for instance, by having movable walls and a movable stage. This would allow users to change the size of the theatre, creating varying atmospheres. A movable stage would allow the spectators to be seated in different positions relative to the stage. A stage could be arranged in the traditional manner with spectators on one side and the actors on another. Or the stage could be in the middle of the theatre with the audience surrounding the actors. This would mean to discard the traditional backstage area- actors could get changed on the stage in front of the audience adding an alternative complexity to the play. Experimental theatre and productions, though small, make up a significant portion of theatre produced these days. You will always have large productions occurring, but on daily occurrences smaller, non-traditional plays are abundant (VAN NIEKERK 2006).

Second Concept

The second concept model of the symbiotic building included a service core which ran along the length of the State Theatre's western façade. This becomes the area onto which the symbiotic building could attach itself without disrupting the physical structure of the State Theatre. The concept was to take the theatre and remove it from its internalized structure and expose it to the square. Theatre goers would now enter the theatre directly from the public space, not just the lower parkade. Instead of parking their cars in the parking lot and moving directly to the foyer areas inside the State Theatre, people would now be faced with the city fabric and public activity. The concept theatre still retained a traditional form. This would prove to be the main failure of this concept, to be discussed later. The western façade of the State Theatre supports the linear form onto which the new theatre will attach itself. This linear element will layer the State Theatre, promoting interaction between the symbiotic building and Strijdom Square. The linear building is allowing movement in the north-south direction but is not responding to the square in a significant way.



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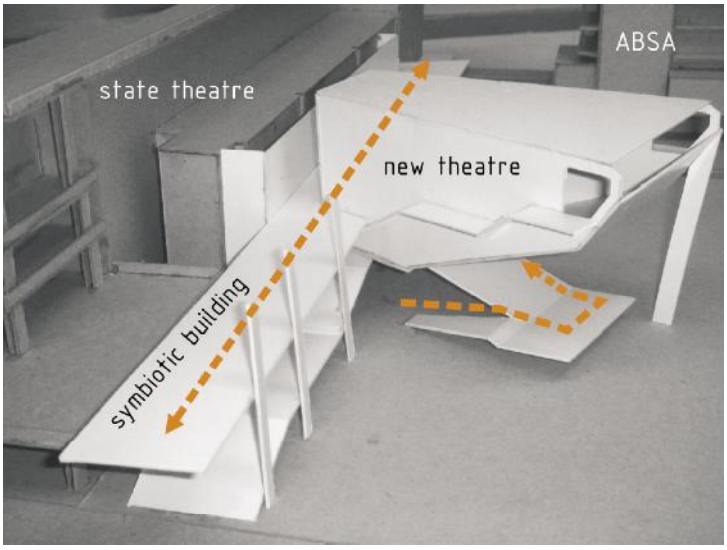

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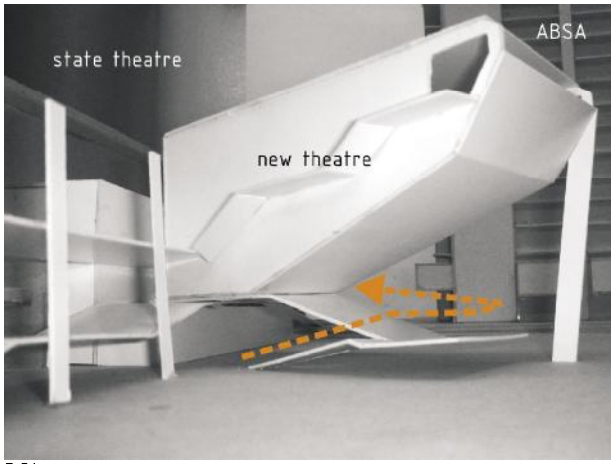

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For guidance to deconstructing program and how it is implemented in reality, the works of Bernard Tschumi and Rem Koolhaas were analyzed.

Tschumi believes that the way in which architecture must be created is to design for "events" rather than "program". A program is a determinate set of expected occurrences, a list of required utilities, often based on social behavior, habit, or custom. In contrast, events occur as an indeterminate set of unexpected outcomes. Revealing hidden potentialities or contradictions in a program, and relating them to a particularly appropriate (or possibly exceptional) spatial configuration, may create conditions for unexpected events to occur (TSCHUMI 1994: 13). This means that when designers undertake the design of a specific function, they are limiting themselves to the functional form of a specific program.

Theatre design is a relevant example. Traditionally, a theatre has to have raked seating in order for the audience to have good sight lines to the stage. This has led to the traditional theatre. As a theatre, the architectural form functions perfectly. The form of the theatre becomes limiting when hosting other activities. The raked seating, stage area, backstage, changing rooms and fly-towers are not adaptable for alternative events. This is where Tschumi believes his theory of "cross-programming" becomes relevant in contemporary architecture. In past times buildings were designed with long life-spans. Today buildings become un-used much more quickly than before. The life-span of a contemporary building decreases all the time. Most buildings, having served their purposes, are converted to serve another activity. Theatres, however, leave little room for adaptability.

In cross-programming, designing for events rather than program forces the designer to take into consideration the use of a space. If a client approached an architect to design a theatre the architect would diagrammatically situate areas needed to accommodate the theatre. With the design of the foyer space the architect may ask themselves, "What is the event of a foyer space?" Some of the answers could be: - a place to wait, have a drink, watch some live entertainment etc. Exhibition spaces or gallery spaces would have similar events. To go to an exhibition of artwork would also involve waiting (viewing the art pieces), having a drink (before, after or during the exhibition), live entertainment (listening to speeches or auctions would take on the same nature). If the foyer space of this theatre could thus be designed in order to accommodate these events, the space becomes useful for more than one event, or is "cross-programmed."

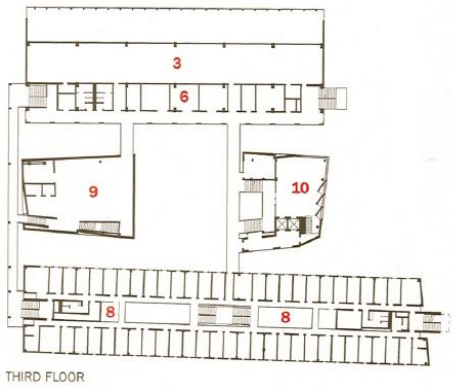
This methodology can be taken through to the design of the whole theatre. As mentioned before, the idea of cross-programming is not just to design an open space that can *possibly* be used for something else. It is the idea of spaces that are well designed and well articulated, good spaces to be in. An open-plan office with dry-walling is flexible in planning, but is not necessarily a nice space to be in. This approach to design will enrich the architecture and prolong the use of a structure.

Fig 5.19 second concept model with linear building but weak response to the square

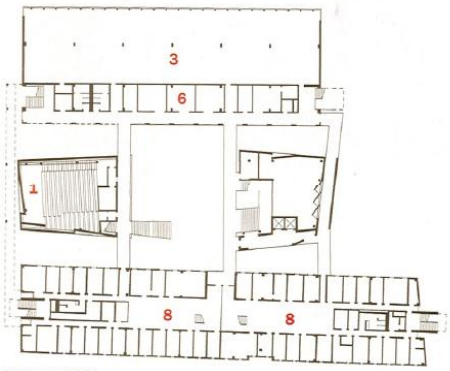
Fig 5.20 second concept model indicating new theatre, a linear symbiotic building dealing with the existing movement. model also shows the introduction of the service duct

Fig 5.21 second concept model indicating the new theatre's response to the square by means of access. new theatre still has static raked seating form

Florida International University had a competition for the upgrading of the architecture department on campus. They decided to undertake a competition exercise in order to create awareness amongst the students, involving them in the process of how an architectural design evolves. Bernard Tschumi Architects eventually won the competition (PEARSON 2003: 103). Tschumi's design inserted two boldly coloured pavilions between a pair of straightforward "bar" buildings. Tschumi stated, "I saw this building in terms of concept and context." (PEARSON 2003: 103). Tschumi shaped the pavilions by analyzing how the people would move around and through them. He sculptured these forms and then wrapped them in red, orange and yellow ceramic tiles to give them that hot Latin flair. North of the pavilions Tschumi placed the design studios in an open three-storey block, glazing the entire north elevation to bring in much daylight (PEARSON 2003: 107).



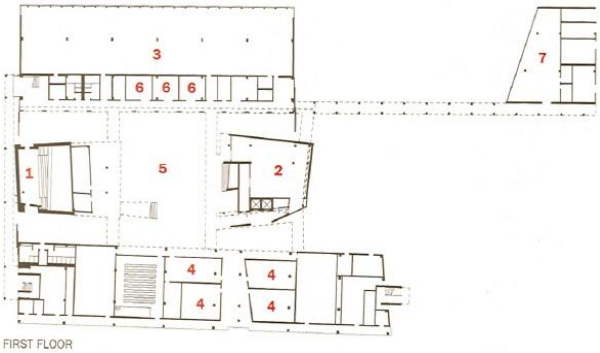
THIRD FLOOR



SECOND FLOOR

Fig 5.22 plans of the Florida International University

Legend
1. auditorium
2. gallery
3. studios
4. classrooms
5. courtyard
6. review rooms
7. model shop
8. faculty offices
9. roof terrace
10. media room



FIRST FLOOR

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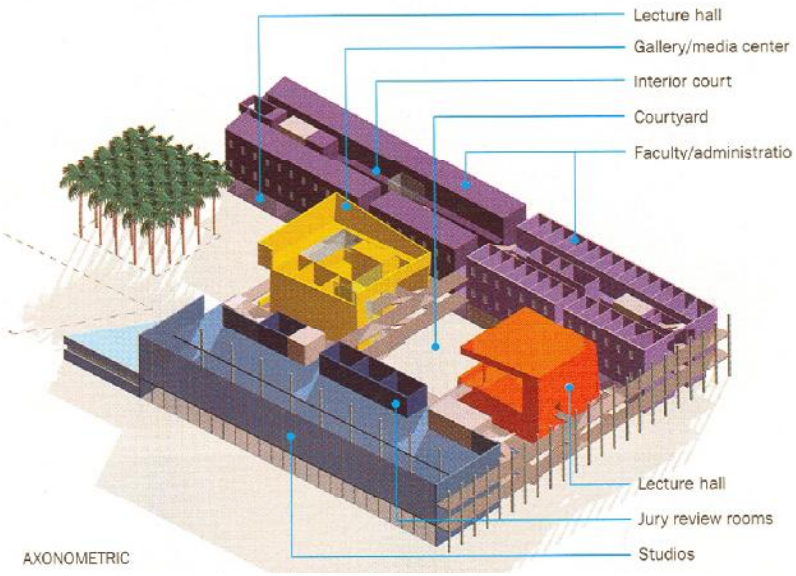

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Tschumi designed these buildings as events by creating areas which facilitated inter-student contact. The studios have wide corridors on which students can socialize while still leaving ample room for people to walk by. The corridors become cross-programmed spaces- functioning as both movement areas and public interaction spaces. These corridors also look onto the courtyard increasing the exposure of users to social interaction. The project is split up into four buildings and are clustered together is a tight form (PEARSON 2003: 107). By doing this smaller social spaces are created for students to linger, instead of leaving the building directly after class.

What can be learnt from this project is that the even a mundane element in a building can be designed as an event, in this case the corridors. The visual interaction the building has with the outside and the interaction between different spaces within the building can create a more interesting and vibrant environment.

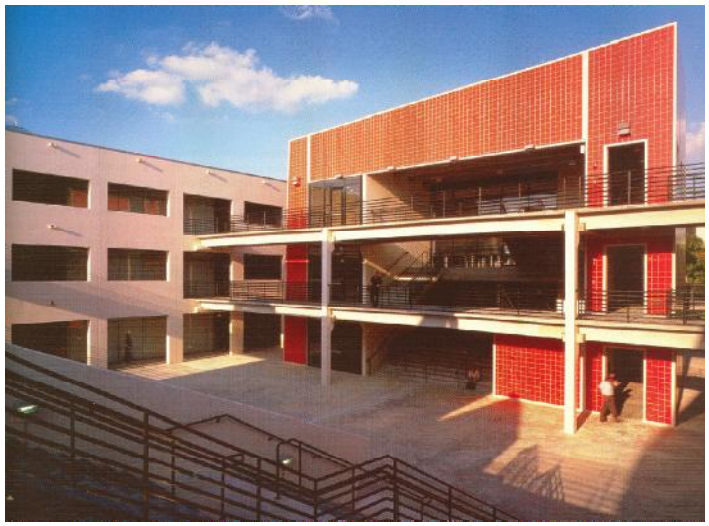

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Fig 5.23 axonometric of school
Fig 5.24 walkways that are wide enough so that they can be used as pedestrian movement and social spaces

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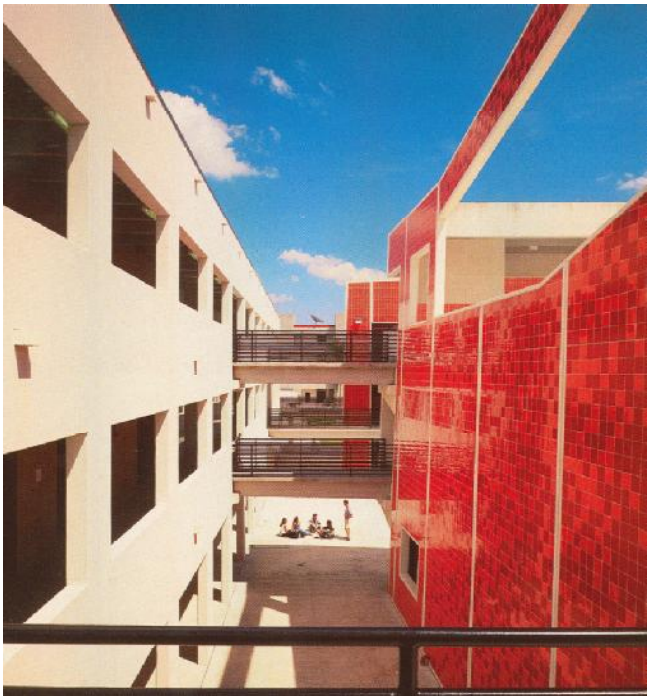

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Fig 5.25 studio spaces in the school. there is a mezzanine floor creating constant interaction between the students. this also creates more intimate spaces which can be used as review areas

Fig 5.26 photo of the wide walkways where students can move or socially interact

Fig 5.27 photo indicating how the different buildings are connected by the walkways, making people move past and interact with each other

Fig 5.28 eastern elevation of the Marne-la-Vallee school of architecture

Fig 5.29 western facade of the Marne-la-Vallee school of architecture at night

Another school of architecture that was designed by Tschumi is in Marne-la-Vallée, France. This was an earlier project to the school of architecture in Florida. Tschumi himself said that he felt under pressure when designing this school. As principal architect on the project he knew that the building would be criticized by those students using and studying in the building (SLESSOR 2000: 63).

Tschumi's own student career was spent at London's Architectural Association. Here he cultivated a recognition of the importance of informal "in-between-spaces,' where students could meet, talk and exchange views. At Marne-la-Vallée Tschumi has endeavored to create a humane, flexible educational environment where the architecture forms an armature for activities that foster both the intellectual and social development of users (SLESSOR 2000: 63). The plan has elegant simplicity and economy: two parallel wings flanking a cavernous central atrium. Studios and seminar rooms are located north of the atrium, with the office and staff facilities to the south. Crisscrossed by walkways and staircases, teeming with student activity, the luminous central hall forms the building's social and spatial fulcrum. Suspended in this heroically scaled space is the lecture hall, its sides clad in expanded-mesh panels (SLESSOR 2000: 66).

Tschumi designed the structure in such a way that all spaces within the building are used for a variety of activities. The atrium space allows visual connection between the different levels of the building at all time. Students are always interacting with other students by being made to move along walkways that connect different parts of the building. The walkways were designed by Tschumi to accommodate the pedestrian movement, while still allowing the students to socially engage with one another. The central auditorium creates a focal point in the building and due to its exposed nature, the foyer space of the auditorium is in the open around it. The foyer space now becomes part of the social matrix of the school. The ground floor atrium space becomes the foyer which is another cross-programmed space.

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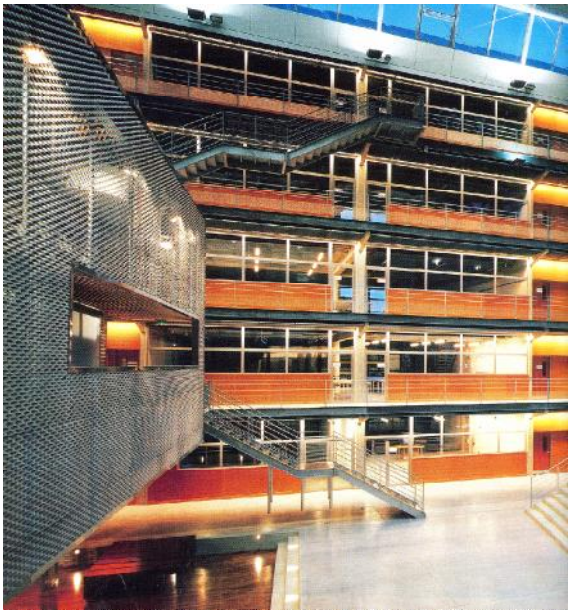

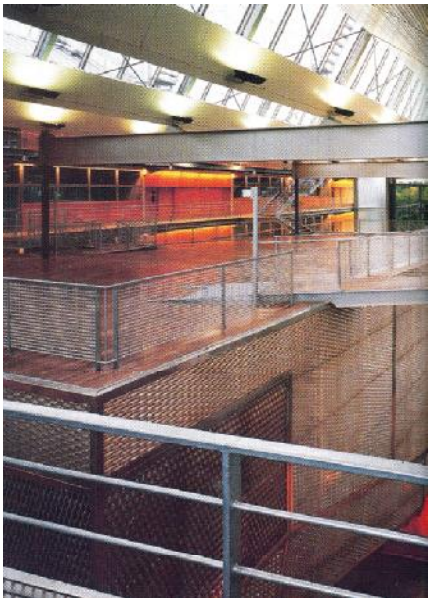

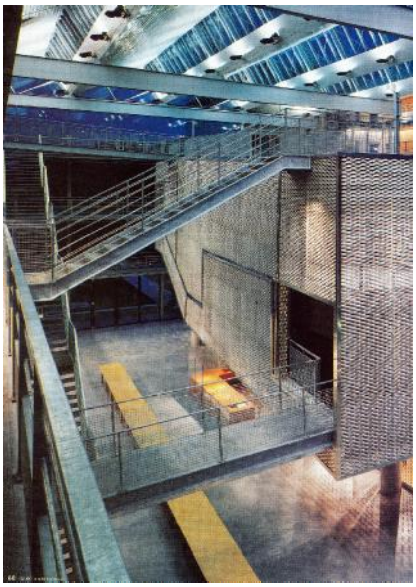

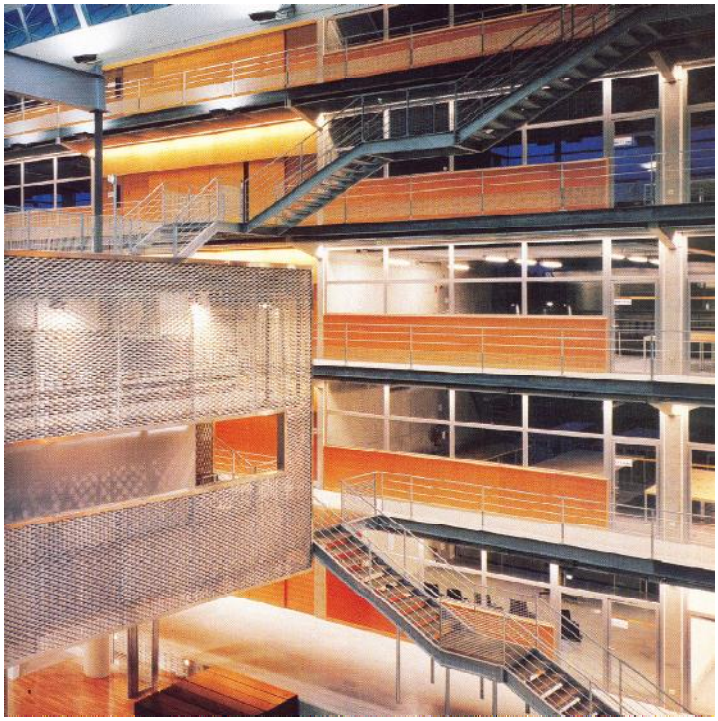

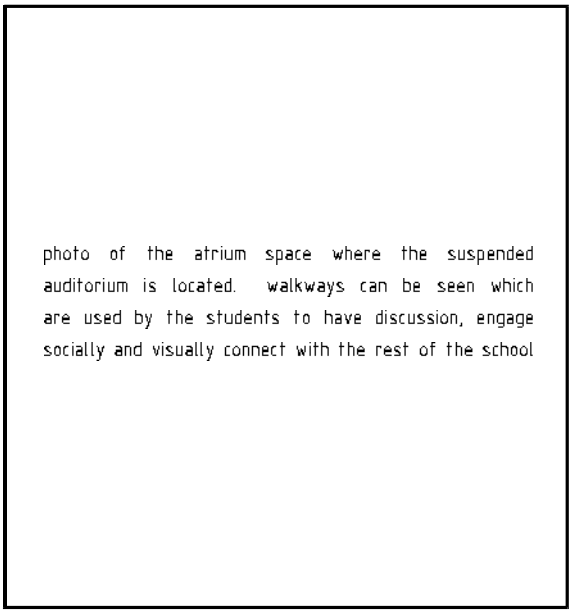

photo of the atrium space where the suspended auditorium is located. walkways can be seen which are used by the students to have discussion, engage socially and visually connect with the rest of the school

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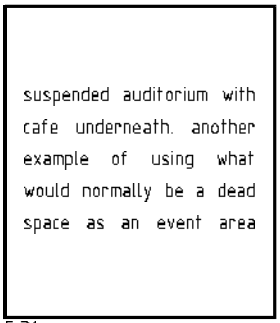

suspended auditorium with cafe underneath. another example of using what would normally be a dead space as an event area

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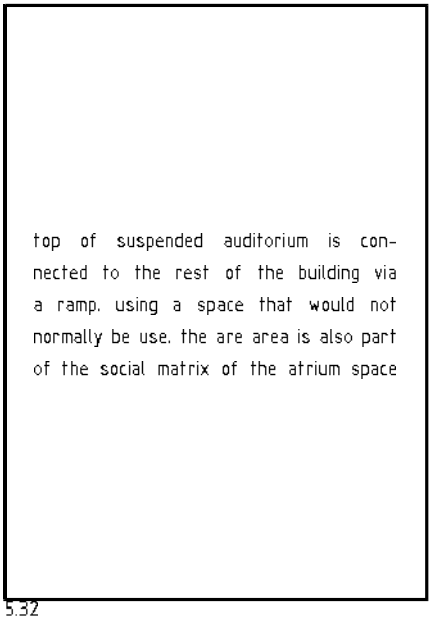

top of suspended auditorium is connected to the rest of the building via a ramp. using a space that would not normally be use. the are area is also part of the social matrix of the atrium space

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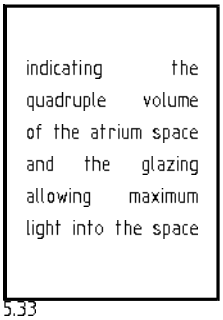

indicating the quadruple volume of the atrium space and the glazing allowing maximum light into the space

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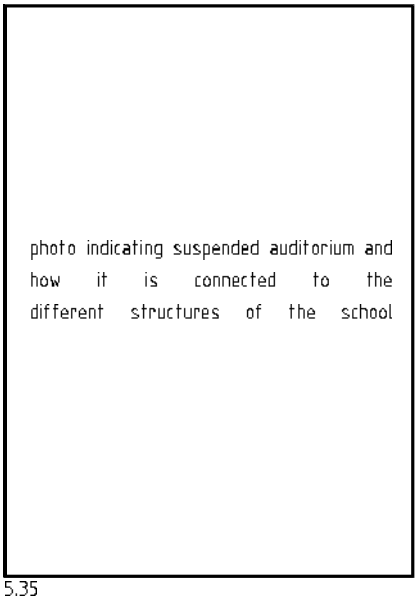

photo indicating suspended auditorium and how it is connected to the different structures of the school

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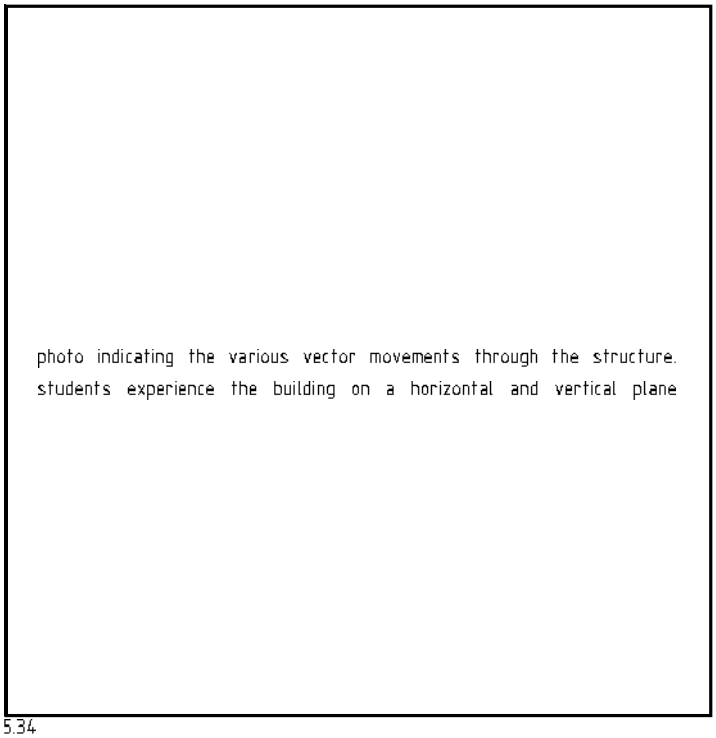

photo indicating the various vector movements through the structure. students experience the building on a horizontal and vertical plane

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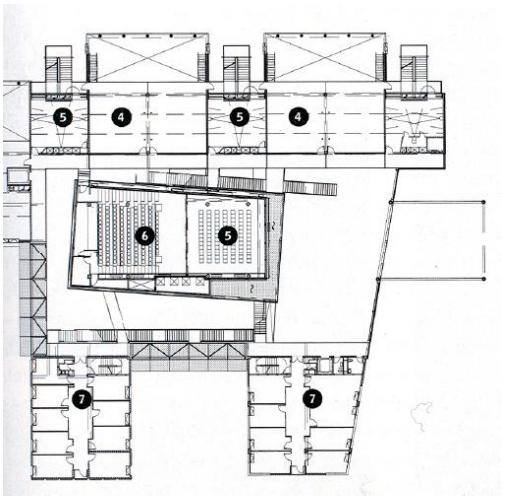

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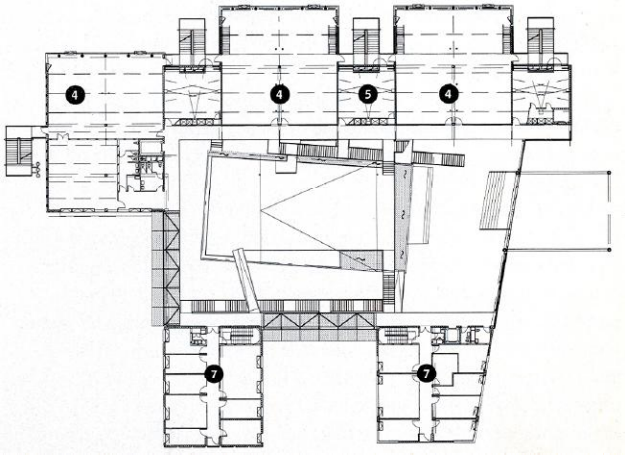

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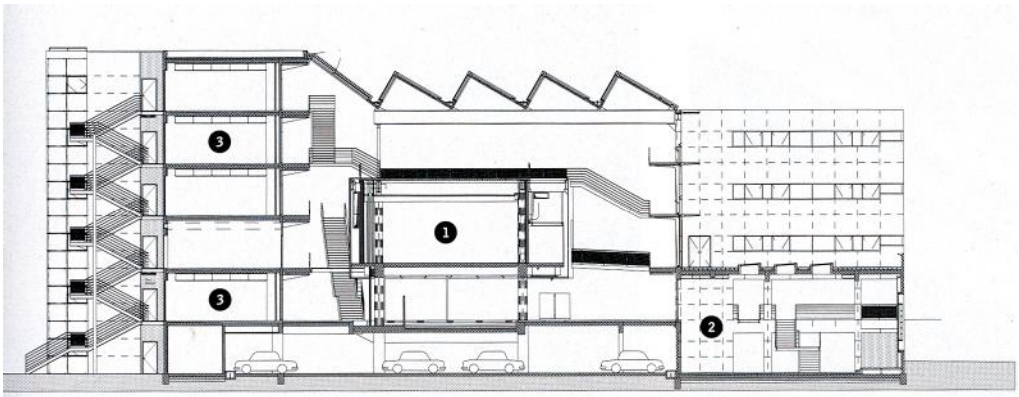

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1 auditorium
2 library
3 classroom

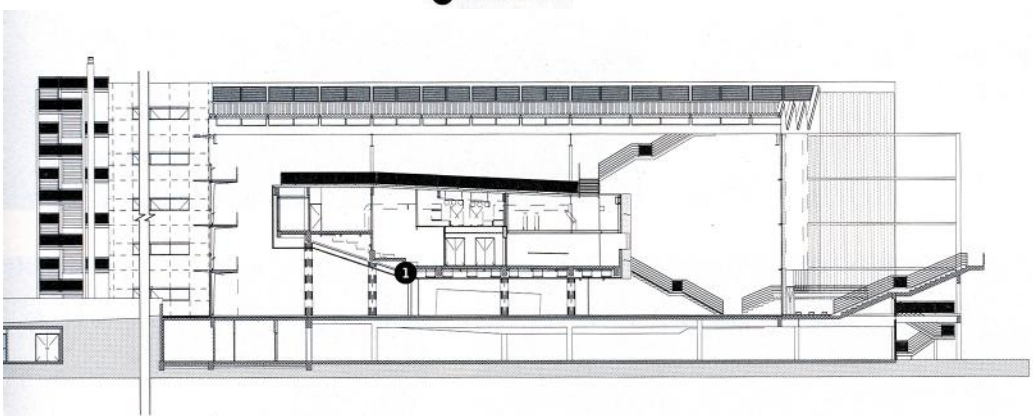

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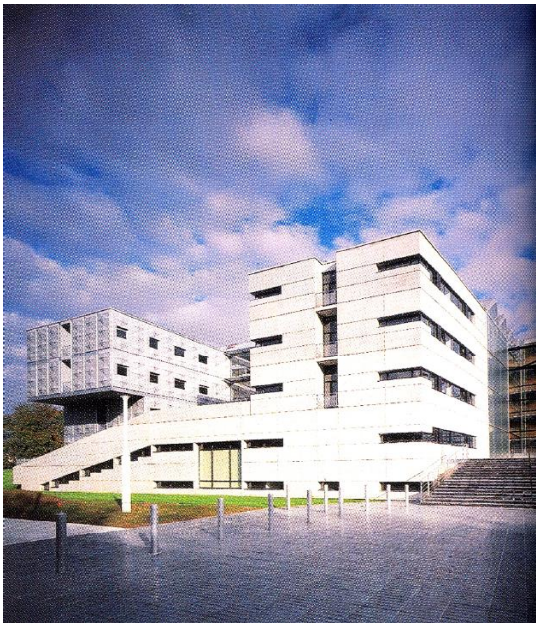
Fig 5.36 fourth floor plan
Fig 5.37 fifth floor plan
Fig 5.38 north-south section
Fig 5.39 east-west section
Fig 5.40 the two wings of the building flanking the atrium space
Fig 5.41 studio spaces with mezzanine floor area, shows the interaction of the two spaces yet allowing different areas for reviews or used as a different studio space

Designing for events was very evident in the building- when Tschumi went to visit the building after completion. "During my visit, the panoramic roof of the lecture hall had been taken over for a crit, with drawings stuck on improvised display panels attached to roof beams." (SLESSOR 2000: 66). The concept of cross-programming the building has led to a place where the students are able to make the building their own. The events that occur within an architectural school are mostly the interaction and discussion of architecture. The building has fully allowed for these events to occur on every level. Like at the Florida Architectural School, walkways are used as places to interact. The atrium space allows contact between the users of the building. A person is never isolated within a space. But mostly, socialization can occur in varying spaces in the building due to its cross-programmed nature.

All the information gathered on the idea of cross-programming up to this point gave the tools with which to test the success of the second concept model (Fig 5.19-21). The form that the theatre had taken in this model contradicted the theory of designing for events. The raked seating floor and high roof for the fly tower, limited the use of the theatre to only that, theatre. The events that can take place in the theatre are only events which share similarities to theatre. That could only be a cinema house. If the theatre is to become a space for the sharing of other programs, the event of the theatre would have to be considered more carefully.



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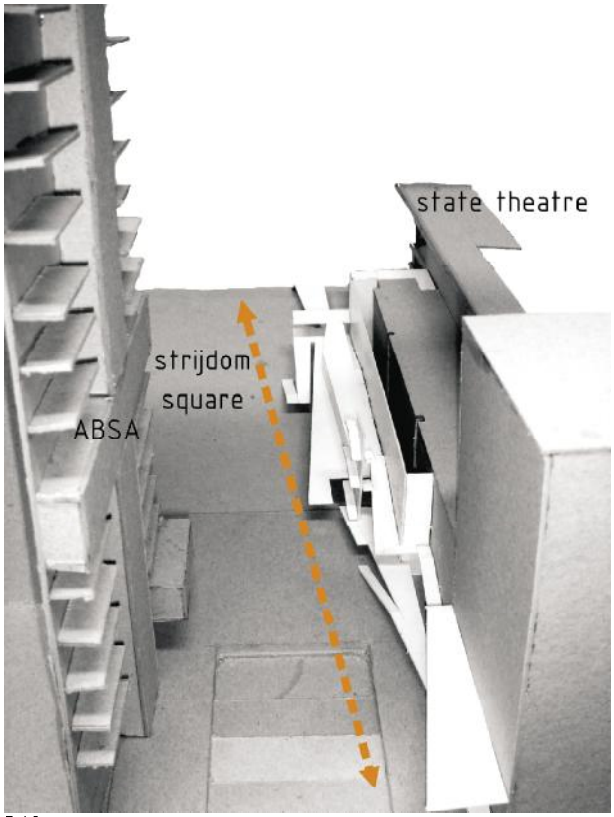
Third Concept

With this in mind the next concept model is developed. This third model indicates an analysis of movement through the site. It explored how people could move through, around and up into the structure. The walkways were an experiment to see how the flow of people can act as a social engager, testing the response and interaction to the square. This model also became the tool to see how a symbiotic building can exist in State Theatre's space and seemingly grow out from it. The open nature of the model and the floating planes are experiments to test fluidity, seeing how it can be achieved through horizontal and vertical planes. Ramp systems are employed to connect various parts of the building and to connect the building to the square. Just to clarify- the third model is not a model of an intended building but rather an experiment of movement. What is achieved through this model is the development of a linear elegant shape, supporting the idea of the building that grows out of the State Theatre. Planes of horizontal and vertical movement became successful in the articulation of the structure. The open western side of the structure gave ideas on further expanding interaction between structure and Strijdom Square.



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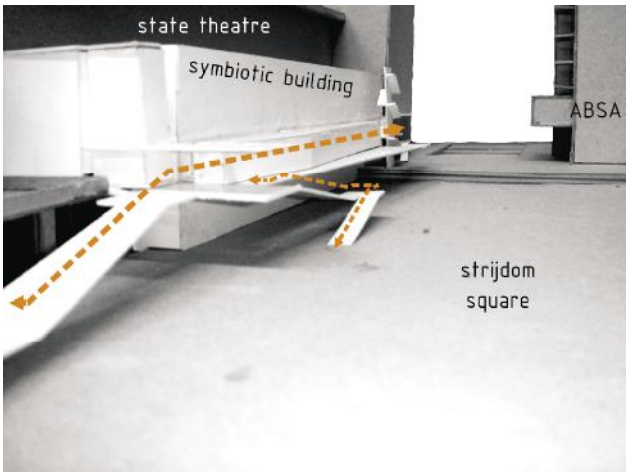

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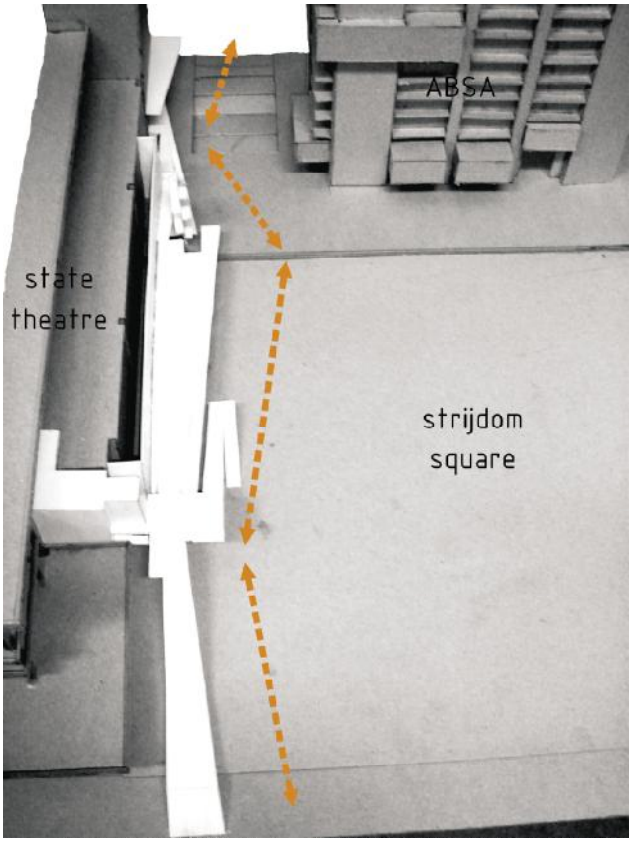

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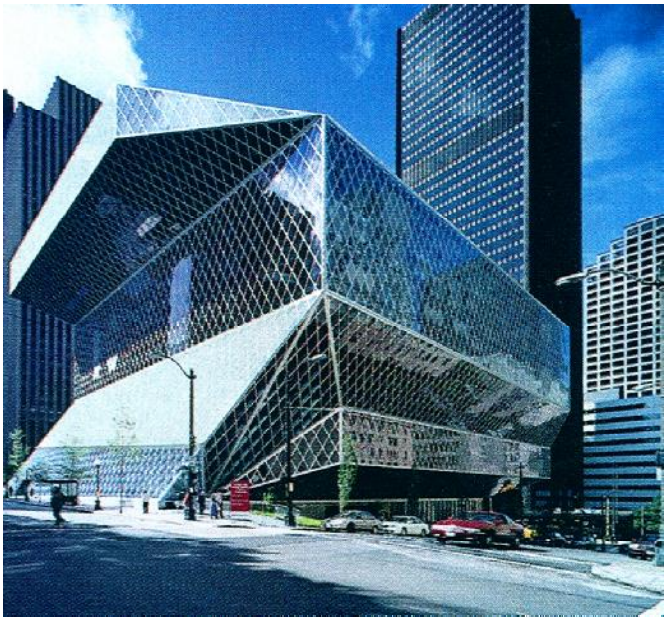
Fig 5.42 third concept model indicating reaction to movement
Fig 5.43 third concept model showing fluidity of the vertical and horizontal planes and how the structure is connected by means of ramps
Fig 5.44 indicating how model grows out from state theatre, emphasising the symbiotic concept

Rem Koolhaas is another good example of an architect that is pushing the boundaries of conventional programming of a building. In the design of the Seattle Central Library in Washington, Koolhaas demonstrates that the form and aesthetic of a building need not govern the success of the space. From the outset, the public were involved in the debate of the design. Koolhaas also held workshops with 11 library user groups and 37 library staff groups (ARCHITECTURAL RECORD 2000: 125). This was to gather as much information on the future of books in order to make informed design



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decisions. Koolhaas believes that the library, as an institution, has moralistically and unwisely positioned itself as the bastion of the book versus the byte. "It's not a matter of and/or," says Koolhaas. "The modern library, especially in a cybercity such as Seattle, must transform itself into an information storehouse aggressively orchestrating the coexistence of all available technologies." (OLSON 2004: 89). There are five programmatic "platform" blocks of floors designed for a unique purpose: parking, staff area, meeting rooms, books and offices (OLSON 2004: 89). The platforms were pushed and pull in directions that allowed them to capture the best light and views. The building was designed allowing for a greater ease of use of a library. The library enters into a large triple volume space that has been nicknamed the living room. This area is where the children can play and amuse themselves with books and other activities. From there you move up into the mixing chamber where all the librarians are situated to provide customers assistance (OLSON 2004: 92). The platforms of the building are done in such a way that there is a constant visual connection between the user and other parts of the

5.46

5.47

library. The large atrium space allows for orientation of the users within the space. The most controversial element in the building is the book spiral. It is less a spiral than a gigantic continuous ramp that inches up across the city-block-size floors and keeps rising for four floors (OLSON 2004: 92). This is unlike conventional libraries that split their floors up onto different levels. The ramp allows continuous flow of books and random moments of discovery (ARCHITECTURAL RECORD 2000: 124). Throughout the climb the users are faced with magnificent views of the city skyline. Access points and

staircases allow direct movement to specific points, whereas the ramp is very much about experiencing the library (OLSON 2004: 92). Other spaces that have been well thought out are movement areas where people are continually in visual contact with others. There is a lecture space which sits in the middle of the library's ground floor. It is open to all around, increasing the event interaction or cross-programming idea. Such elements give the building a unique quality and re-interpret the conventional program of a library. The program must accommodate the everyday events that could take place within a space and make the use of the space as spontaneous as possible.

What can be learnt from the principals applied in the library is that any new design can re-interpret the conventional program of an event without having to drastically alter the form of the building. To re-interpret form does not solve the question "How can it be different?" The spatial and experiential quality of a space gives the answer to that question through the re-discovery of space use.

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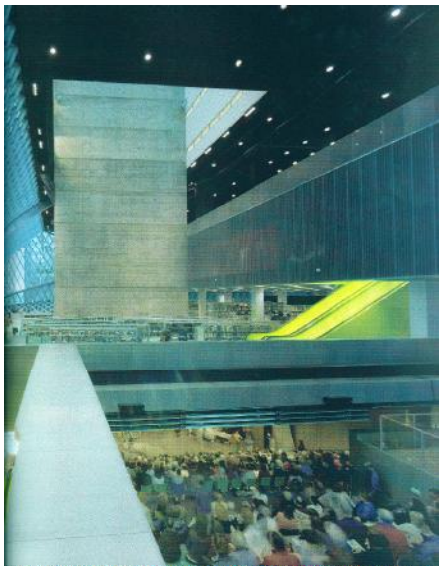

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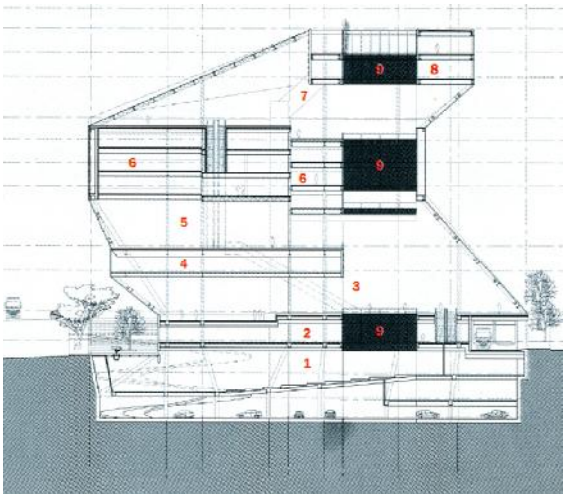

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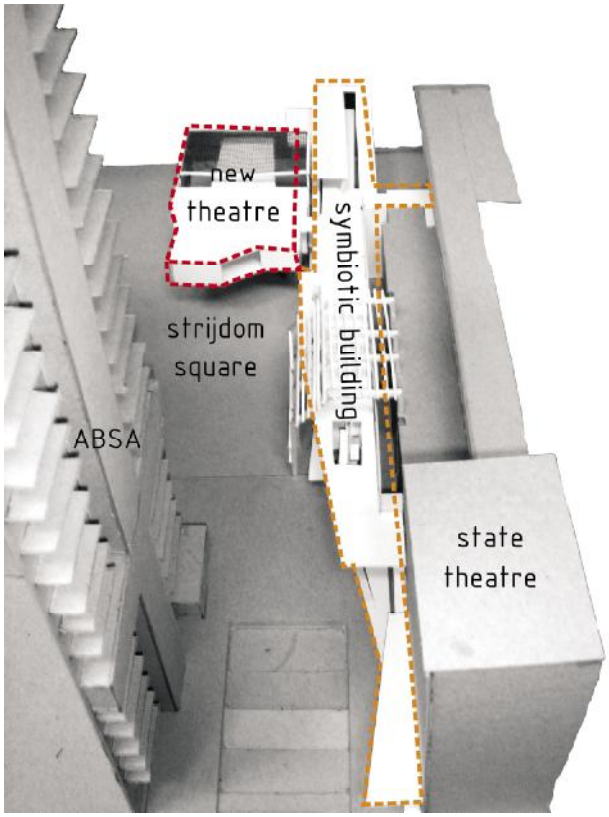
Fig 5.45 exterior view of the Seattle Central library
Fig 5.46 exterior view of the Seattle Central library
Fig 5.47 model done by OMA as a designing tool
Fig 5.48 view from the mixing chamber into the living room. this photo indicates the use of double volumes and platform extending under or over each other in order to achieve a constant visual connection between different parts of the library
Fig 5.49 photo of the lecture hall that sits in the middle of the library emphasising the use of cross-programmable spaces
Fig 5.50 section through the library. section shows how floor platforms are pushed and pulled to create the best view of the city skyline and to increase visual connectivity between different parts of the building

Fourth Concept

After studying Koolhaas' building, a fourth concept model is built and explored. This model dealt with the idea of re-thinking what a theatre program could be. The symbiotic building retained its slender linear shape- the movement and fluidity of the previous model was sufficient and dealt with all the necessary issues that the symbiotic building had set for itself. The theatre now becomes the main focus- looking at ways that theatre as an event can be designed. Initially the theatre space is calculated according the number of people to be accommodated. This space is then designed in such a way that the theatre space can be split up into three smaller theatres. Theatre activity can thus make use of either smaller, intimate spaces or be opened up to become a larger theatre. This planning resulted in a theatre that had a central stage and fly-tower area. Attached to this would be the smaller theatres sharing the stage, but if needed the theatre could be used in its entirety. Other solutions included making the theatre adaptable so that it could be used for other activities. These include activities like the conference facilities, or being converted so that cinema films could be projected when the theatre was not in use. With this is mind, the model grew into three separate theatres. One theatre still retains the raked form, and the other two being joined (with the idea that they could be opened or closed at will) having a flat surface for theatre and other activity.



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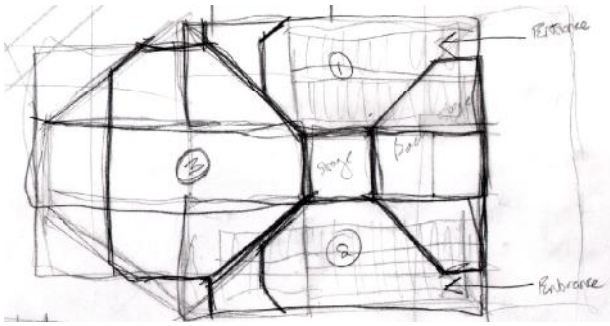
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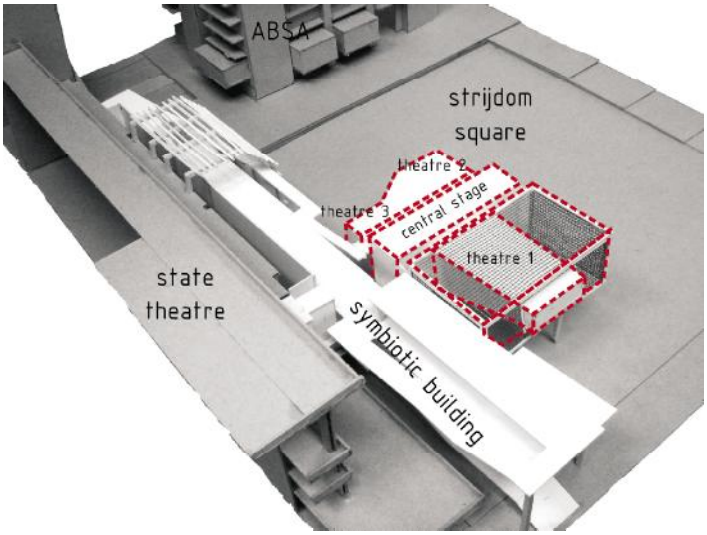

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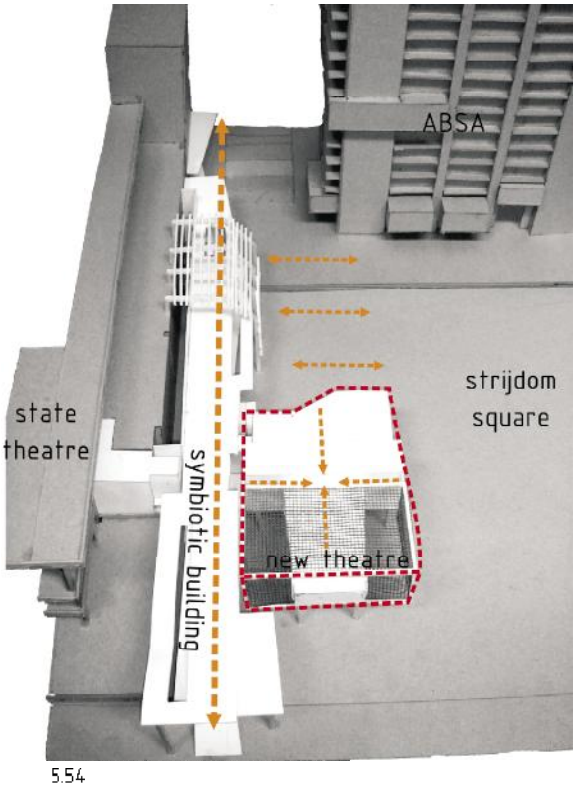
Fig 5.51 fourth concept model indicating the symbiotic building with the new theatre attached to it

Fig 5.52 concept sketch exploring a plan of a theatre that could contain three smaller theatre spaces and able to convert into a larger theatre space

Fig 5.53 fourth concept model with the new theatre. the model shows the design of 3 smaller theatres attached to a central stage area.
theatre 1 is the traditional form theatre with the raked seating. theatre 2 & 3 are the theatres that have a flat floor surface. these can be converted for use as conference facilities or similar functions. they can also be combined as a larger space.

Fig 5.54 fourth concept model indicating that the symbiotic building works well in form. however the theatre still very internalized, not responding to the square at all. the theatre's shape does not compliment the symbiotic building and becomes obtrusive in the square



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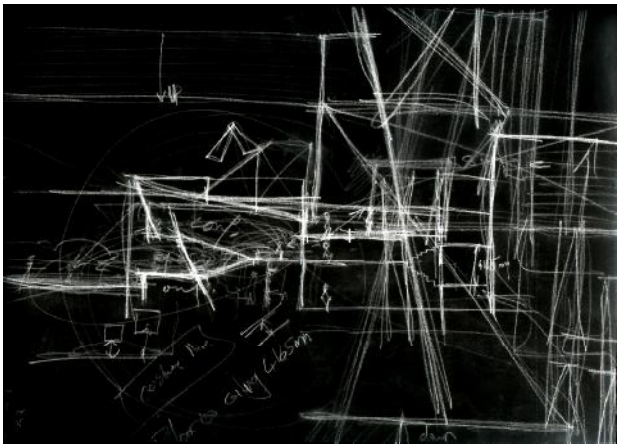

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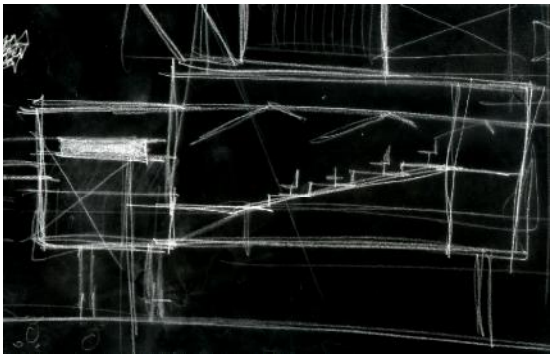

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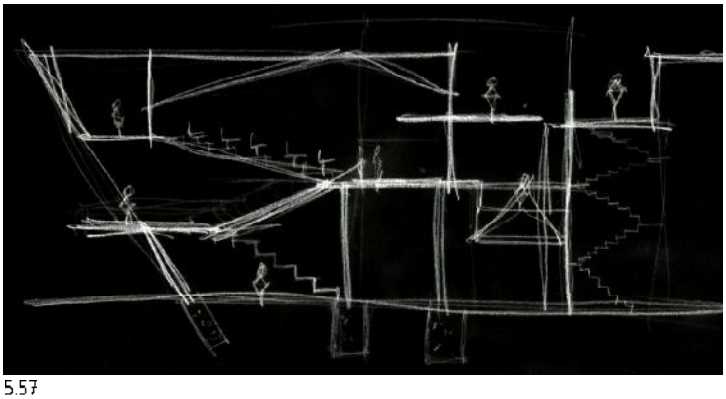

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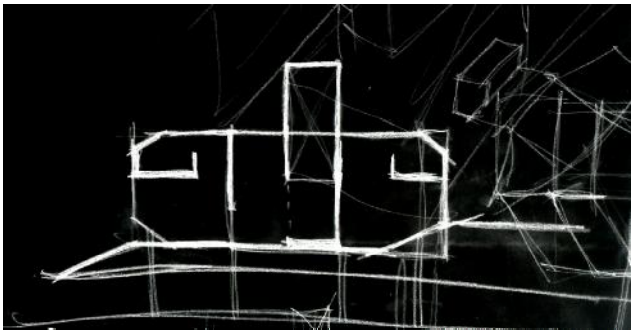
Fig 5.55 – 5.60 concept sketches exploring various theatre forms. all have taken on the shape of the traditional theatre form. in all instances the theatre is being designed to interact with the square. the shape of the traditional form is limiting in its cross-programmable use. ways of trying to interact the theatre with the square were rudimentary as this was done merely by physical connections. the theatre needs to be explored for an event-flexible use



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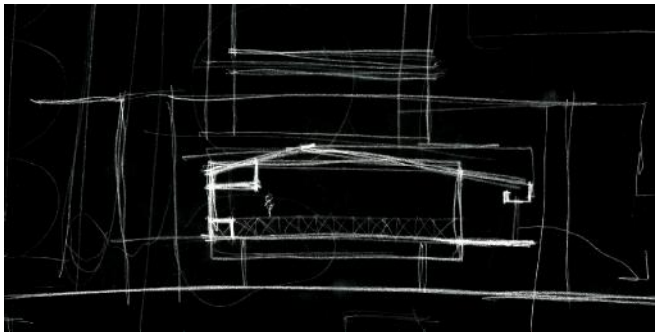

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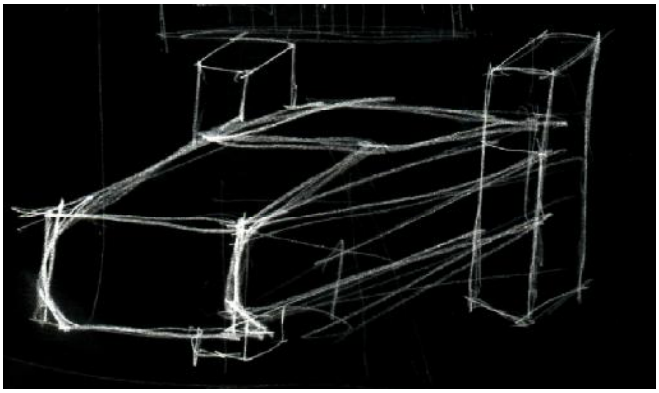
When analyzing the fourth model, it can be seen that the planning resolution of the theatre again did not satisfy the concept of cross-programming. Concept sketches explore differing theatre form, most of which still retain the traditional theatre form. These sketches attempt to mould the traditional form into something which would suit both Strijdom Square and the symbiotic building. These include lowering the lower side of the raked theater onto the square level or simply trying to resolve the connection to the square by means of physical access. The overriding idea in the sketches was an attempt to create visual and physical interaction with the square. The theatre however remained too rigid in its form and the use of the space for other events became the limiting once again. As Tschumi and Koolhaas had demonstrated through re-thinking, the solution need not be complicated. This fourth concept model highlighted issues such as how to address movement, and how the form of the symbiotic building should take shape in the context of the site. But the theatre was not responding well, it remained too internalized. A solution has not been found but the concepts engaged are moving towards a resolution.



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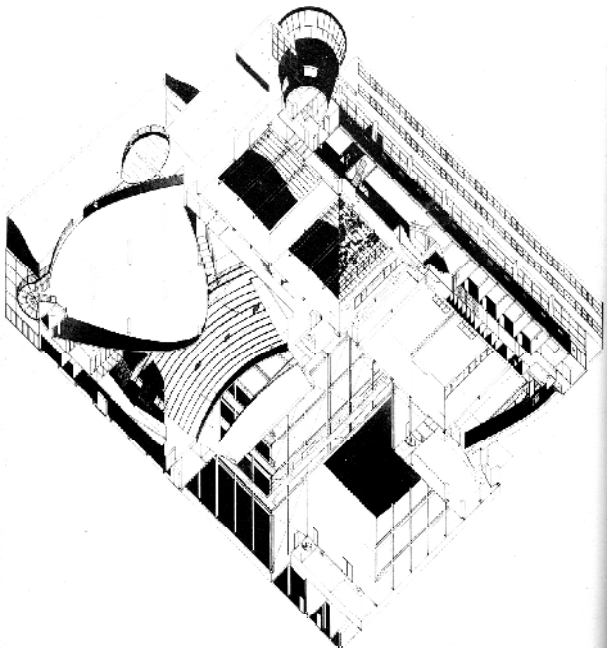
An analysis of theatres with unconventional programs was undertaken in order to see working solutions.

The Netherlands Dance Theatre in The Hague is a theatre house designed by Rem Koolhaas. The theatre from the exterior is rather mundane. The façade is quietly recessive, predominantly monochrome corrugated steel and glass, except for the mural of dancers on the fly-tower, the wavy-edge roof over the auditorium and the "golden ice-cream" that accommodates the box office and cafeteria (BUCHANAN 1988: 34). The interior is also unconventional. Rather than being spatially articulated, accommodation is, as characteristic of Koolhaas, simply zoned into strips (BUCANAN 1988: 34).

The dancers' common rooms are located in the strip adjacent to the square, so putting their daily life on display through slightly tilted floor-to-ceiling glazing. The foyer strip next to the rear auditorium strip reaches right to the roof and bulges sideways under the sloping floor of the auditorium. The foyer too is an unconventional space. The archetypal theatre or opera foyer extends into the street with colonnades and street lamps inside and upwards. Progression from the exterior inwards becomes a parade of people displaying themselves and watching each other (BUCHANAN 1988: 34).

Like the foyer, the auditorium achieves considerable drama with the bare minimalism of form and detail. With its charcoal painted walls and ceiling and black studded rubber floor it is literally a black box. There is none of the usual architectural articulation, nor any mediation between the auditorium and stage. The audience is put on display in balconies and boxes that also sweep the eye forward, integrating performer and audience in a singular event (BUCHANAN 1988: 34). The wavy curves of the roof are surprisingly striking when they are spot-lit. The ceiling is simply the underside of the roof. Two layers of corrugated steel with insulation sandwiched between are warped over exposed truss to rise and fall as waves out of phase with each other along either side. Cheap, yet very efficient structurally, the roof highlights a crucial aspect of the building and how, despite its cheap insubstantiality, it is not an archetypal decorated shed. Its outer volume is directly related to the spaces within and even expressive of their function (BUCHANAN 1988: 37).



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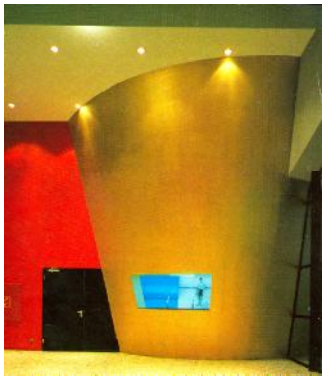

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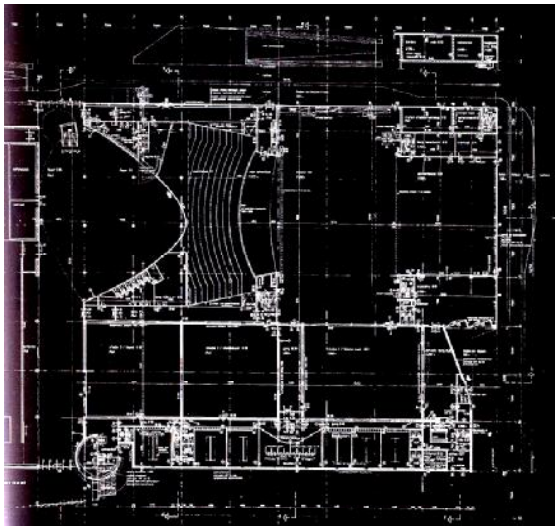

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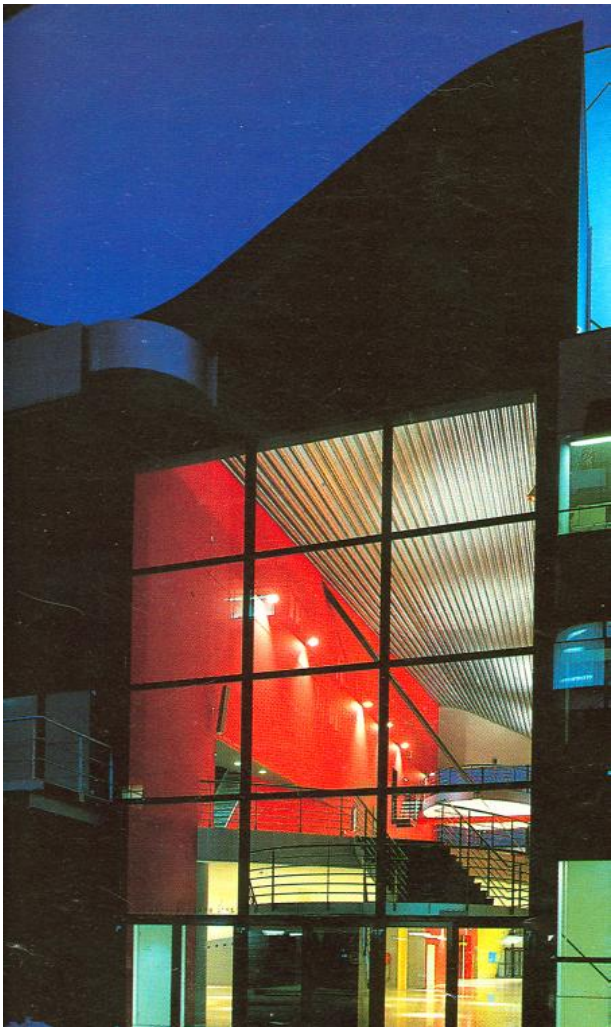

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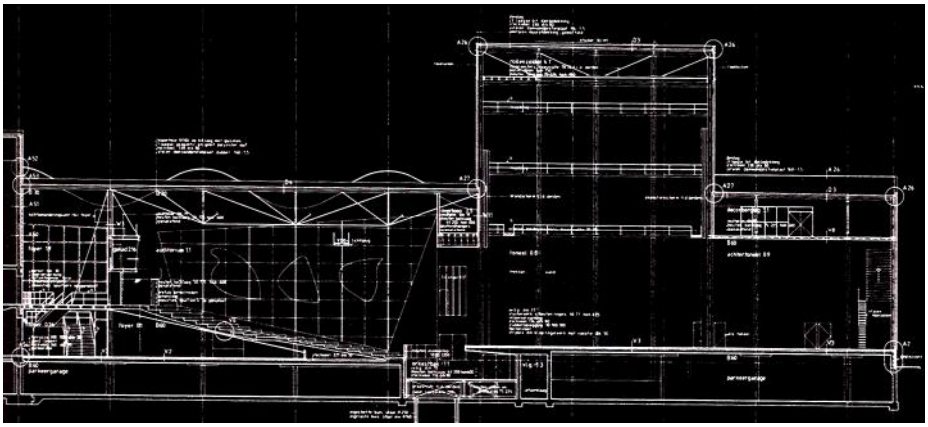
Fig 5.61 isometric section of Netherlands Dance Theatre
Fig 5.62 outside view showing the "ice-cream" box office with cafeteria above it. also can be seen is the dancers common rooms and the studios above that. the mural on the fly-tower is also seen (done by Koolhaas' wife)
Fig 5.63 ice-cream box office from the interior
Fig 5.64 ground floor plan of theatre. foyer space can be seen bulging into the auditorium space
Fig 5.65 northern view of the wavy roof which extends into the theatre space
Fig 5.66 section through theatre showing the wavy roof in the theatre space



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What Koolhaas achieved in the Netherlands dance theatre was a new approach to theatre programming. Avoiding architectural stereotypes, he took mundane program elements and simply changed our perception of them. The manner in which the foyer space meets up with the rear of the auditorium, through decreasing the headroom as you approach the space. How people enter into the foyer, designing an experiential transition between exterior and interior. The theatre itself was not typically executed. Where, in most cases, the theatre receives the main emphasis of the design, Koolhaas re-interprets how the theatre should function. By introducing the wavy roof form into the theatre space, the structural identity is revealed. The purist theatre form was discarded. Acoustics and lighting need not overpower the form design of the theatre. Koolhaas created intriguing spaces in the theatre building and although it has been described as a cheap alternative to regular theatre design, it has been widely accepted by the users.

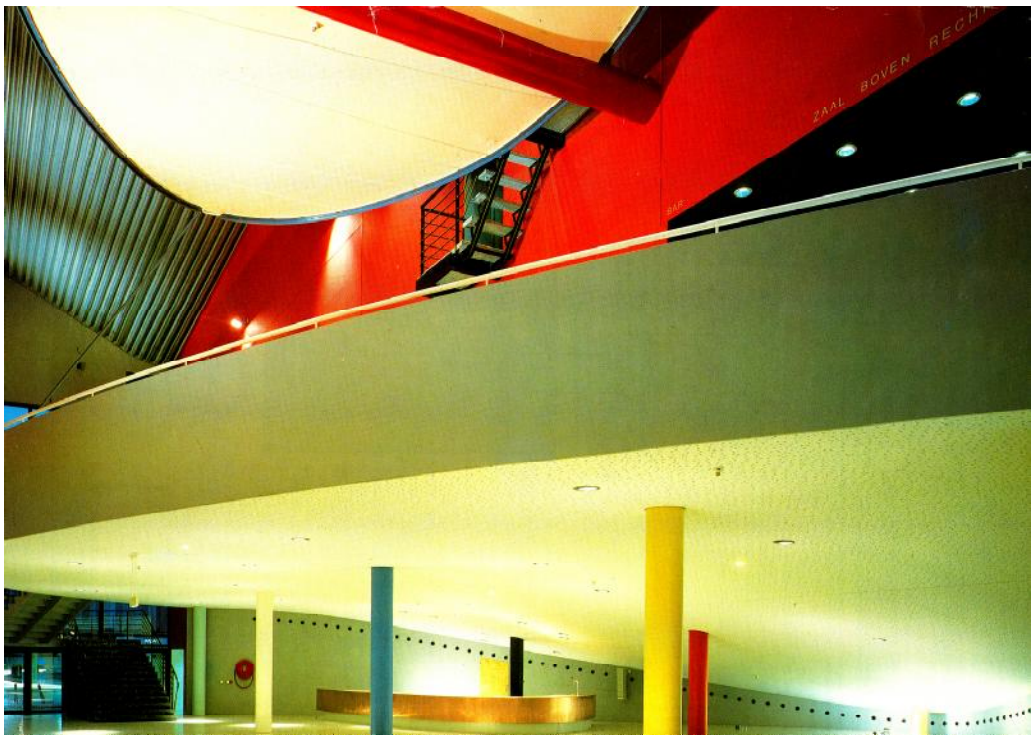

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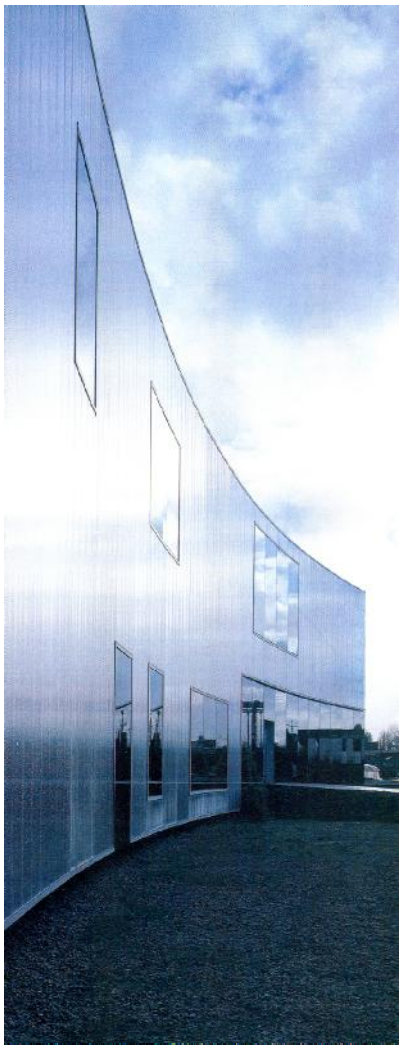
Fig 5.67 foyer space of the Netherlands Dance Theatre where the floor-to-ceiling bulges up against the rear of the auditorium

Fig 5.68 exterior view of Laban Centre for Dance and Movement. photo shows the translucent polycarbonate skin with glazing punching in at specific area for views into the building

The Laban Centre for Movement and Dance is another example of an unconventional theatrical space. Designed by Herzog and de Meuron, the structure is an inflected box with a curved face, masking the principal entry hall or "animated slot". It is a departure from pure geometry- the Laban's curve embraces a zigzag pathway and mounds of recycled earth designed by landscape architect Gunther Vogt. Kaleidoscope reflections of the immediate context register on the concave elevation's sweep of the glass panels, as in a hall of mirrors. The Laban's exterior also consists of a polycarbonate skin and a taut inner membrane of milky glass, tinted with blurry swatches of colour like lime, turquoise and magenta (RYAN 2003: 132). Areas of clear glass occasionally punch through the polycarbonate material allowing the outside to peek into the internal happenings inside the building.

After dark the building emerges as a coloured light-box, a beacon of renewal (POWELL 2003: 42). The building's interior is a network of streets or corridors and chambers on two full stories with an interstitial mezzanine. The Laban's programmatic heart is the 300-seat performance space that rises through the center of the building. The entry level of the building accommodates more hybrid functions and casual gatherings; the second floor is less public and dedicated to the dance studios (RYAN 2003: 132). Dancers are silhouetted against the translucent polycarbonate external wall, displayed to the transparent internal corridors of the building. The combined effect enhances the form and the movement of the dancers, offering up an irresistible spectacle to fellow staff and students as they circulate through the building (BUILDING 2002: 34).

The Laban Centre comes with an agenda to reach out to the local community. The surrounding community of Deptford is poor and the Centre is situated in a run-down area. It is surrounded by housing developments, barges and tugboats that get stranded at low tide (RYAN 2003: 130). The building is hoped to be a catalyst for urban regeneration. According to one of the directors, the new elegant centre with its visible practicing dancers will help to attract students in the area to the centre, therefore uplifting the community (BUILDING 2002: 38). The Laban Centre has made a dance school into an interesting program. What are normally rectangular areas, hidden away within in a skin, Herzog and de Meuron have brought out, expressing the beauty of. The translucent polycarbonate facade has excluded the use of mullions, creating a clean façade. The translucency gives a shadow display of the dancers rehearsing. The dancers are forced to be internally exposed to other students while rehearsing and thereby allowing other students to observe and learn. The studios are located around the periphery of the building allowing light to enter rehearsals spaces all the time. What is normally a hidden art up until the night of a performance can now be viewed by the public.



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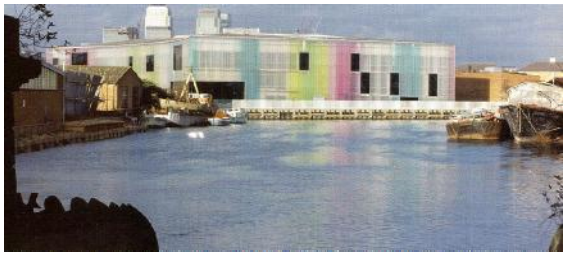

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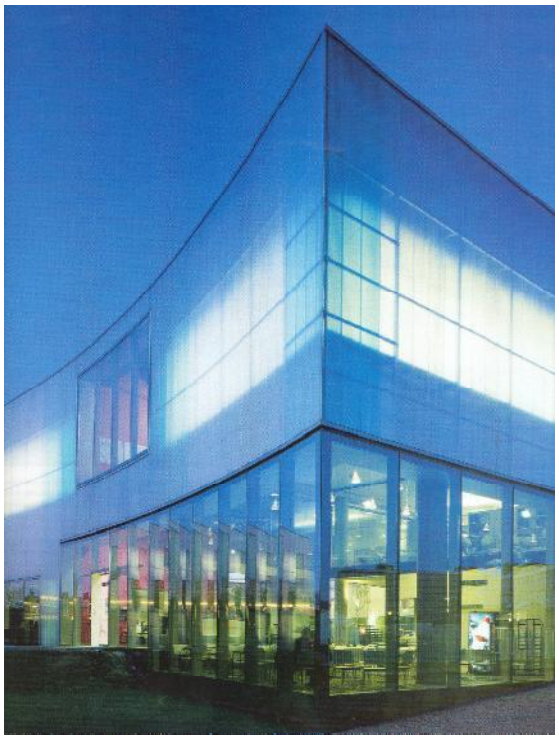

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Fig 5.69 exterior view of Dance Centre with the translucent polycarbonate skin in the various colours. what can also be seen is the concave shape of the facade

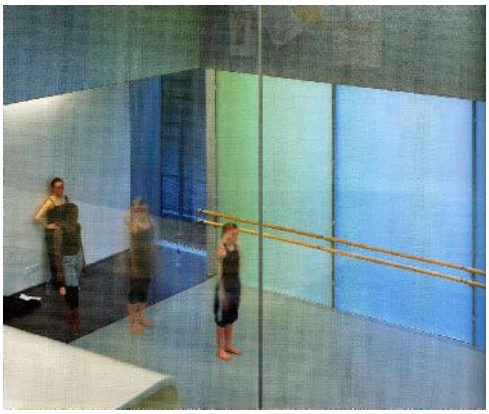
Fig 5.70 view of the building from the river showing the run-down context within which the building is situated

Fig 5.71 exterior view of Dance Centre with the translucent polycarbonate skin in the various colours at night. building reveals its interior after dark

Fig 5.72 dance studio space. photo taken from the interior of the building. dance studios are separated by partitions of glazing therefore rehearsal spaces are exposed to everyone inside the building

Fig 5.73 first floor plan where the dance studios are situated

Fig 5.74 section through the building



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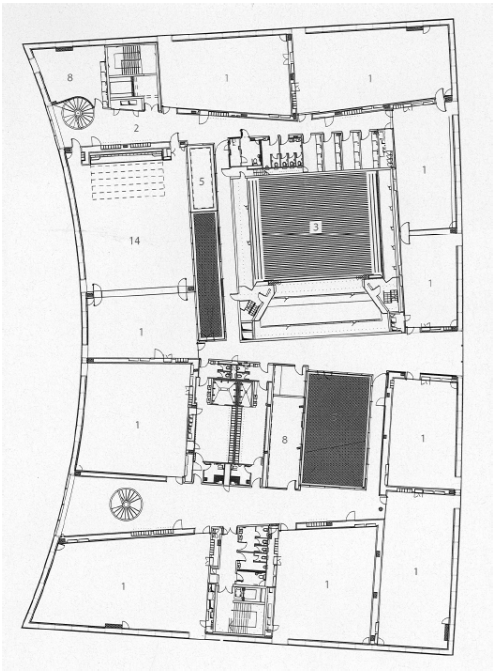

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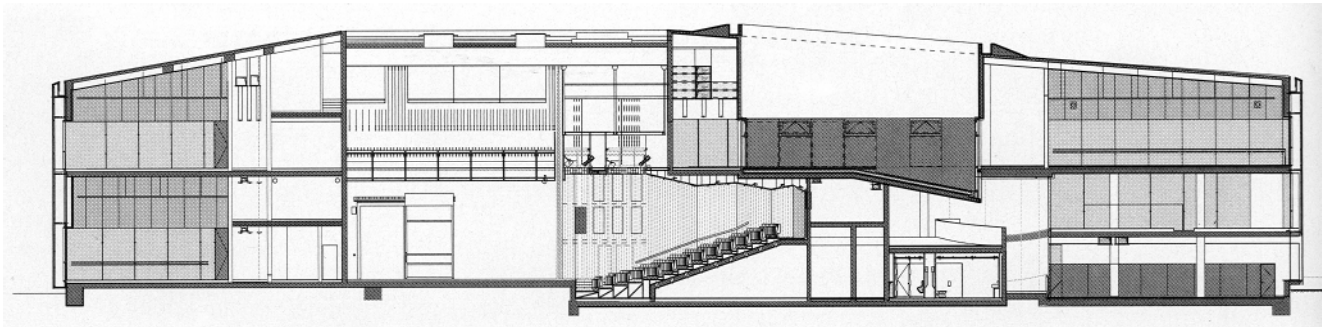

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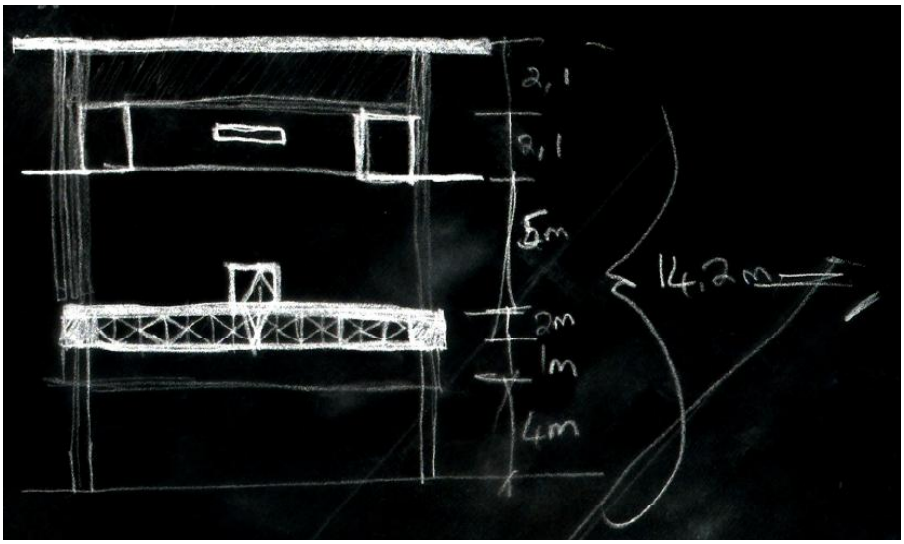
The analysis of the Netherlands Dance Theatre and the Laban Centre for Movement and Dance aids in a further exploration of conceptual ideas for the symbiotic building. The main focus of the design process at this point is to conceptually resolve the theatre space. The resolution of the theater assists with the design of the rest of the building, becoming the support event to the theatre. However, the main focus of the building is not the theatre alone- the entire building functions in the resolution of the dissertation problem.

Unresolved items at this point:

- The traditional theatre form will not be a sufficient resolution of a cross-programmable theatre space, as it is too rigid.
- The theatre program as a whole is too rigid.
- The theatre needs to do more than just have physical access to the surrounding environment.
- Traditional theatres have an inward progression of program and all amenities for the theatre are contained within one shed-like space. The new theatre must break away from this notion.

Keeping in mind that the solution to the most challenging design questions is normally the simplest, concepts were sketched of a space able to satisfy all the requirements made apparent through the analysis.

So the questions were slowly answered. An open theatre space is required to allow for flexibility of audience and stage arrangement. This also requires a flat floor surface as a sloped floor lacks the versatility required for divisibility of the space. The answer: a square space. A square space does not create hierarchy in how it can be divided. If the space is divided centrally, there is an equal half remaining. If a stage is placed in the middle of the space, the area remaining around it would be equal. This solved the problem of what shape the space planning should take. In terms of planning, the theatre's level surface area can now host any form of event able to fit the space. A conference meeting, annual corporate office meetings, media shows, television studio space, dance recitals, corporate office parties, cultural competitions, lectures, fashion exhibitions, art exhibitions, commercial



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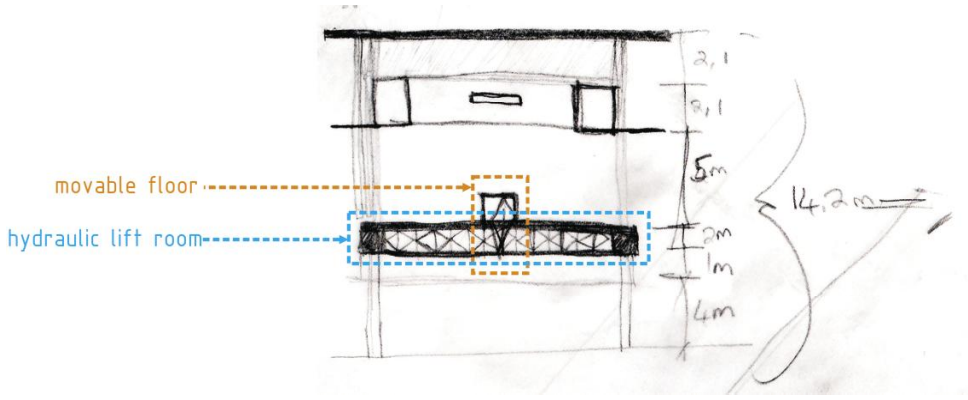
exhibitions and theatre can all be accommodated within the space. In concept sketches explored, a box-like form shaping the theatre evolved. What remains important is the need for performers to be able to elevated, making themselves visible to their audience. However, elevating a portion of the floor would defeat the object of having this versatile space able to change its character so easily. What if the floor could move up and down? Not as a whole but in smaller components so that portions of the floor could elevate. A 2 meter x 2 meter grid floor was designed with the idea that each 4m^2 portion of floor could rise and lower independently. A platform could thus be created by raising panels in a specific area. In the case of a sculptural exhibition, the floors could be raised individually in various areas of the space as exhibition platforms. If a fashion show needed to be put hosted, the floors can be raised in a T-shape to create a backstage area and the length would become the ramp on which the models would walk. As the area is to primarily function as a theatre, floor panels can be raised to create stages as the need arises. With the flexibility of the floors, a stage can be created anywhere the director feels it is necessary.

As mentioned previously in the interview with Stephanie van Niekerk, she would love a theatre where she can place a stage anywhere, creating differing dramatic scenes.

Next, the accessibility of the theatre was considered, in order that it may function differently to the State Theater and address the square. Ideally, the theater should be open to all sides to achieve this. The solution is to provide sliding movable panels that can either enclose the theatre entirely or move where the theatre is exposed to its surroundings. The panels, on the side facing into the theatre, are finished with timber while the exterior is a non-permeable material such as steel sheeting. This provides the theatre with adequate protection from the weather, as well as providing physical protection. It is intended that the movable panels slide on individual railing systems so that they can be moved to any position necessary. This controls the natural light into the space. Some panels can be open while others will close off certain spaces to achieving different effects. The movable panels now create the opportunity for un-choreographed urban plays to take place.

Fig 5.75 concept sketch of box theatre. sketch explored possible heights needed for each space
Fig 5.76 same sketch as Fig 5.75 indicating idea of movable floor system



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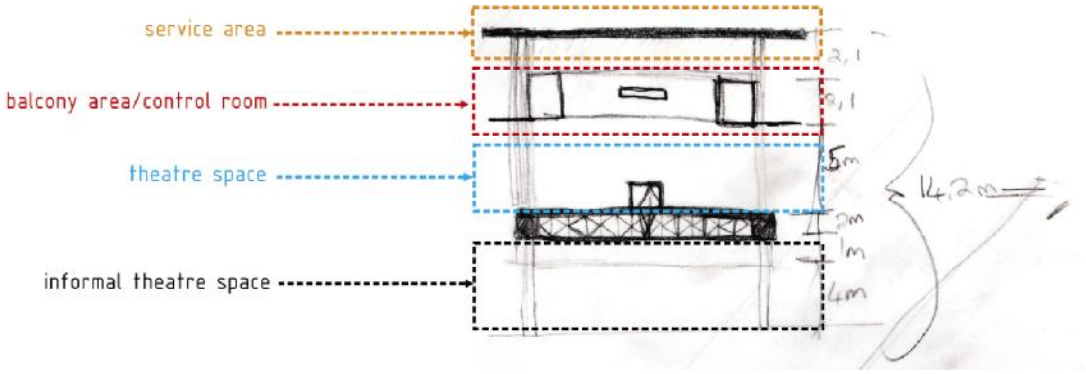

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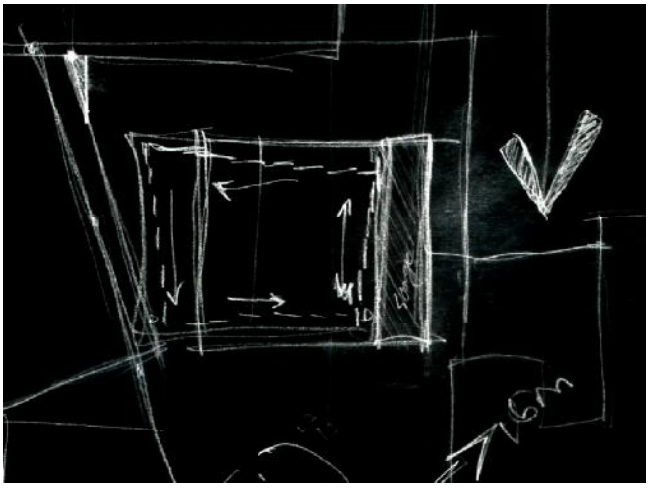
The surrounding city environment now becomes the backdrop of plays. Because all four sides of the theatre can be opened to the square, a play can use the city environment as live scenery. Different lighting conditions will occur at different times of the day and year. People moving in the city backdrop will constantly change. Weather will create different atmospheres. The possibilities become endless. The theatre event will never remain the same even for the same production. An alternative theatre experience will be available to the people in the industry and the audience.

Next, the floor to ceiling height of the space is to be determined. A balcony area above the theatre floor follows the perimeter of the structure. This area was conceived with two ideas in mind. Firstly, a control room is needed to operate the sound and lighting required by theatres and other forms of exhibitions. This balcony is to take on that role. But what was also needed is for the control room to be able to move. A control room needs to be directly opposite the stage area so that the operator can fully understand what is happening on the stage in order to make decisions. The problem is that the theatre will be able to erect a stage anywhere in the space. In order to get the sound booth directly in front of this movable stage requires the sound booth to have the same flexibility. The balcony area fulfills this need. The sound control equipment can be located wherever necessary relating to different stage positions. The remaining balcony space can be used as a gallery area for spectators.



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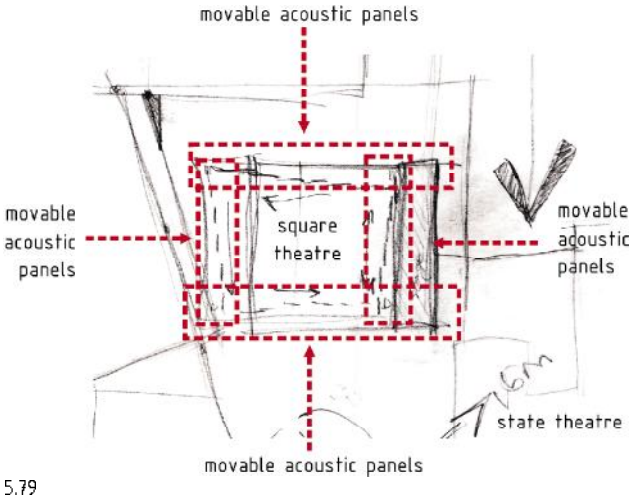

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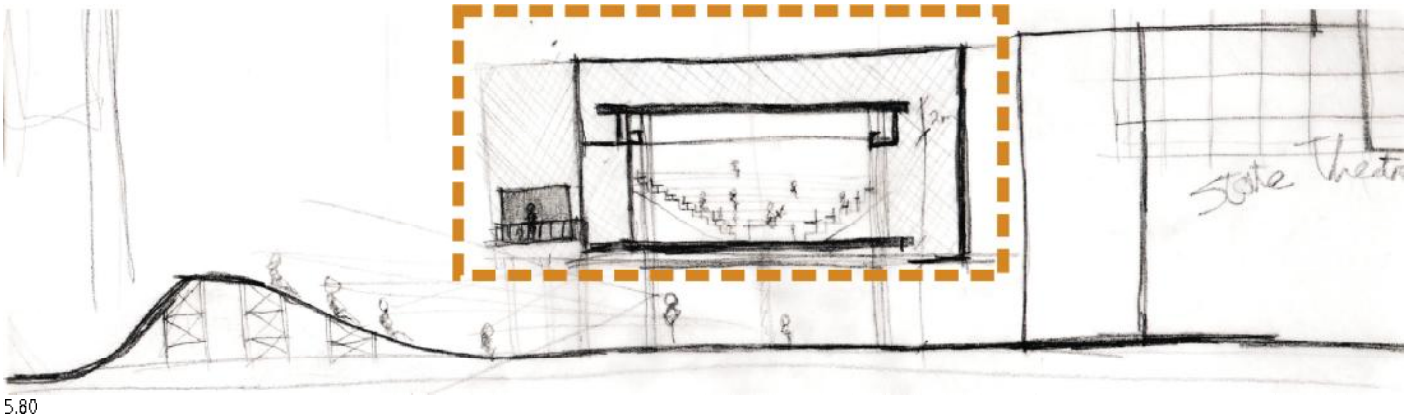
Audience seating needed to be solved to adopt the same versatility of use as the rest of the theater. A retractable seating system is to be employed. This system allows normal seating arrangements but the whole seating system can retract into a smaller stack. These stacks can then be wheeled to wherever needed. The retractable seating system comes in widths to suit the space, either to be stacked next to each other or maneuvered to suit the stage setup (www.audiencesystems.com). Above this space is the service area. Sound and lighting crews will be able to access this area from the balcony through service hatches. The service area will be equipped for temporary fixing of lighting elements at various points. Steel bridges will allow access the entire area.

Fig 5.77 same sketch as Fig 5.75 indicating zoning of theatre function
Fig 5.78 concept plan sketch of box theatre
Fig 5.79 same sketch as Fig 5.78 indicating where the sliding panels will be located

As discussed previously, the ground floor square level is a food court area with public movement through the symbiotic building. This is the public zone of the building. But as people move vertically through the building a transition occurs through semi-public to semi-private. The building will never be entirely private as it opens onto a public space. The theatre is on the second floor of the building in a semi-private area. The space underneath the theatre is still open and is on the public square level. Just as Tschumi programs every space to be a possible event (space under the auditorium in the School of Architecture, Marne-la-Vallée, being used as a cafe as an example) so too is the space under the "box" theatre.

Theatre has traditionally been an event only available to the selected few. There are many people performing informal street theatre around the city as a means to generate an income. In an interview with one of these performers, Bheki Lukhele, he said that they move around from public space to public space in the inner city trying to attract crowds to watch them (LUKHELE: 4th April 2006). Bheki is homeless and wanders the streets in anticipation of opportunities to entertain people. Bheki said in the interview that he would like to be able to perform in Strijdom Square but did not because there were not enough people in the space and that there is no space to perform (LUKHELE: 4th April 2006). The space under the new theatre is designed to accommodate this type of informal/street theatre. It is not merely an open space with shelter affording people space to perform. The space will be designed to accommodate events. It will have in its roof space a structure that can support lighting or speakers. Electrical points for the equipment will be provided. As indicated in Fig 5.15, the ablution facilities are located to the north end of the building. The dash-dot-dash line in Fig 5.15 is the line-over of the theatre's position on the second floor. The space on the ground floor forms the informal theatre space. The ablutions are positioned in this area so that they can function as changing rooms for the street performers.

The last element is the light-weight steel structure that wraps around the theatre. This structure is designed to contain the theatre in its space. As the theatre is open to the square it was felt that it needed to have an element that provides some privacy. The light-weight steel structure is to be clad in a mesh material. This allows the theatre to remain visible while a threshold is created. The mesh structure can open in certain areas, revealing the space within. The structure is also to create a void between the "box" like theatre and the mesh. This would become one of the foyer spaces to the theatre.



5.80

Fig 5.80 east-west concept section looking north showing the new theatre next to the State Theatre. concept of manipulating the square surface to create seating for the informal theatre on square level is explored. light-weight structure containing the theatre with the foyer space sitting between theatre and light-weight structure is indicated

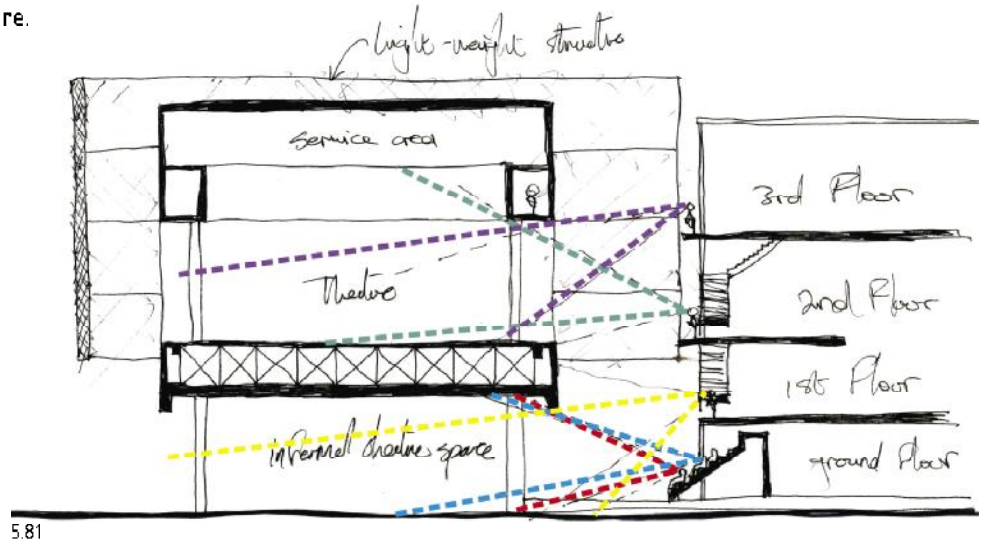
It was designed again with the re-interpretation of the traditional theatre program- instead of the foyer space being contained; this foyer space is exposed to the square. The whole experience of the theatre thus becomes part of the city life. The area between the theatre and the steel structure is open to anyone who uses the building. However, access into this space can be controlled if the space needs to be more restricted.

The vertical circulation of the building is also designed so as to accommodate events. The northern staircase has been made wider with large riser and treads. It is positioned so that people can sit on the staircase and use it as seating to view the informal theatre space. The staircase also has normal tread and riser dimensions for people who merely want to move up to the first floor.

As someone climbs the staircase, the theatre remains constantly in view. If the sliding panels are open, views into the theatre are possible, allowing plays to be watched. The landings of the staircase become viewing platforms and, depending on a person's level, different vantage points are available. This further develops the duality of spectator and performer in the building. The people moving through the building become the performers for the people on the square. Simultaneously, those in the building become spectators to the actors in the theatre.

The resolution of the rest of the building explores which events would best suit the theatre; the design of the building is to support the theatre to a certain degree. The building is to become a foyer space to the theatre. This will occur on the first and second floor levels. As mentioned before, the literal foyer space is the area around the theatre within the light-weight steel structure. But this does not mean the entire structure cannot function as a foyer space.

The events occurring in a foyer space include waiting, socializing, and being entertained, drinking, and eating/ snacking. The program of the building can allow for the entire theatre experience to flow throughout the spaces. So that going to the theatre does not solely involve moving directly to the theatre, but becomes an experience through the spaces. Other events that can be supported by this program are exhibitions. It allows people to flow through spaces, to entertain themselves, drinking and eating. Movement to the theatre can involve moving through an exhibition, standing and gathering, viewing art and it all becoming part of the theatre experience in the building. Exhibitions will not be limited to the times when the theatre is functioning. The spaces will function independently so exhibits can take place on their own.



5.81

Fig 5.81 north-south concept section through the theatre looking east. sketch shows staircase being used as seating for viewing into the informal theatre space. also shows differing views on different levels

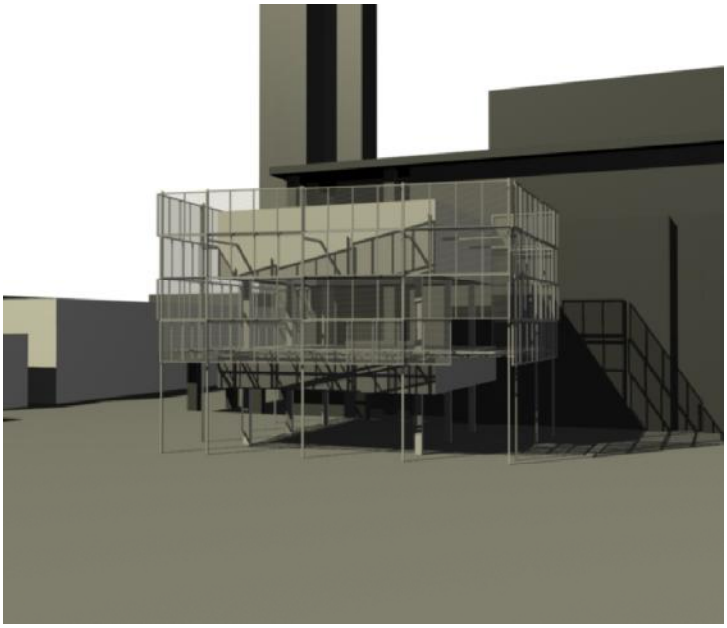


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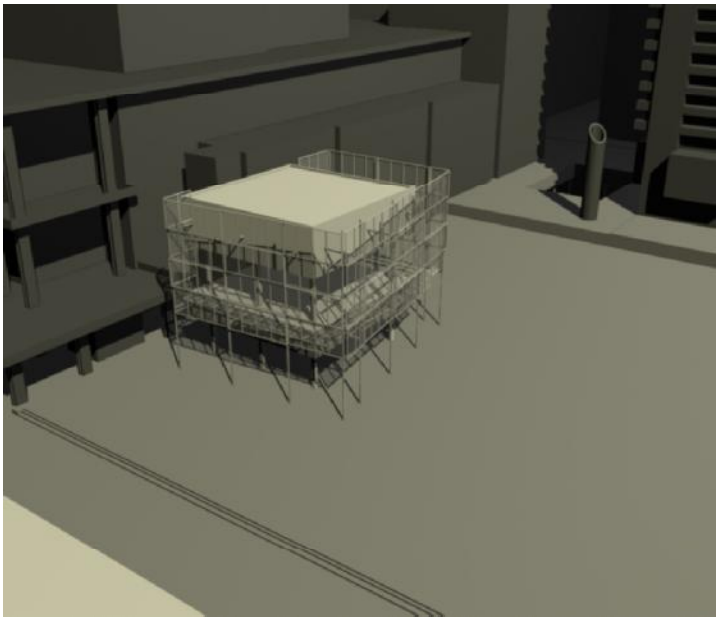
Fig 5.83 west elevation of new theatre showing opening section of mesh
Fig 5.84 north-west elevated view of new theatre
Fig 5.85 fifth concept model indicating the new theatre
Fig 5.86 fifth concept model looking north indicates improved interaction between symbiotic building and Strijdom Square
Fig 5. 87 fifth concept model indicating how new symbiotic building fits into its surrounding context



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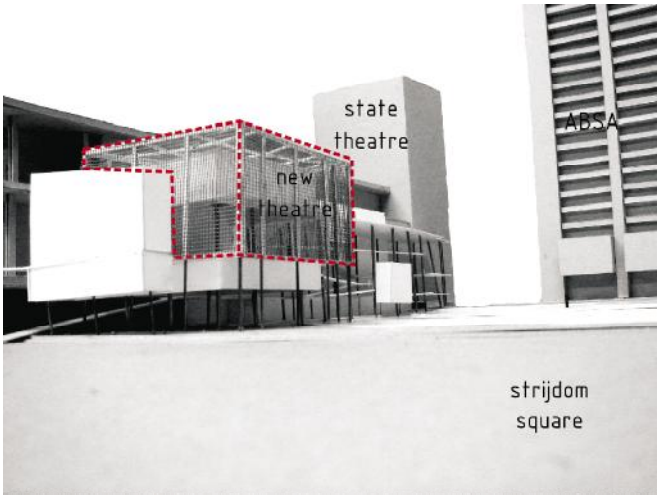
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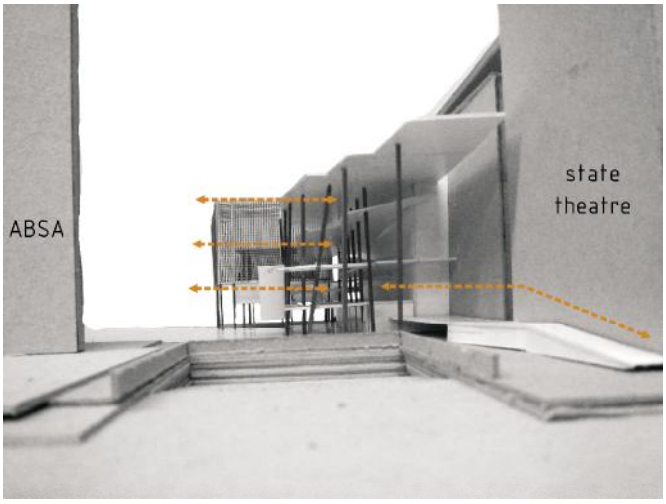
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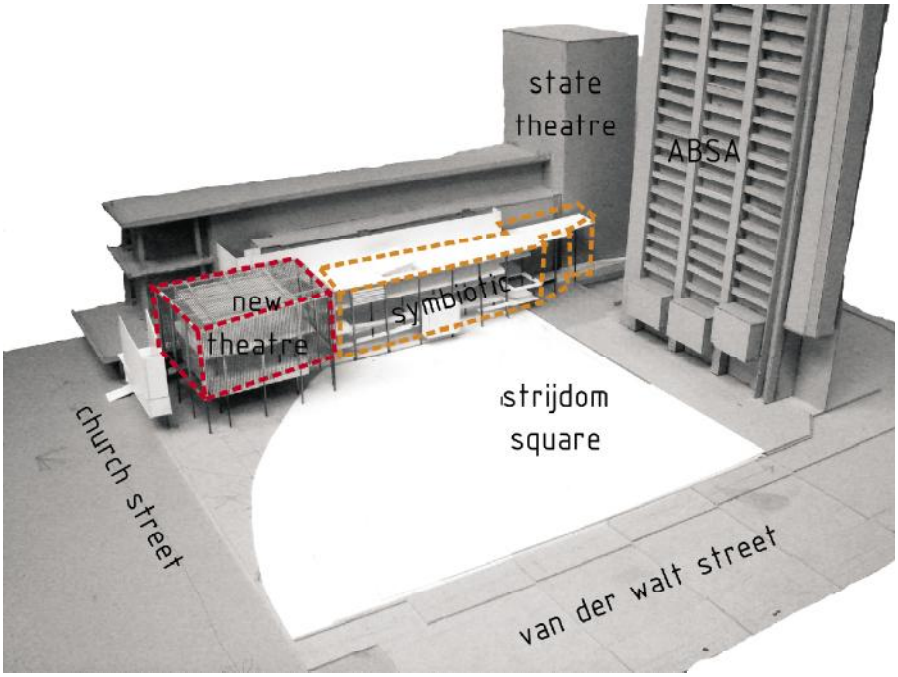
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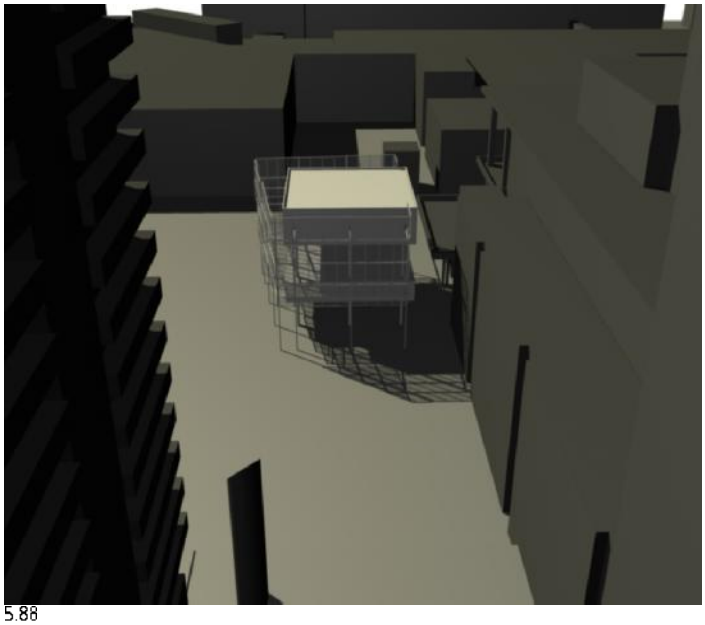
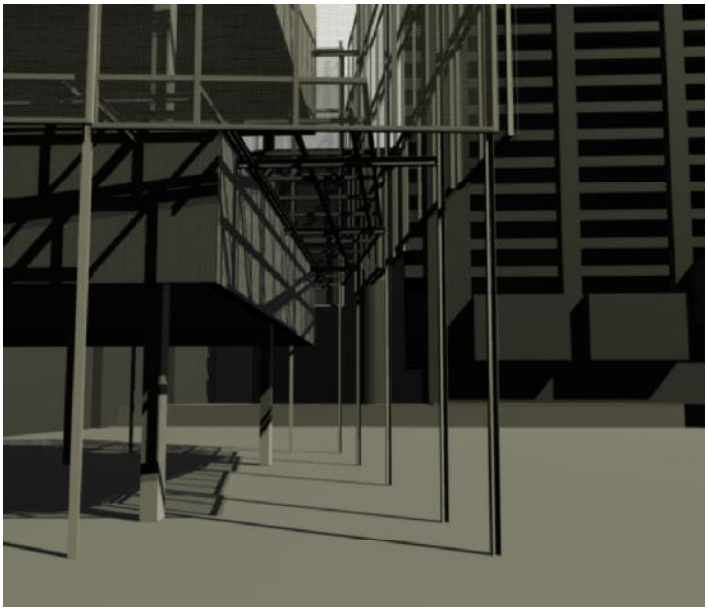


5.88

Fig 5.88 elevated southern view of new theatre
Fig 5.89 view of theatre & light-weight structure from below looking north
Fig 5.90 fifth concept model indicating floor for Strijdom Square to create better accessibility to the space
Fig 5.91 fifth concept model indicating horizontal & vertical movement through the building



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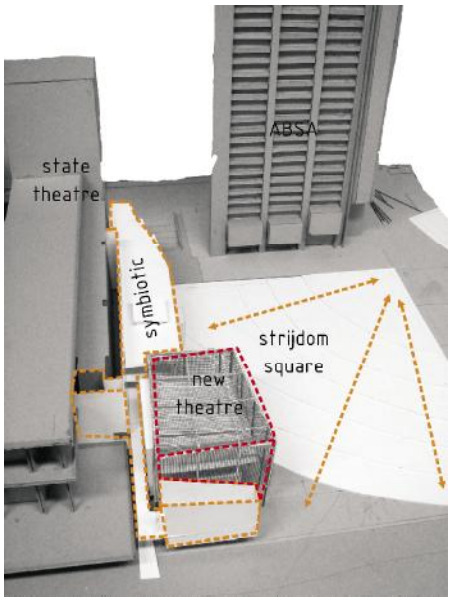

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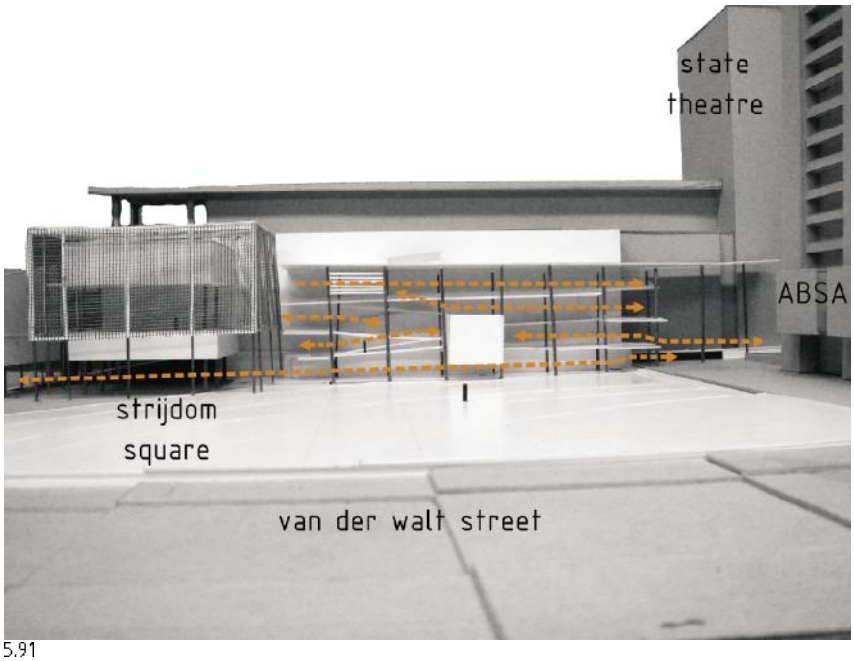

5.91

With the theatre conceptually resolved and the idea of temporary exhibition for the rest of the building emerging, a working example of a theatre/auditorium space that also opens up to the public is studied.

In the Netherlands, Rem Koolhaas designed a structure for temporary exhibitions called the KunstHal. Unlike a museum it has no permanent collection. Rather, it serves as a warehouse-like venue for a diverse lineup of temporary exhibitions ranging in subject matter from car design to avant-garde jewelry, from modern painting to the traditions of Indonesian royalty (METZ 1993: 68). As a reaction to the buildings apparent lack of program, Koolhaas created a bold structure, one that may at times overwhelm the work presented inside (METZ 1993: 68). The glazed west façade reveals the auditorium with its sloping floor and the restaurant with its sloping ceiling. The exterior is a horizontal Modernist composition reminiscent of Mies van der Rohe's Neue Natoinalgalerie in Berlin (METZ 1993: 68). The interior is completely different. The circulation route is tautly organized, ingeniously, leading visitors down through the auditorium (METZ 1993: 68). Koolhaas has incorporated inexpensive industrial materials such as corrugated plastic sheeting and light-metal framing next to the elegance of travertine and broad expanses of glass, thus varying solidity and transparency (METZ 1993: 68). As daylight fades, the KunstHal becomes a translucent box perched over Museum Park. What Koolhaas achieved in this building was to invite the public into the space through the use of transparent materials. As in the façade of the auditorium space, the public is allowed to gain visual access in and the users of the auditorium can bring the public into their space. Koolhaas also employs subtle suggestions of movement for circulation through and around the building so that understanding of exhibition spaces is fully experienced.

Koolhaas uses visual connection between differing parts of the building transforming people into exhibitions themselves. This can be seen in his use of the steel corridor which places people below and above to be in a constant state of exhibition or viewer.

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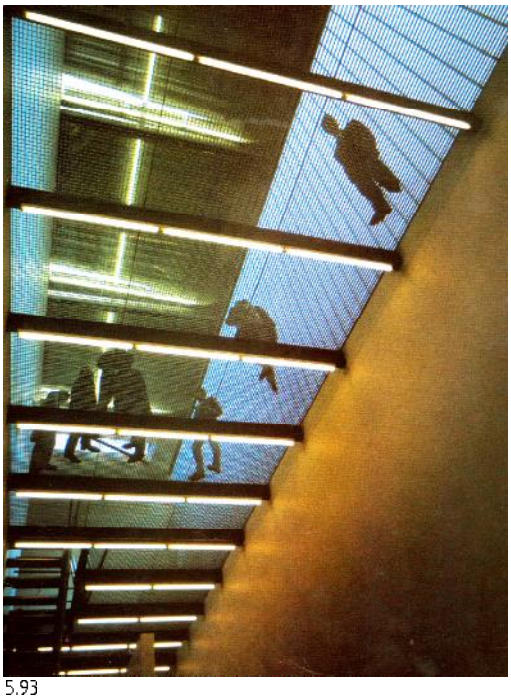

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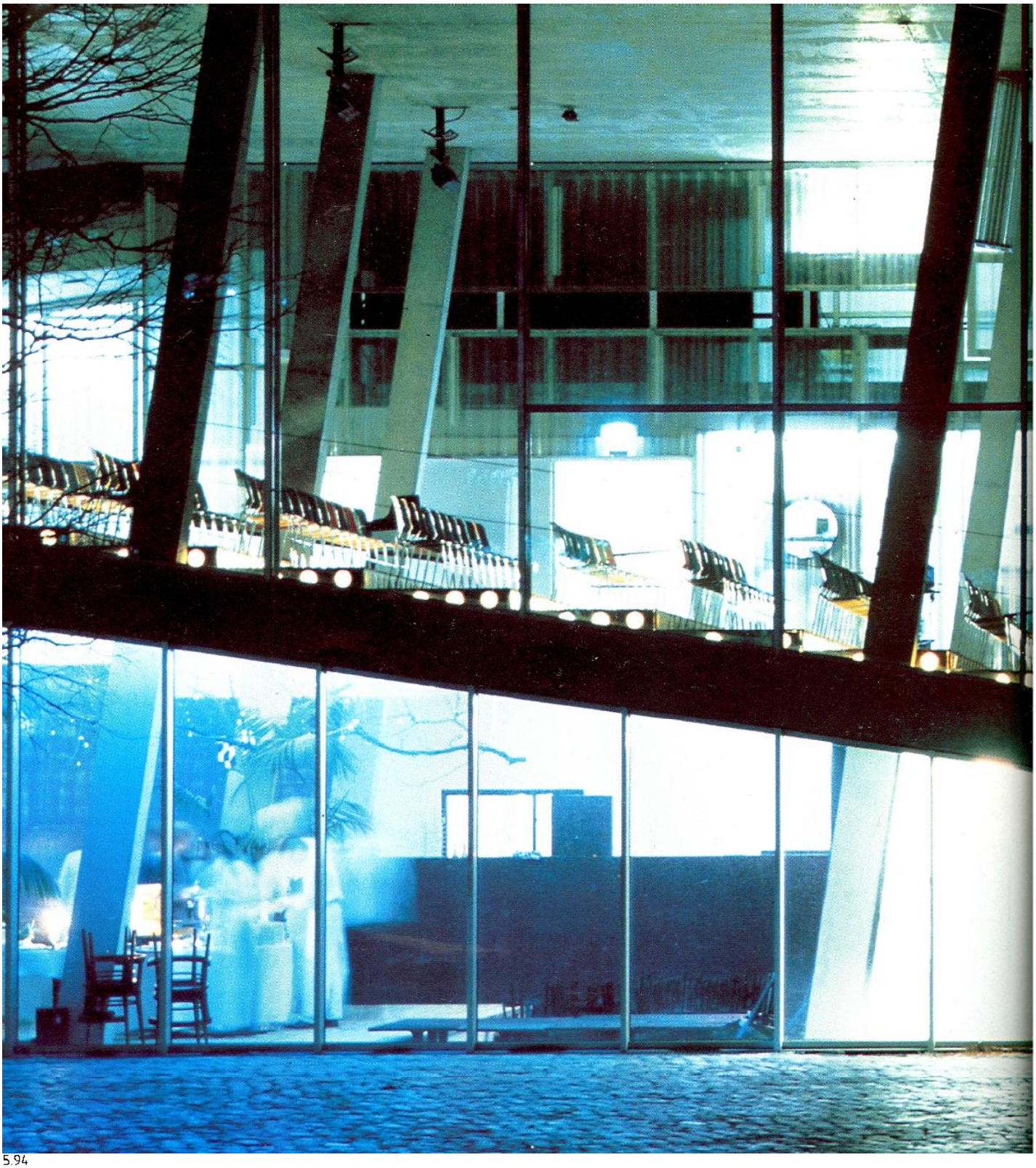
Fig 5.92 southern elevation of the KunstHal
Fig 5.93 photo of the steel bridge allowing people to see upwards or below
Fig 5.94 western elevation showing the glazed facade of the auditorium



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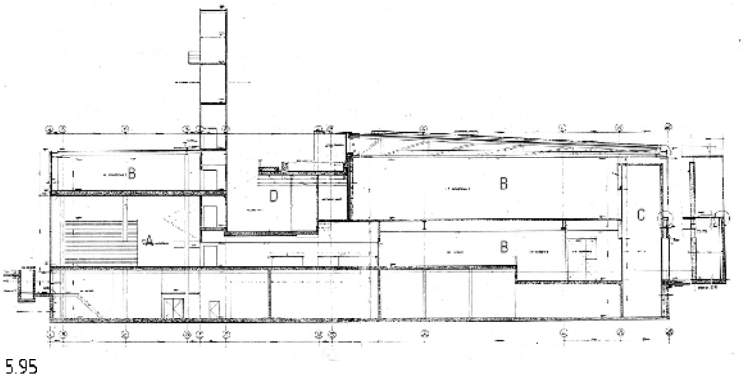

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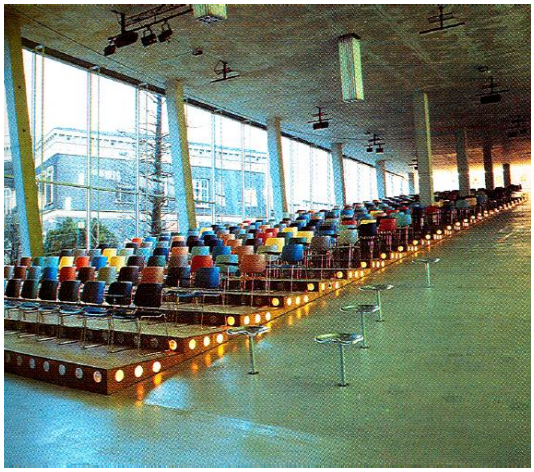

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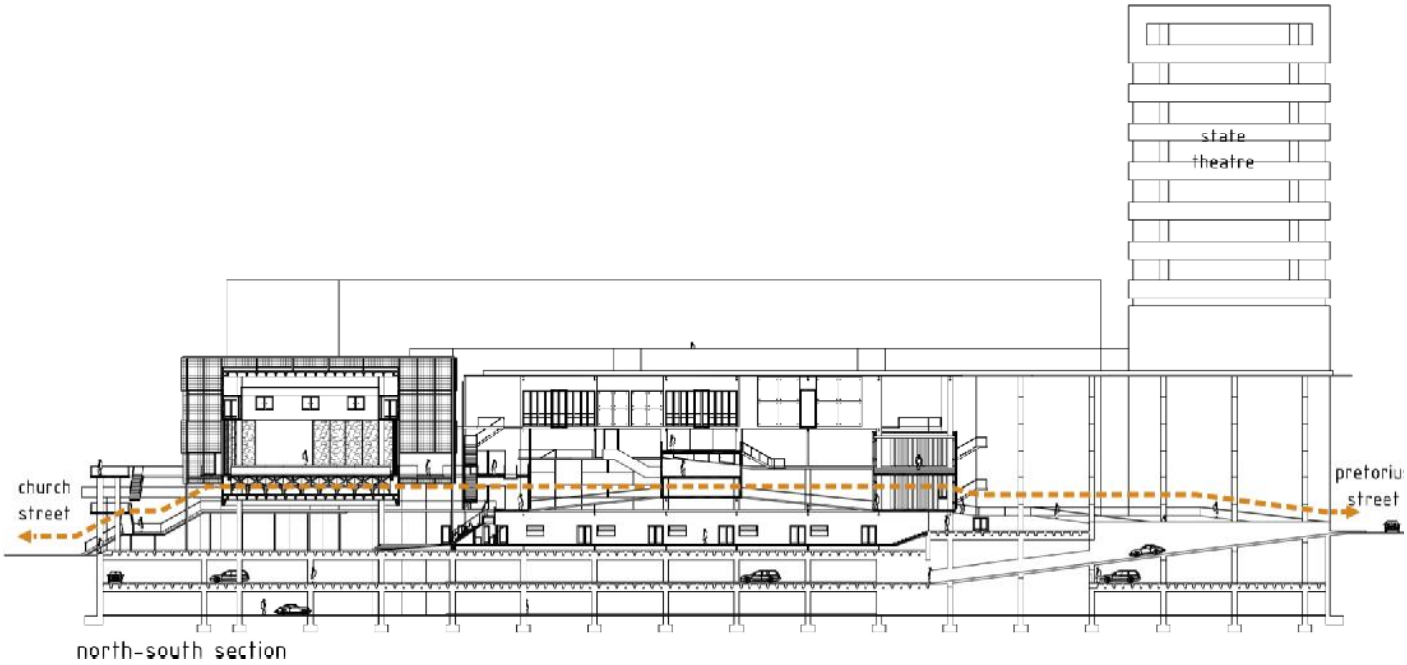
Fig 5.95 east-west section looking south through the building
Fig 5.96 interior view of a exhibition space
Fig 5.97 interior view of the auditorium
Fig 5.98 interior view of a exhibition space
Fig 5.99 section through symbiotic building indicating movement from the ABSA platform level onto the first floor

5.98

What can be learnt from this building is that forms and programs need not always follow traditional thought. To glaze an entire façade would be unheard of in typical auditorium spaces. The acoustics would not be up to standard. The space would have a constant flow of natural light from the day which could be seen as limiting. But as Koolhaas has proven- it all depends on what that space is going to be used for. If excellent acoustics is not needed for the auditorium and the transparency adds quality to the design, it can be done. Problems arising from the glazing can be solved, and should thus not be a limiting factor.

The design of the rest of the building maintains the idea of un-programmed space. As the design evolves, a distinction between the theatre and exhibition levels of the building (first and second floors) emerges. The theatre, although designed to accommodate various events, becomes more programmed than the rest of the building.

The level difference between the ABSA building platform and Strijdom Square is of sufficient height that it allows easy transition from the southern end of the site onto the first floor of the building. The current steps used to enter the State Theatre's administration building are replaced with a ramp. This improves the accessibility of the State Theatre, also taking people onto a level from where it becomes easy to access the first floor of the symbiotic building. From this platform, another ramp takes people up onto the first floor exhibition level of the building. Another staircase operating on the southern side of the building will take users right up to the third floor. A second ramp is also provided allowing users to move to the ABSA building via a ramp system, without having to pass the State Theatre ramp which takes you into Pretorius Street.



north-south section

5.99

First Floor (semi-public level)

The first floor of the building is designated as exhibition space. The exhibition space is not going to be designed simply as an open floor plan in which artwork is displayed. As unprogrammed space, it will be used not only for exhibitions but also for other events, by providing the right infrastructure. Columns rise up to roof height along the length of the building. This defines that which is inside and where the square is. This transition space has a subtle edge, keeping the building open to the square, while containing people in the space. The colonnade will define the outer skin of the building which will respond to the square. Everything to the inside becomes the "guts" and inner workings of the building.

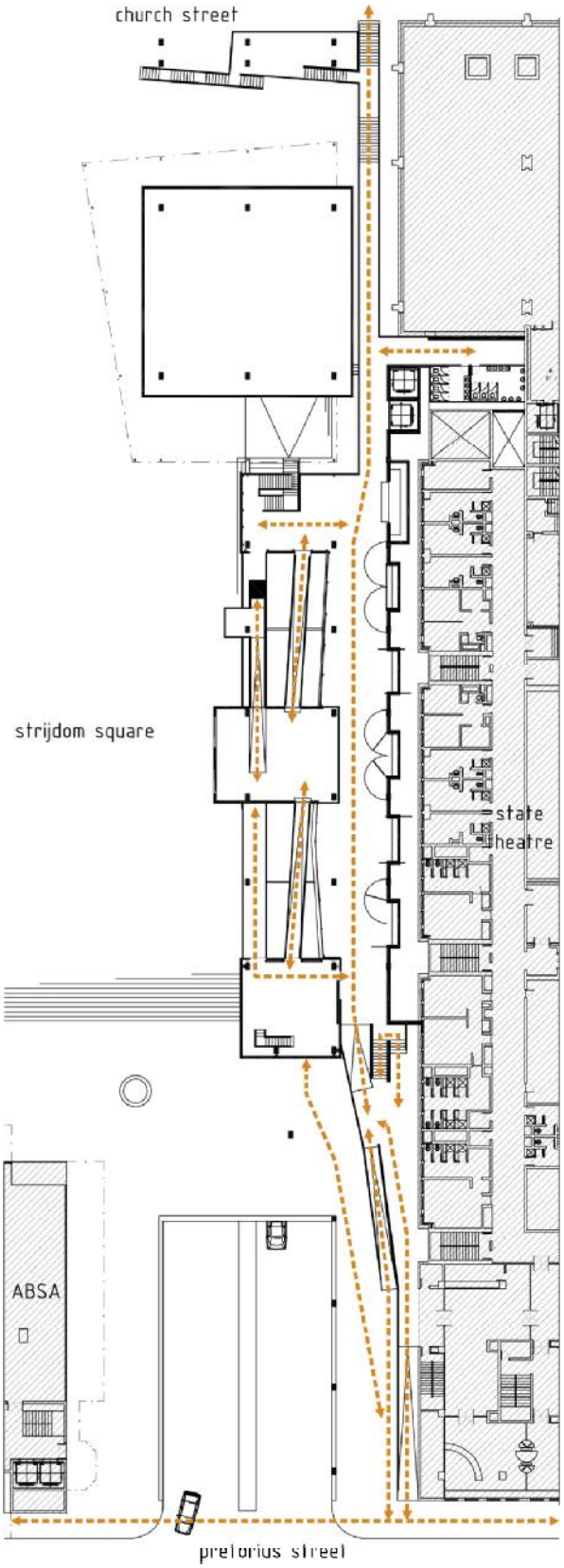
The inner workings of the building can be zoned into the movement areas and stationary or still spaces. The movement areas are the systems that encourage vertical movement, while the still spaces encourage horizontal movement. The vertical movement areas such as the ramps and staircases sit on the western outer edge of the building whereas the still spaces are located deeper inside the skin. This is for a number of reasons. The movement areas are located on the outer skin and even punch through that envelope because it displays the people using the ramps or staircases to the square and to the city. Landings become viewing platforms out onto the city. Looking into the structure from the outside, people using the movement systems animate the building. The movement systems are also exposed to the natural elements of the weather.

The inner still spaces will have a non-penetrable envelope, thus protected from wind rain etc... The ramps cause constant movement of people from inside to outside as they make their way through the different levels of the building. The ramps punch into the still spaces of the building, emphasizing the movement and the transition. Another reason why the still spaces sit deep inside the building is due to the west facing façade. The western sun is problematic (will be discussed further in the technical report) therefore, by placing the usable spaces deep in the building, they are afforded more protection. The ramp systems will also stop some of the direct western sun into the still spaces.

The layout of the first floor is simple, but certain areas have been enclosed to create spaces within spaces. If a person moves through the first floor from the southern end of the building they will encounter on their left, a wooden box. This space is enclosed with a timber clad structure and is separate to the rest of the space. It is designed to create hierarchy of space on the floor level. The space can either keep more important art displays, and locked if something of value is kept within. The wooden box is open to the natural elements. The timber cladding, with gaps between each slat will allow wind, rain and sunshine into the space. The lighting that will come through the space though will be surreal and will change with the movement of the sun. The space will feel as though it is part of the first floor but it is actually situated outside. Inside the box is a staircase that will take a person into a similar space on the second floor, directly above them. From this box there is access to a ramp into another exhibition area as well as access to a bridge, running along the outer edge of the building's envelope. The bridge does not take a person to anywhere specific, but provides a platform for views out onto Strijdom Square.

From the wooden box, still on the first floor, are niches that cut into the service duct wall. These were designed so that artwork can be displayed in them. They are large enough so that sculptural art or multi-media art can also be placed comfortably. If they are not being used for display purposes, these niches act as seating which can be used if waiting for the theatre to commence or while just moving through the space. Next to the niches are slits in the wall into which steel panels can slide. These panels were designed so that they can be used to display art. They can be slid out as far as needed, and can also slide all the way out. In this position they can swivel in any direction.

Fig 5.100 first floor plan indicating possible movement through the level
Fig 5.101 first floor plan indicating the theatre and the more isolated exhibition spaces



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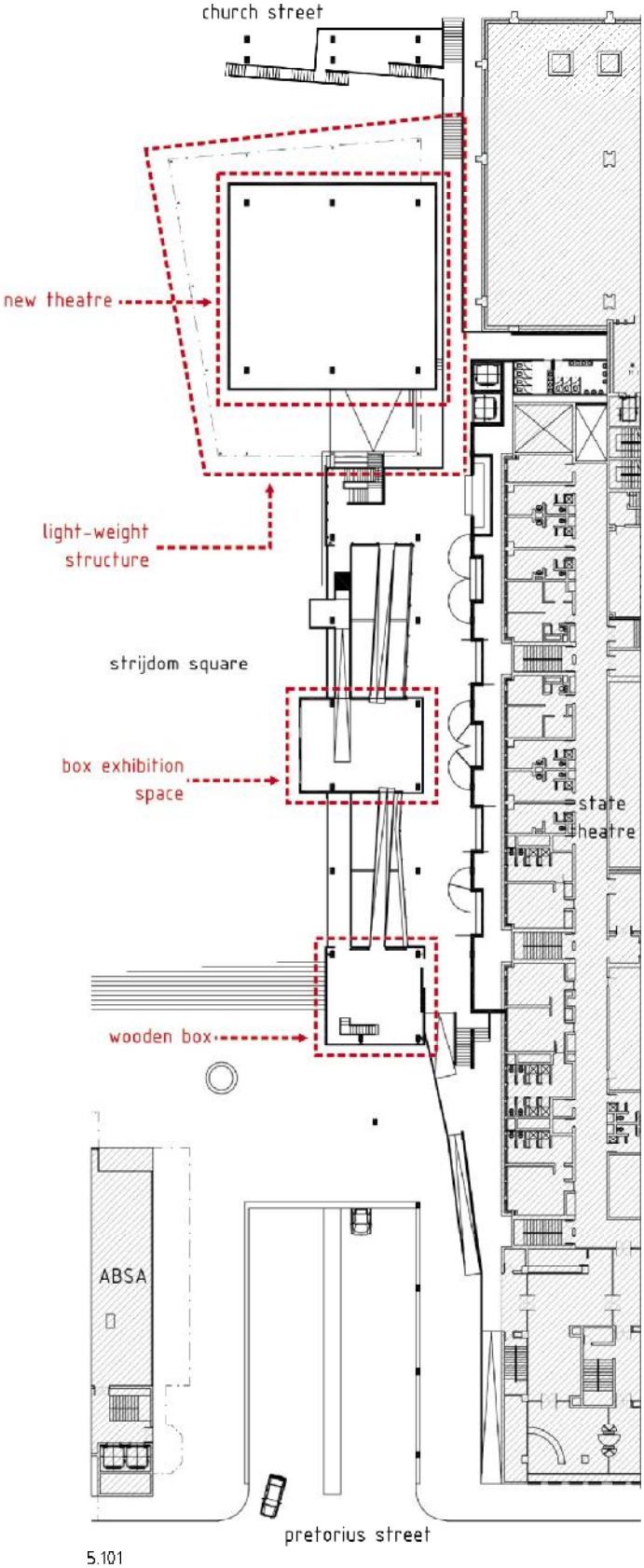

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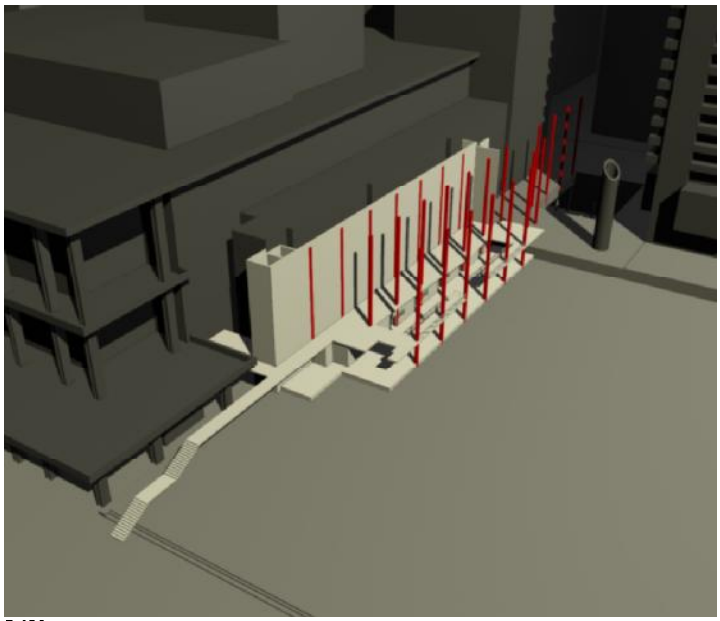
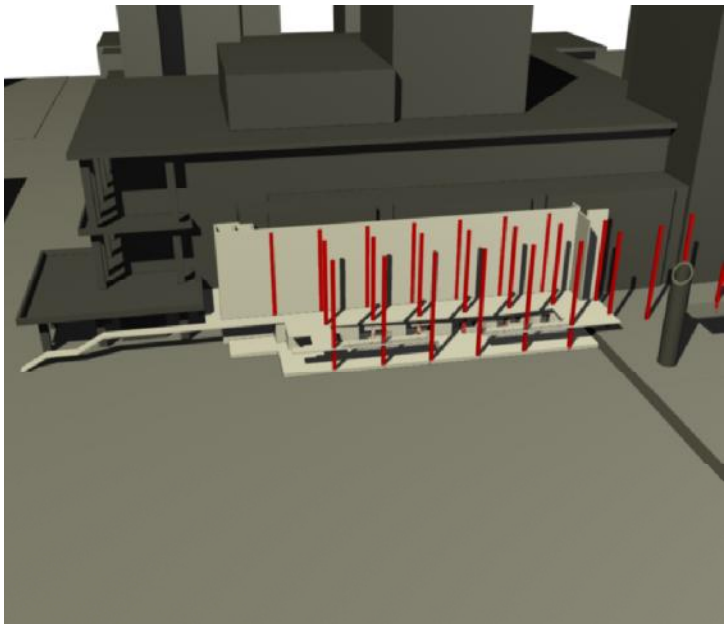


5.102

Fig 5.102 north-west view of column grid creating the colonnade
Fig 5.103 plan view of column grid
Fig 5.104 elevated western view of colonnade
Fig 5.105 elevated northern view of colonnade

5.103



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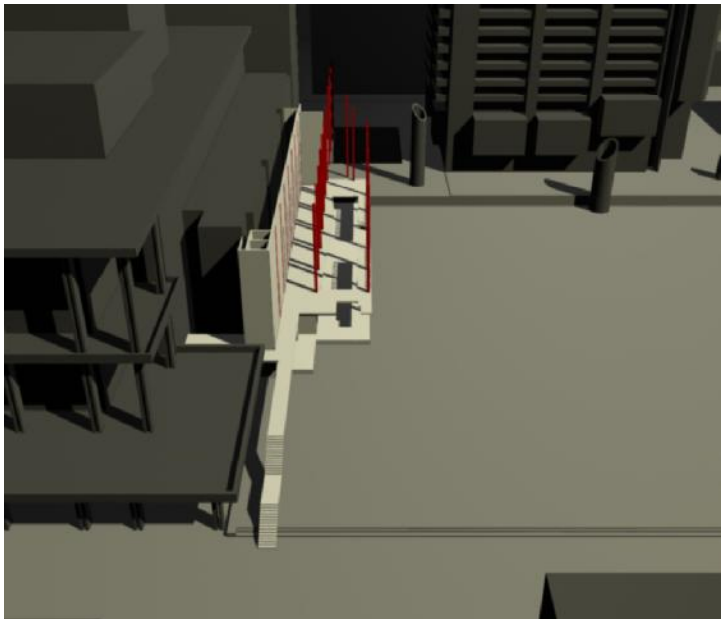

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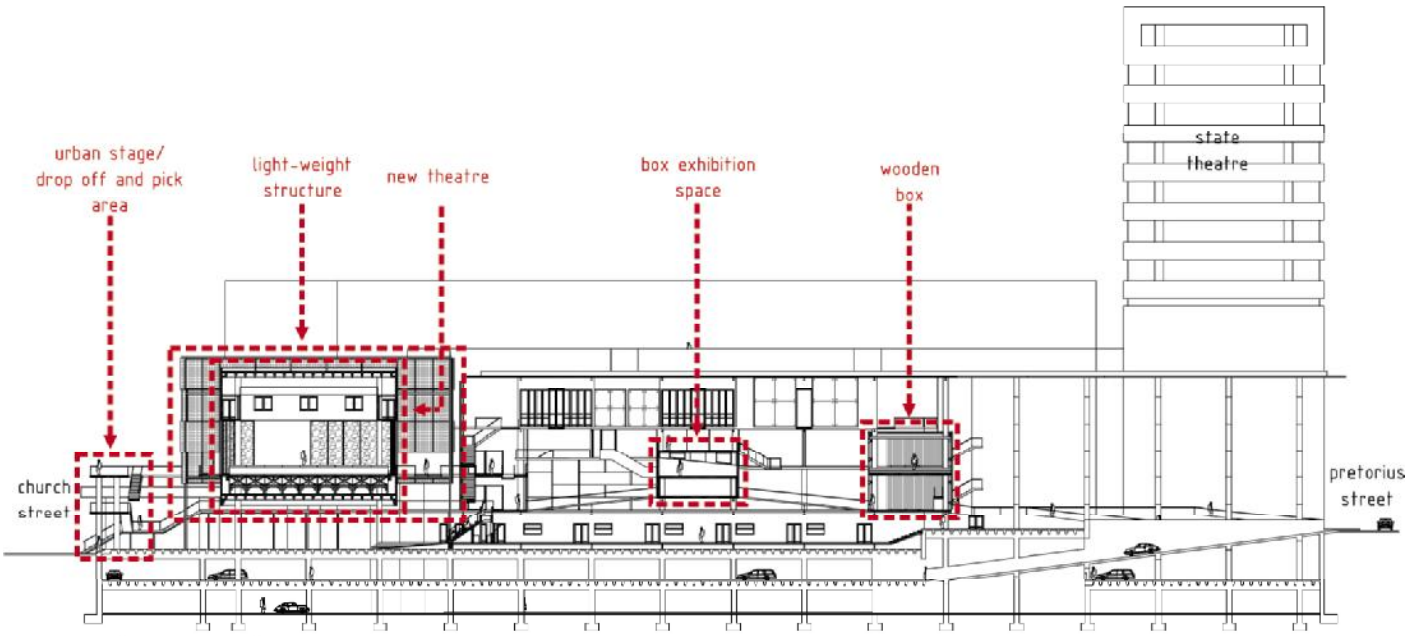


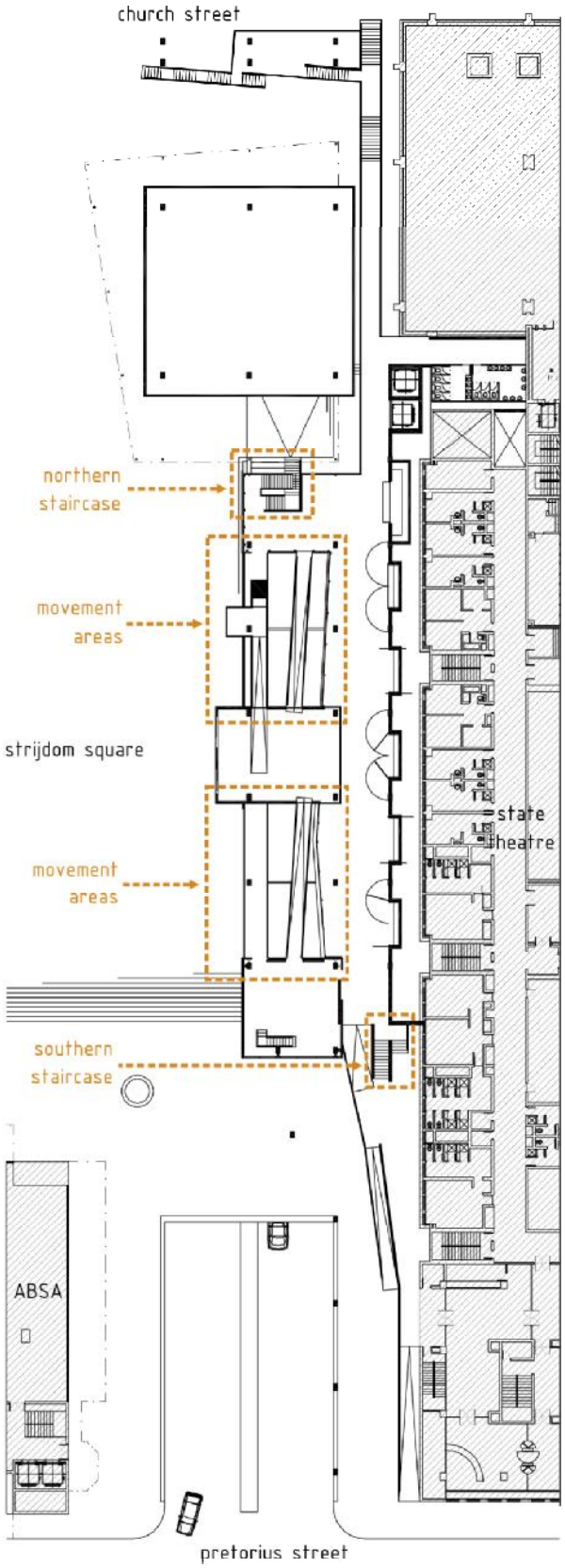
5.106

Fig 5.106 section through symbiotic building indicating the theatre and isolated exhibition spaces as in Fig 5.91
Fig 5.107 first floor plan indicating the movement areas on the outer edge of the building and northern & southern staircases
Fig 5.108 first floor plan indicating the still area which will have a skin around it

This creates a panel that can display in different positions. The panels can swivel so as to enclose the niche which can be locked over night if valuable art is on display. Some of these panels can be removed and hung from the roof space so that art work can be displayed overhead.

Moving northwards through the building, to the left is another exhibition space. It is also a box space but different to the wooden box as it is almost entirely closed. The box is situated on a split level (1,53m above the first floor level) between the first and second floors. It is open to the eastern side which faces onto the first floor area. This space provides an alternative exhibition area as it is slightly removed from the rest of the building. On the first floor you are visually connected to the space and can hear those in it. All that separates a person from the area is a balustrade. Even though a person can see into the space, it can only be accessed from one of the two ramps that enter into the space. Because the ramps are on the exterior of the building, a person must leave the interior space of the exhibition space to get to this enclosed box. From this box another ramp takes you onto the second floor, where the theatre is located. Inside the box is another split level that responds to the second floor- a food preparation area that is to service entertainment on the second floor.

Below the food preparation level, still in the box space, a more intimate area is created. The rest of box is a double volume and the low floor-to-ceiling (1,95m) lends the space a more intimate atmosphere. It will allow a person of average height access. It is not meant for general access but as an alternative exhibition area within the double volume. Roller-shutter doors are provided to each ramp to control access into the box. The western side of the box has an opening cut into it which is then layered with a steel mesh surface with sliding opening sections. This allows the space to be open through the mornings and midday. As soon as the sun starts to lower in the west, they can be closed for protection.



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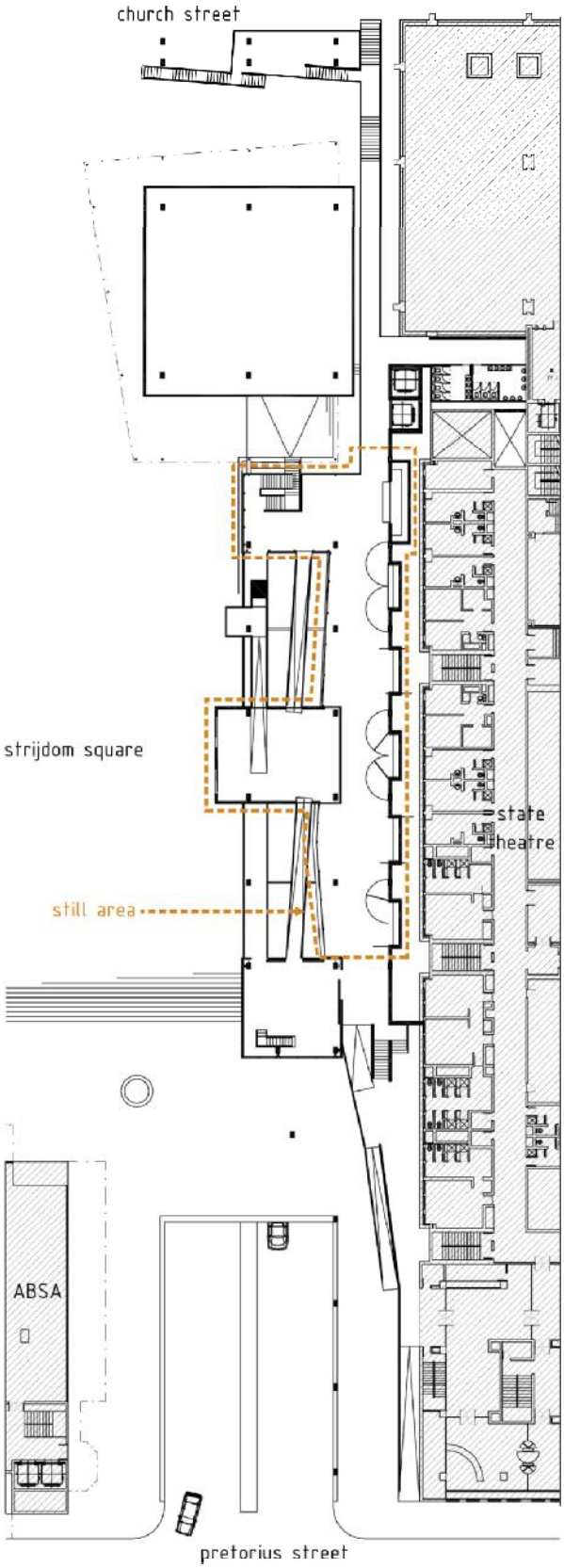
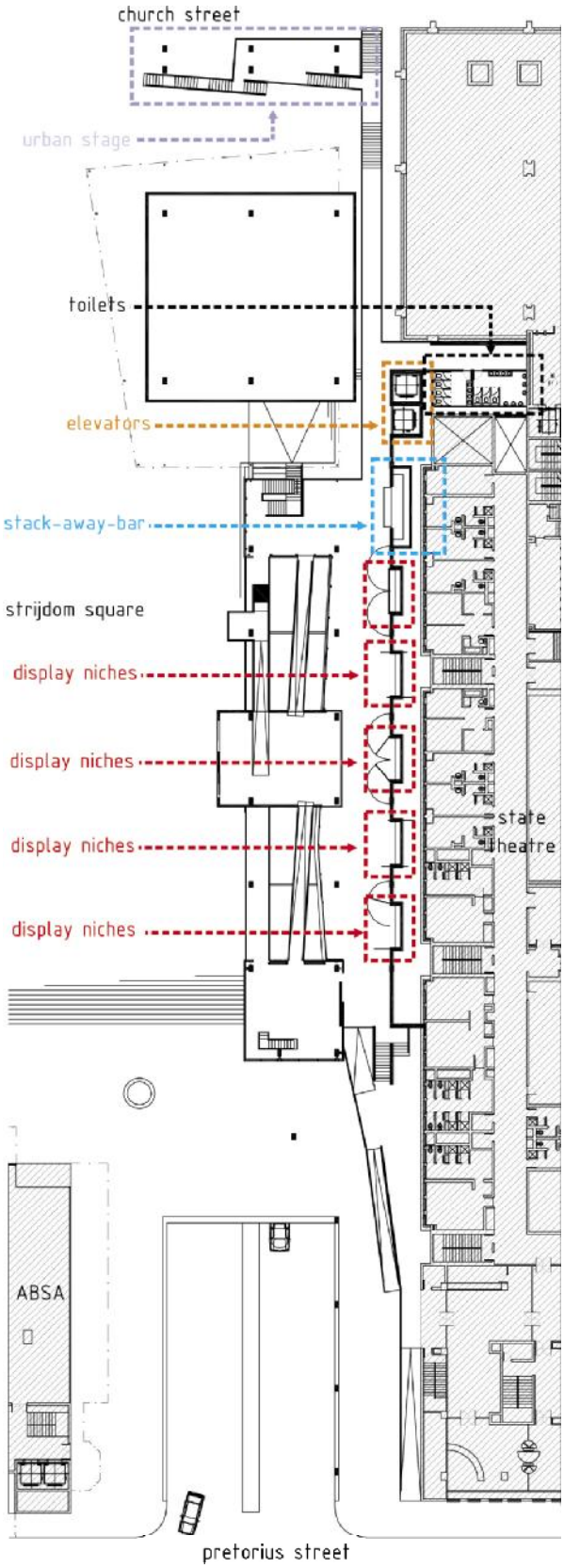


5.108

Moving back to the first floor north in the building you find the last niche inside the service duct wall. It is larger than the other niches and forms a stack-away-bar. Depending on the function occurring in the building, it may be an exhibition, theatre show or both, allowing people to mill through the spaces and levels. The bar creates flexibility in the use of spaces in the building. It is duplicated on the second floor as well.
Public and service elevators move from the two basement levels up to the third floor. Public toilets are situated on the first floor. They are meant for all the users of the building including people coming to the theatre. Continuing north one moves past the State Theatre balcony, on a higher level. To the north of the building is a staircase which takes you down to ground floor (Strijdom Square level) and you can either move east-west into Church Street or across Church Street to Sammy Marks Square.

Lastly, a platform accessed by a staircase that flanks the theatre. This platform ends the building and contains the theatre. This platform becomes an urban stage from where announcements can be made or performances can be staged- ideal for Sammy Marks Square. The staircase runs down to the ground floor and is entered from the western side, following the flow of pedestrian movement in Church Street. Under the urban stage is a pick-up/ drop off point. According to the GAPP Architects urban inner city framework, a "tram-type" transport system is to be installed. The concept of this framework is to pedestrianize Paul Kruger Street from Pretoria Train Station up until Church Square. Church Street east of Church Square is already pedestrianized, up until Prinsloo Street (see Fig 2.15). A public transport system will run back and forth along the pedestrian routes. Drop-off and pick-up points will need to be designed and Strijdom Square is an ideal area for one such point. It places people in what will become the theatre precinct area and into a public space. The activity of a public space allows people entering into the space to feel comfortable, not isolated. Public spaces are also ideal areas from where people can orient themselves. Inside the drop off/pick up area an information area is provided for tourists and people not from the city.



5.109

For example, the spaces could be used as following:

The theatre is being used for a show. At the same time a local artist is exhibiting. Working together, the artist and producers of the play use each other's activities to enhance their respective events. People arriving at the theatre may park their cars in the basement. They will take the elevator up to the ground floor. Instead of arriving within a foyer space, as would be the case if they were using the State Theatre, the people are presented with Strijdom Square. This allows them to experience the city fabric and they are not hidden away from the outside world. From here the people will use the staircase up onto the first floor. The bar is open and serving drinks while waiters walk around with snacks fetched from the food preparation area in the split level box. On the first floor, the artist's work is on display. People are caught by the artwork and move to see more. Access to the staircase entering the theatre has been denied so that people are forced to use the ramps into the box on the split level. This encourages movement outside the exhibition envelope to the outside ramps. Along the ramp, views of the city and of Strijdom Square open up providing different vantage points to the ground floor. Moving into the box space people are drawn back into the interior, though somewhat isolated from the rest of the building. More of the artist's work is on display, the double volume space creating a different atmosphere. They then realize that the east side of the box is open allowing them to re-connect with the first floor. The west facade of the building is also open, presenting more views of the city (if after dark, the western sun has set, allowing the sliding panels to be open). From there they move up another ramp, taking them outside the building once more. At the ramp's landing a viewing platform is presented. A person can pause there gaining a more intimate view of the city while others continue to walk by. Continuing up, one will reach the second floor on which the theatre is located. On this landing area more of the artist's work is displayed. Then you will move into the light-weight structure around the theatre and be able to gain views of the theatre's interior through open sections of the structure while waiting to move to your seat. During intermission, because the bar on the second floor is closed, people will have to move back down the same way to the first floor. This creates a continual experience of views level changes and of movement. Theatre viewing has now become a different experience from traditional theatre. All the aspects of the theatre program are now experiential and have been re-programmed. The building can be adjusted in different ways to create varying affects.

Fig 5.109 first floor plan indicating the display niches, elevators, public toilets, and urban

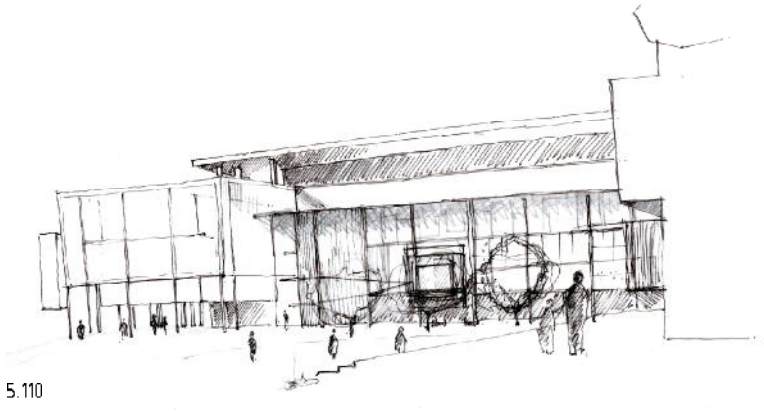


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Fig 5.110 exterior concept sketch of the building from the south western end of the site

Fig 5.111 interior perspective sketch of the first floor exhibition space indicating the polycarbonate sheeting. also showing possible use of the space and the ramp system up to the theatre.

Second Floor (semi-private)

The second floor can be accessed from the ramp inside the box area or via the elevators and staircases. The second floor provides a continuation of the exhibition space on the first floor. The theatre is located on the second floor. Across from the theatre are the public toilets. Past the toilets is a staircase that goes up a level onto the third floor to the theatre storage. This storage area can also be accessed from the service lift. The service lift allows larger and heavier props or objects to be taken down onto the theatre level. The entertainment/exhibition area on the second floor is on a higher level than that of the theatre. A staircase is provided up onto this level. The floor slopes down in a ramp section as you move south through the level to get back onto the same level as the theatre. This is done to provide the exhibition space on the first floor with different volumes and separating the entertainment level slightly from the theatre space. The entertainment level is intended to be a continued exhibition space, but also hosting a cocktail bar or informal club with sit-down areas. This creates a space where people can sit down, eat and drink prior to and after the theatre. Speeches, auctions or similar events can also occur here.

A section of the first floor is cut out along the service duct wall creating a double volume area to the first floor. This allows a visual connection to the exhibition area below. The food preparation area, on the split level below the second floor can be accessed from a staircase on the second floor level. The staircase, unlike the rest of the staircases and ramps, which have steel balustrades, is designed with a solid balustrade. This conceals any food or dink spilled by waiters when on the staircase. The top of the exhibition "box" can also be accessed from a staircase on the southern side. This area is to be used as an outside lounging area for the cocktail bar/informal club. It is on the exterior skin of the second floor space, so exposed to the elements. The vantage point allows clear views out onto the city and the square. The "wooden box" second floor space is also on this level. The staircase takes you up or down through the wooden box allowing the flow of exhibition to continue between floors.

The northern end of the second floor, past the theatre moves down a staircase to the urban stage. From this area, access to the State Theatre is to be provided by a staircase onto the State Theatre balcony. As the symbiotic building is an extension of the State Theatre and will thus be run by the State Theatre, access to the respective buildings must occur. Users of the State Theatre and the symbiotic building can move through each of the buildings. This improves the layering of the State Theatre. The inclusion of the symbiotic building makes the State Theatre more accessible. If the foyer spaces of the State Theatre are opened up to allow people to move from one building to the other, the accessibility of the State Theatre will be improved. The entrance to the State Theatre contains beautiful murals and artwork and has a style of the past that can be shared and become available for the public to see, demolishing the stigma of the State Theatre only being used for the elite few.

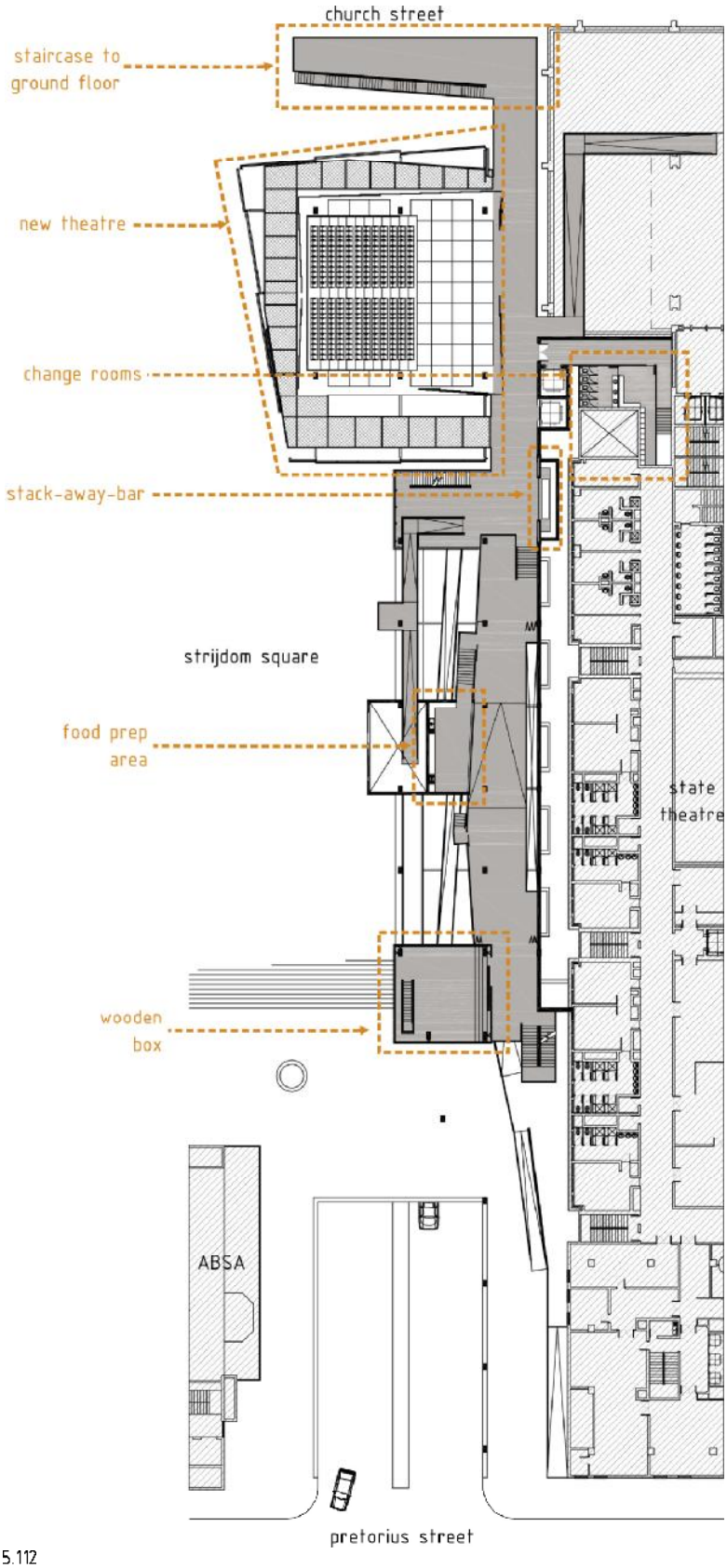

Fig 5.112 second floor plan indicating various space
Fig 5.13 second floor plan indicating still spaces
Fig 5.14 second floor plan indicating movement areas

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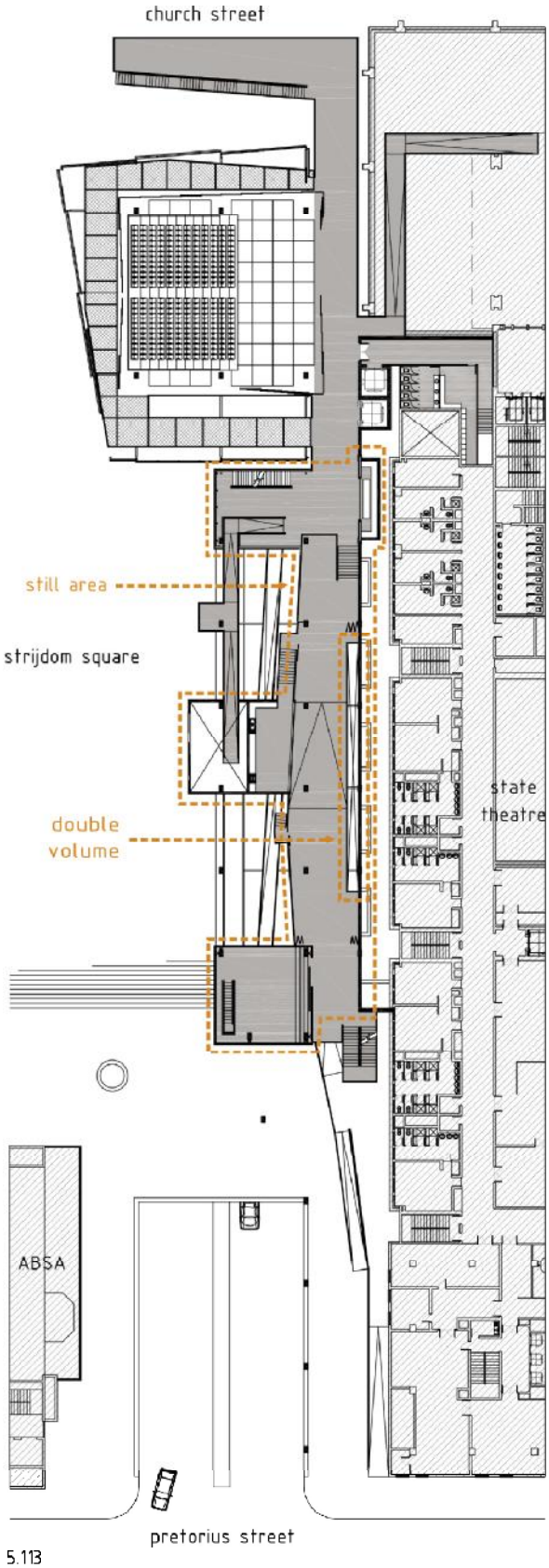

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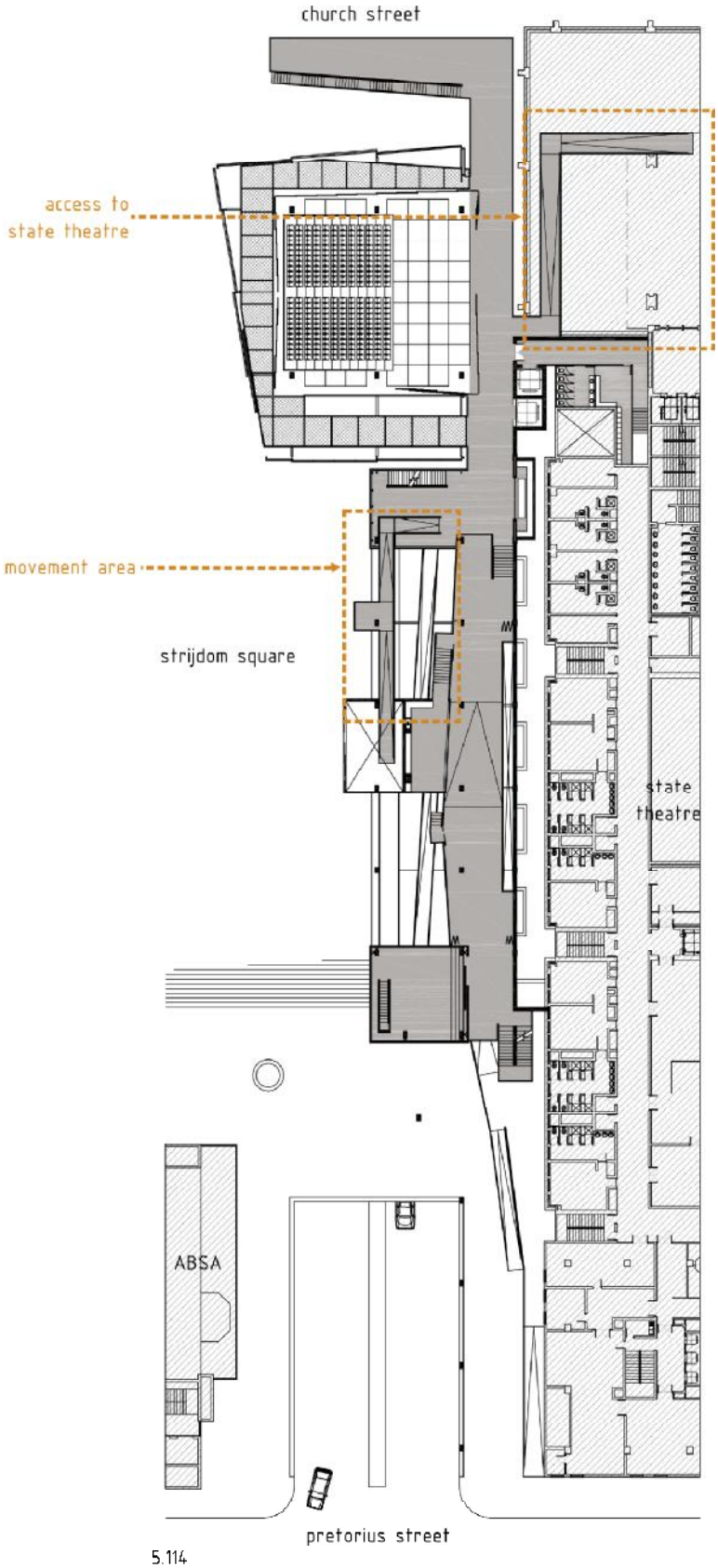

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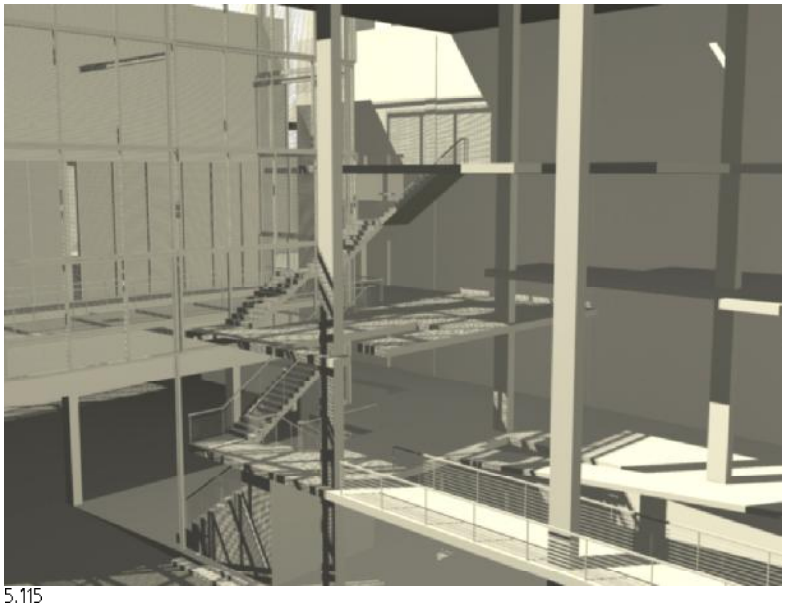

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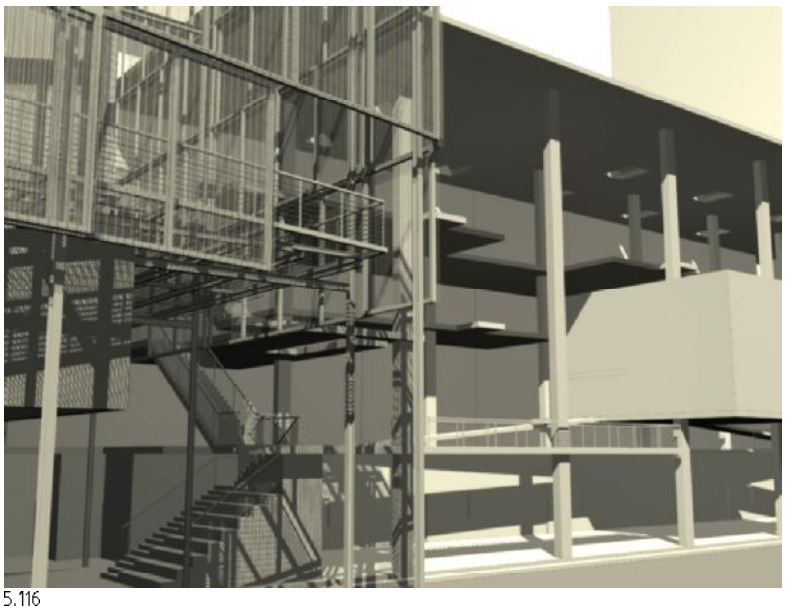
Fig 5.115 3D image of theatre, staircase and ramps
Fig 5.116 3D image of theatre and building looking from the north west
Fig 5.117 third floor plan indicating usable spaces



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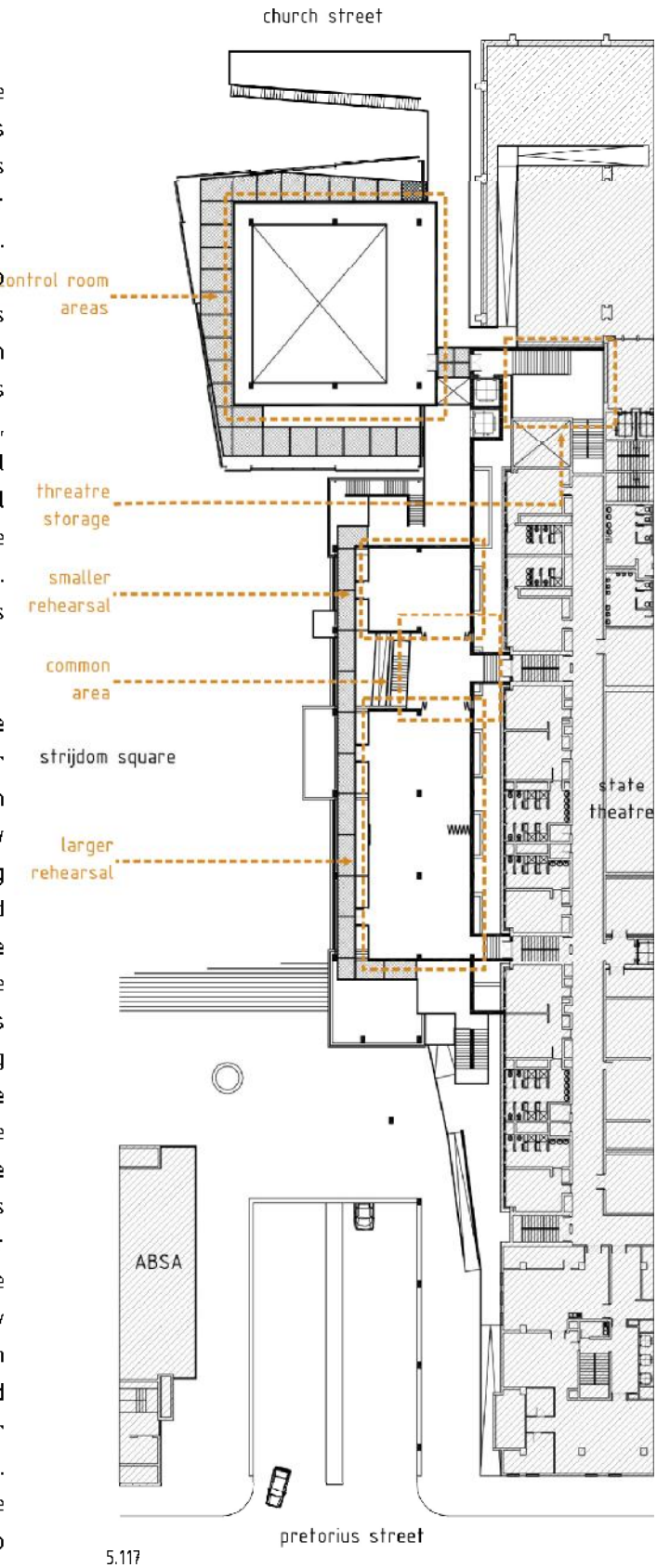
Third Floor (private level)

The third floor is the private level due the function of the space. The third floor is to be occupied by rehearsal spaces for either dance or theatre. As the new theatre provides a new look at how theatres can function, a new look at how rehearsal spaces can be looked at in the same way. Rehearsal spaces, like in the State Theatre, are hidden deep within buildings and they are never seen by other students or the public. Just as with Herzog and de Meuron's Laban Centre for Movement and Dance, where the dance studios were transparent, allowing the public to view into this world, so too is the same concept implemented for the rehearsal spaces in the symbiotic building (BUILDING 2002: 34). Rehearsal spaces were allocated to the third floor as it reinforces the connection between the State Theatre and symbiotic building. The symbiotic building, as a new layer into Strijdom Square, is to increase the accessibility of the State Theatre.

Because the symbiotic building is an extension of the State Theatre, placing the rehearsal spaces on the third floor and exposing them to the public actually draws once hidden activities in the State Theatre out into the public. A new rehearsal space has not been created but rather, the existing rehearsal spaces have been exposed. The attention received by human activities was illustrated by observations around the expansion of a department store in Copenhagen. While the excavation and pouring of foundations were in progress, it was possible to see into the building site through two gates facing the pedestrian walkway. Throughout this period, more people stopped to watch the work in progress on the building site than those stopping in front of the display windows of the fifteen department stores. In this case, it was the workers and their work, not the building site itself that was the object of interest (GEHL 1987: 31). As Gehl has noted, people are fascinated by the sight of others, partaking in an activity that they are not used to seeing. The rehearsal spaces on the third floor will be glazed allowing people to look in and the performers to see out. As they are on the third floor it will not be a complete invasion of the space by the public. The rehearsal spaces will have a physical connection to the State Theatre. Access is gained via enclosed bridges into



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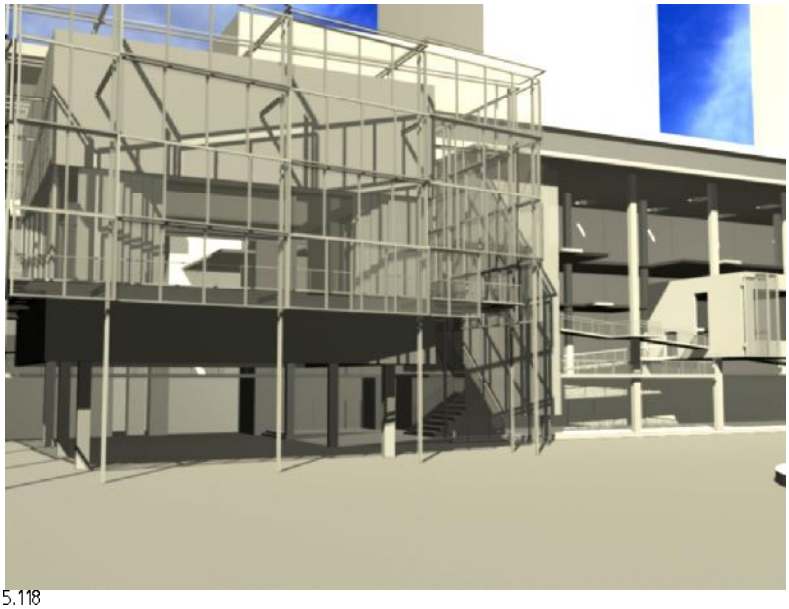

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the existing staircases on the western facade of the State Theatre. This access point arrives on a split level of the staircase and movement up or down is possible. The rehearsal space is not provided with change rooms or ablutions as these are available in the State Theatre in areas adjoining the symbiotic building. Movement into these spaces is mostly via the State Theatre; however access from the symbiotic building is also available. The rehearsal spaces are entered from the symbiotic building from a steel bridge running along the western edge. There are two rehearsal spaces, one large one small. Between the two is a common area from where students enter or exit the State Theatre. This shared area is a place where bags can be left and things stored. There are two bridges into the State Theatre, one in each rehearsal space. The common area separates the rehearsal spaces with sliding stacker doors. The two spaces can thus be combined as a larger rehearsal space. Sliding-folding doors can also split the larger rehearsal space into two smaller areas.

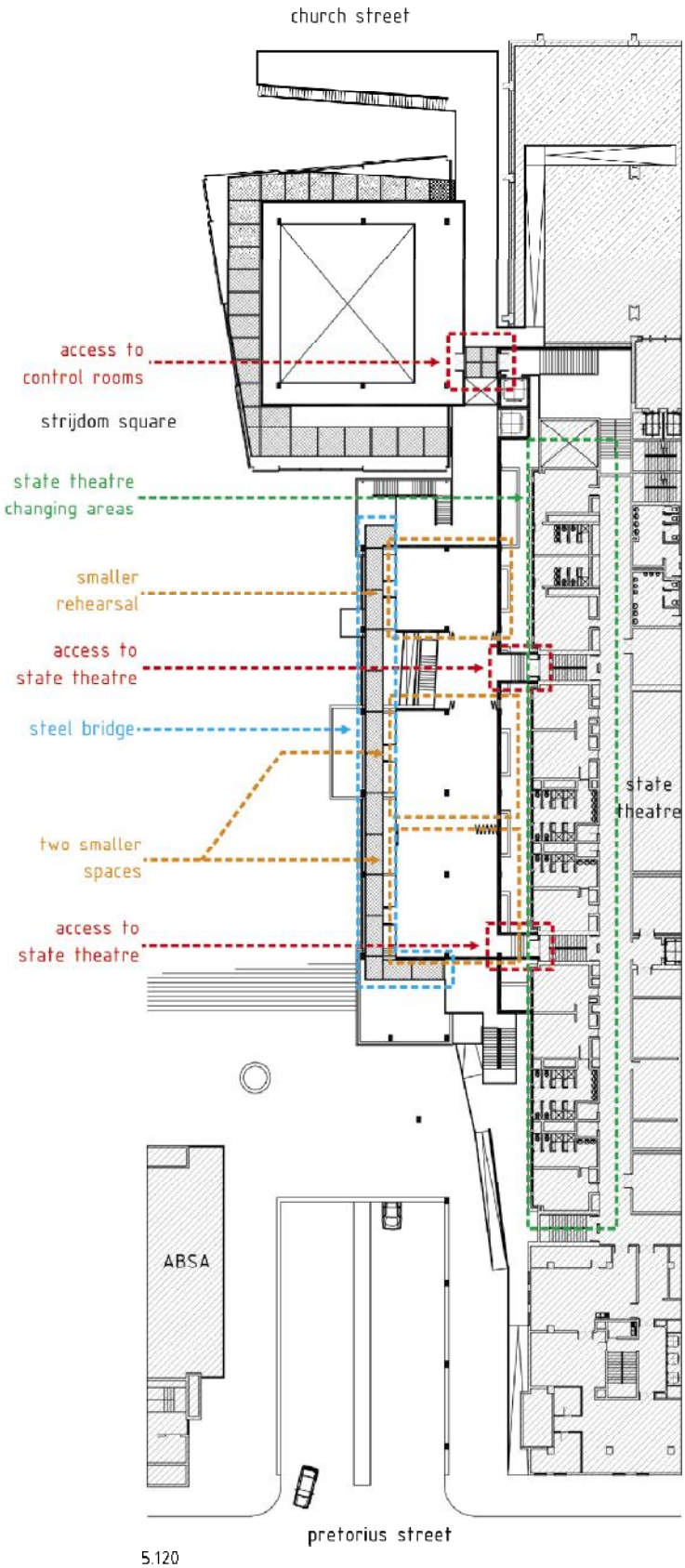

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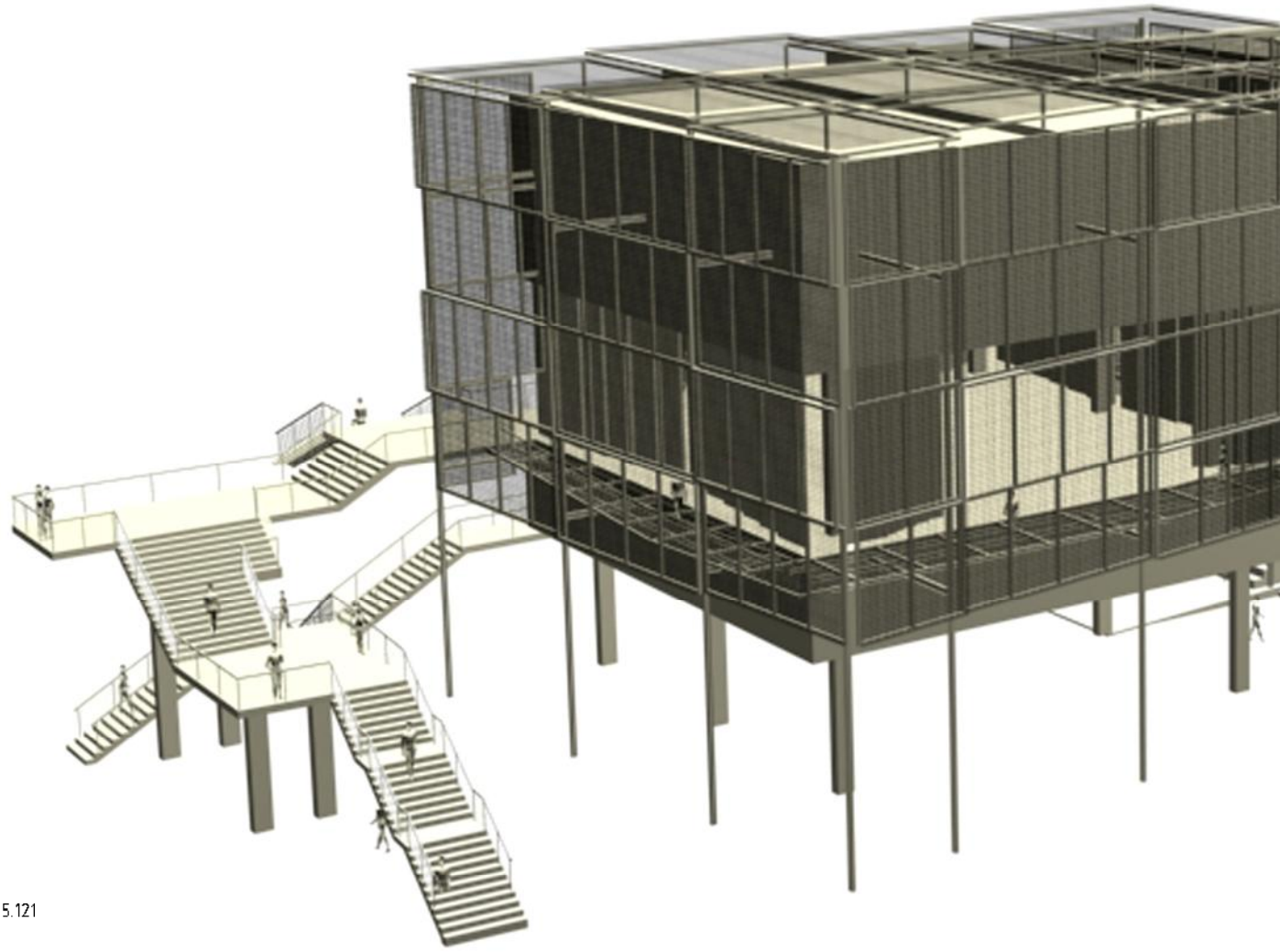
Fig 5.118 3D image of theatre's steel mesh
Fig 5.119 3D image of building from the south western side of the site
Fig 5.120 third floor plan indicating access to the State Theatre. also shown is the steel bridge access to the rehearsal spaces and how the larger rehearsal space can be divided. plan indicates the State Theatre's change rooms
Fig 5.121 isolated elevated north-western 3D image view of the symbiotic building
Fig 5.122 isolated elevated south-western 3D image view of the symbiotic building



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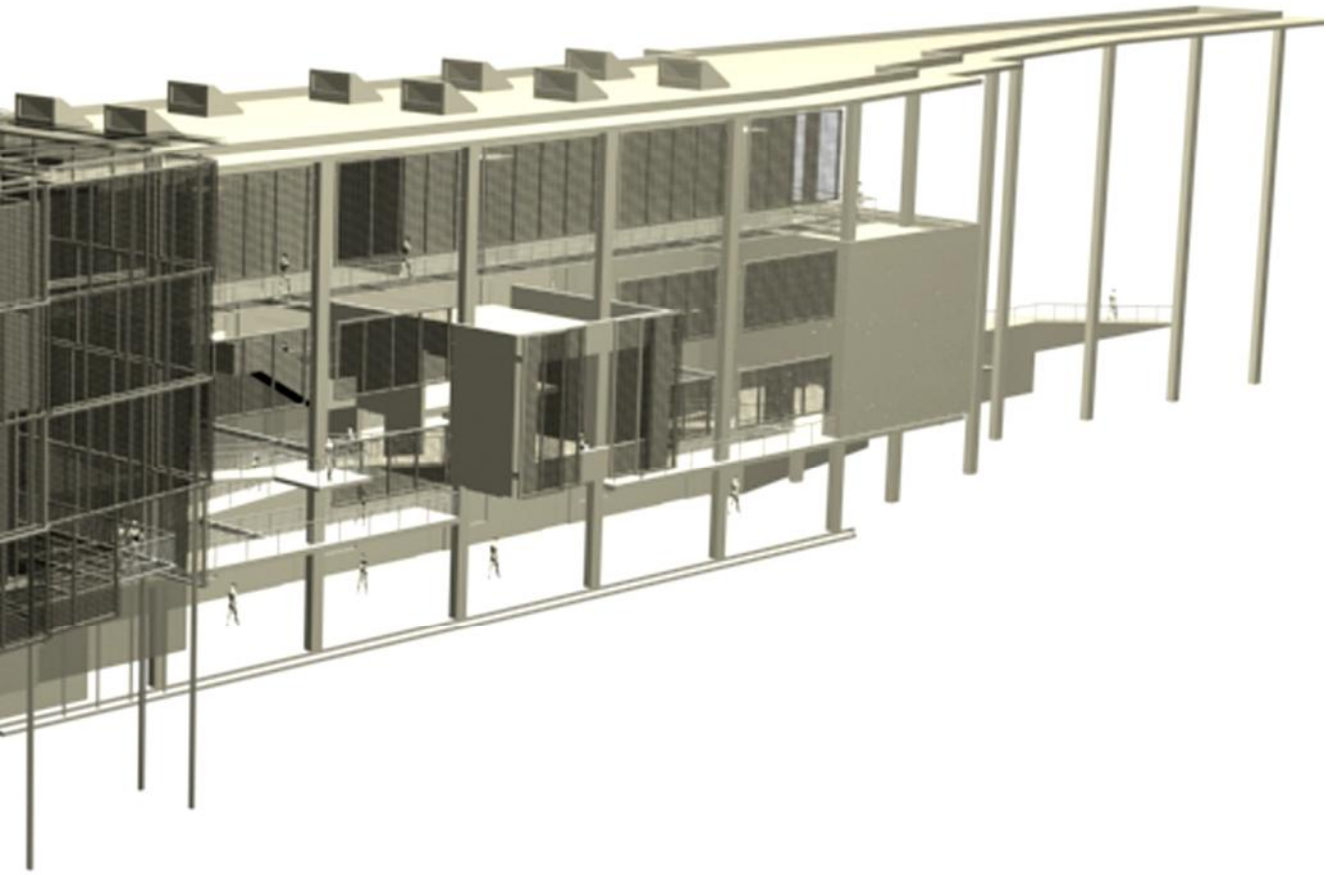

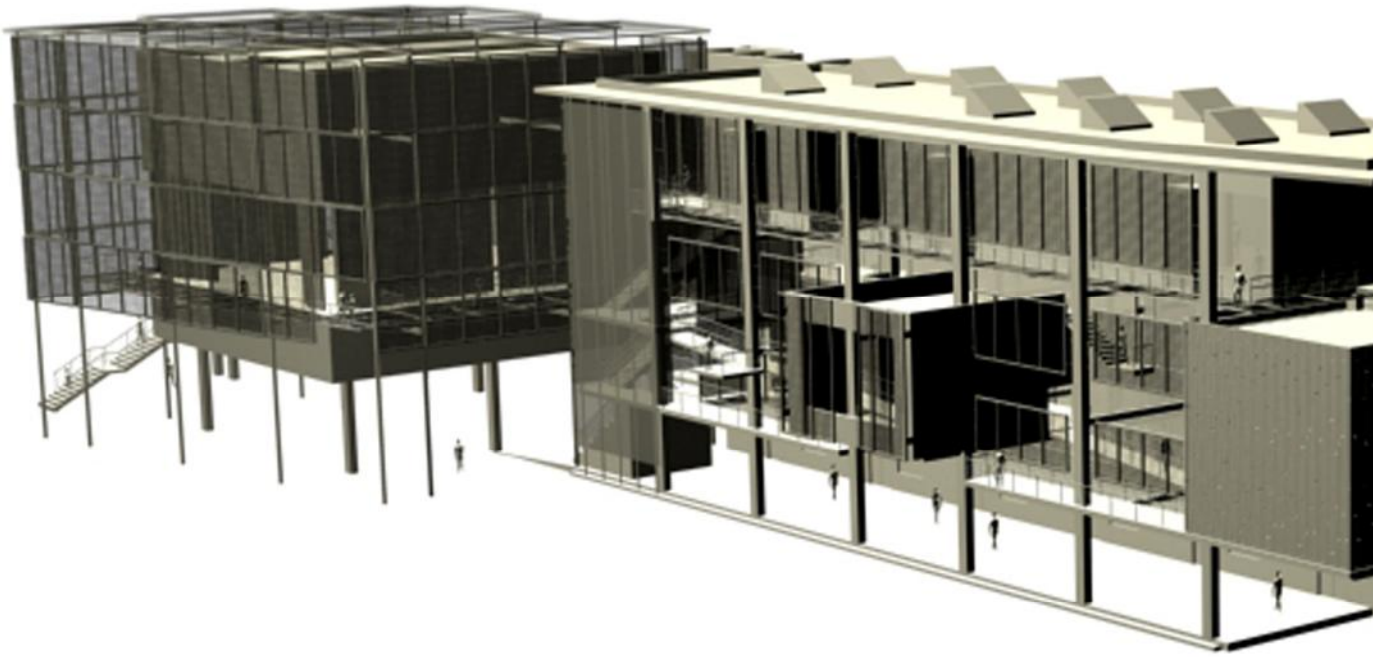

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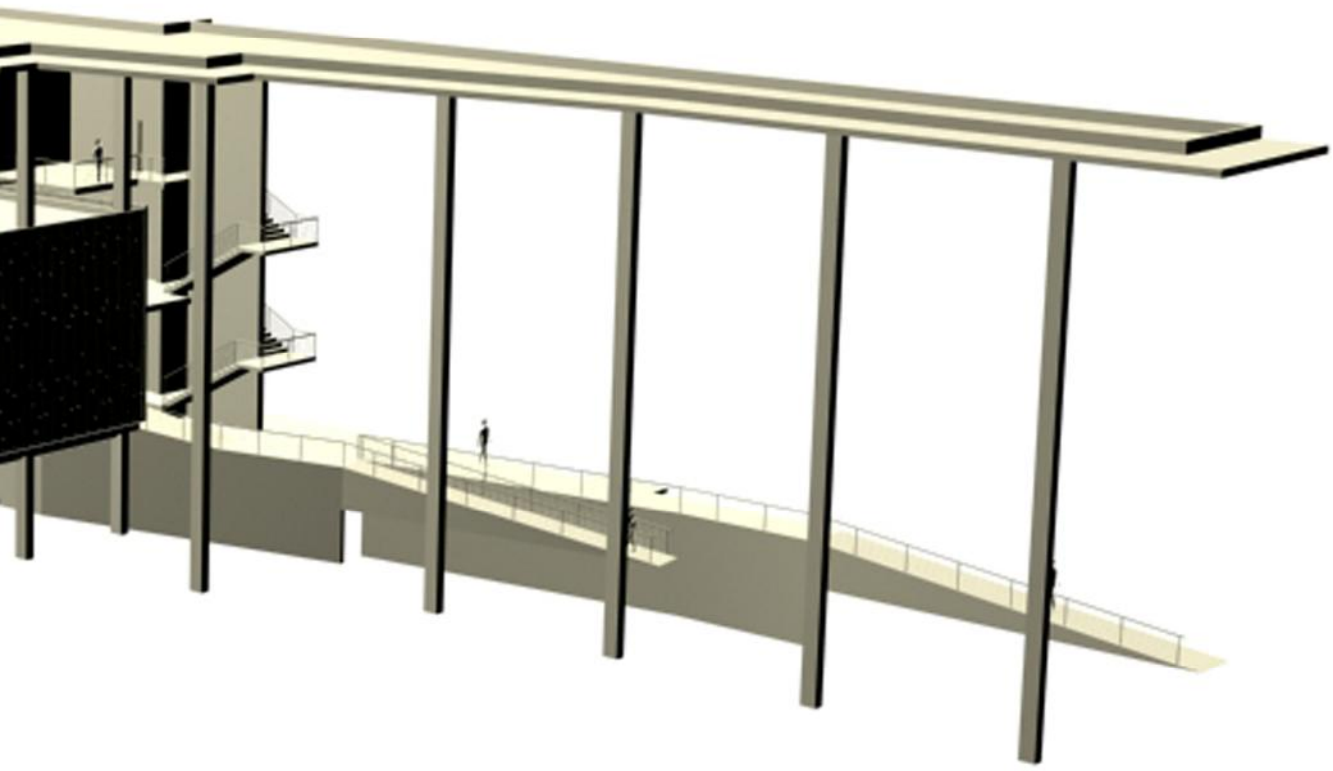

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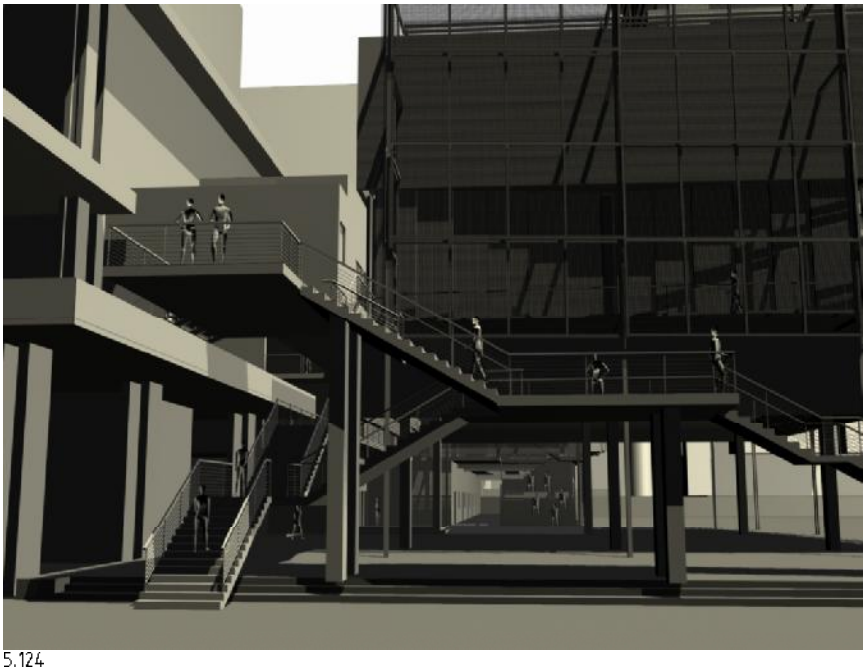

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Fig 5.123 photo looking south along western facade of State Theatre

Fig 5.124 3D computer generated image of what Fig 5.123 will look like after symbiotic building is inserted into space

5.125

Fig 5.125 photo looking at western facade of State Theatre

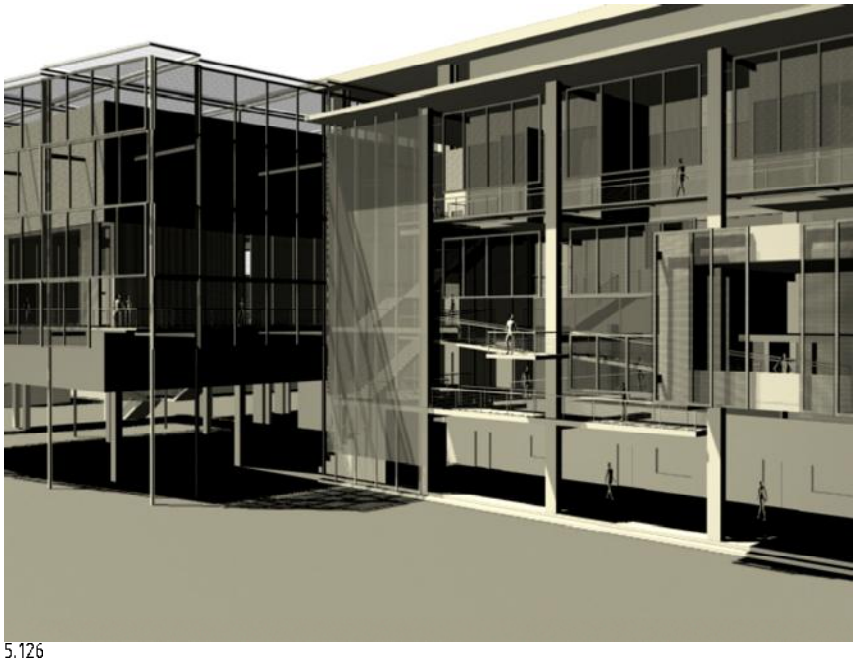

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Fig 5.126 3D computer generated image of what Fig 5.125 will look like after symbiotic building is inserted into space

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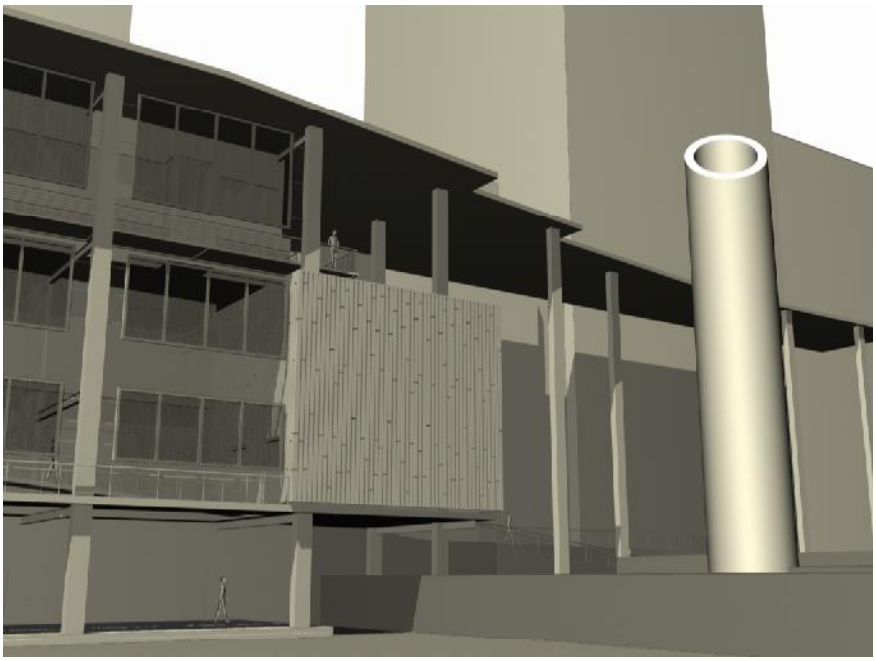

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Fig 5.127 photo looking along western facade of State Theatre

Fig 5.128 3D computer generated image of what Fig 5.127 will look like after symbiotic building is inserted into space

5.129

Fig 5.129 photo looking at western facade of State Theatre

Fig 5.130 3D computer generated image of what Fig 5.129 will look like after symbiotic building is inserted into space