

# 5

## TRANSFIGURE

Design Development

**transfigure** *vb* to change or cause to change in appearance;  
to become more exalted

## 5.1\_Influences on the Design Development

### 5.1.1\_Dwelling and Building

#### 5.1\_Influences of the design development

In 'Building Dwelling Thinking,' phenomenological philosopher Martin Heidegger discusses the notion of dwelling and contends that 'only if we are capable of dwelling, only then can we build' (Heidegger, 1971:160). A major problem with dwelling as a concept is its lack of specificity, particularly in terms of design significance. This chapter explores the possibility that the work of American architect Christopher Alexander, indicates ways in which Heidegger's dwelling can be translated into more grounded architectural meaning.

#### 5.1.1 Dwelling and Building

In 'Building Dwelling Thinking,' Heidegger's major means of investigation is etymological: what is the word history of 'to build' ('bauen') and its links to dwelling? Bauen, says Heidegger, relates to nearness and neighborliness and also implies "to cherish and protect, to preserve and care for" (ibid: 147). Bauen also relates to the Old High German word for building, 'baun,' which means 'to dwell' in the sense of remaining or staying in place.

In emphasizing this link to place, Heidegger suggests that building relates to dwelling, which therefore can be said to involve a sense of continuity, community, and at-homeness (Harries, 1983). The crux of dwelling, Heidegger argues, is sparing and preserving - the kindly concern for land, things, creatures, and people as they are and as they can become (ibid: 149; Zimmerman, 1983). As human beings, we cannot fail to dwell, for dwelling, ultimately, is the essential existential core of human being-in-the-world from which there is no escape.

At the same time, dwelling is just as much a means as an end. There will always be a certain tension, a kind of imperfection, between what we wish, do, and make. The significant questions are how do we dwell in our own particular situations and how can we shape the quality of our dwelling for better or worse? Heidegger links the quality of our dwelling to the quality of our building, since an effective building arises from a genuine sense of sparing and preserving (Foltz, 1995:159-63).

Heidegger also argues that, in practical terms, dwelling involves the gathering of the fourfold - the coming together of earth, sky, people, and a sense of spiritual reverence, or 'the gods,' as he signifies higher realities (ibid.). In this sense, dwelling is no mere extension of existential space or place; rather, it becomes itself the fundamental human activity.

As Heidegger interprets dwelling, the built environment is crucial because it supports and reflects a person and group's way of being-in-the-world. The built environment is a certain embodied grasp of the world, a particular way of taking up the body and the world, a specific orientation disclosing certain aspects of a worldly horizon (ibid:154-155). The world in which we find ourselves completes us in what we are, and therefore the specific nature of the built environment becomes crucial.

Heidegger argues that, in our modern age, human dwelling is reduced and so, therefore, is building. His explication of why we dwell less fully today is complicated; he suggests that, in part, it is because we manipulate and demand from our world rather than meet it with an attitude of sparing and preserving, thus, allowing it to be and become. In this sense, a key to dwelling is letting ourselves and the world be, and this letting-be includes the ways we build, see, understand, and think.

It is this need for letting-be in designing and understanding that marks the value of Alexander's work for a deeper, more grounded, understanding of dwelling. Alexander seeks concrete means for identifying and describing built qualities that sustain and strengthen the quality of dwelling - providing ways to see and think more clearly, which, in turn, might lead to better designing and building.

### 5.1.2 Christopher Alexander and Pattern Language

This reconciliation between people and their built world is a major aim in the research and design of American architect Christopher Alexander. Alexander is very much concerned with architecture in its larger environmental context. In other words, how can activities, buildings, spaces, and landscapes be designed in an integrated, coherent way to create places that are coherent, beautiful, and alive for their residents and users? In short, the aim is place-making that sustains dwelling.

Alexander argues that, if an environmental whole is made rightly, it has a powerful sense of place, which may help people who live in and use that place to have more satisfactory, vibrant lives. In his work, Alexander seeks a way to return a sense of wholeness to the buildings and environments of modern Western society. He emphasizes that the crucial process is healing. Every new construction, whether building or square or street furniture or window detail, must be made in such a way as to heal the environment, where 'heal' especially means 'make whole.' The obligation is that the thing built must work 'to create a continuous structure of wholes around itself' (Alexander 1987:22).

The practical tool that Alexander developed to foster environmental wholes and healing is a 'pattern language' – a conceptual method whereby the designer can identify and visualize the underlying elements and relationships in a built environment that promotes a sense of place (Alexander 1987:ix). Alexander emphasizes, however, that successful places are always composed of many interrelated patterns that work synergistically to create a whole greater than the individual parts. Pattern language is not a master list of unchangeable design principles that must be incorporated in all buildings and places. Instead, it is a way of looking at and thinking about buildings and environments so that one can better understand how their parts might work together to create a whole. Design must be premised on a process that has the creation of wholeness as its overriding purpose, and in which every increment of construction, no matter how small, is devoted to this purpose (Alexander, Ishikawa & Silverstein 1977:16).

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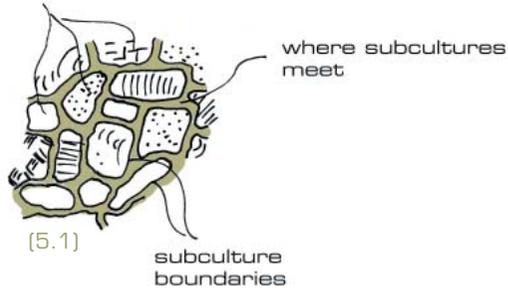
**Figure (5.1) & (5.2):**

Conceptual diagram showing the relationship between the different subcultures and where they meet

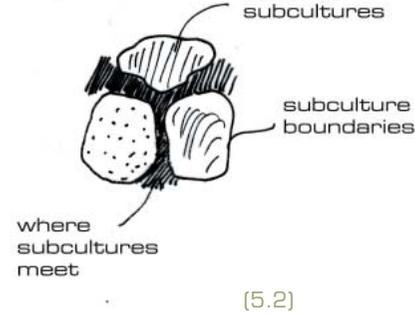
**Figure (5.3) & (5.4):**

Concept illustrated on city and site scale

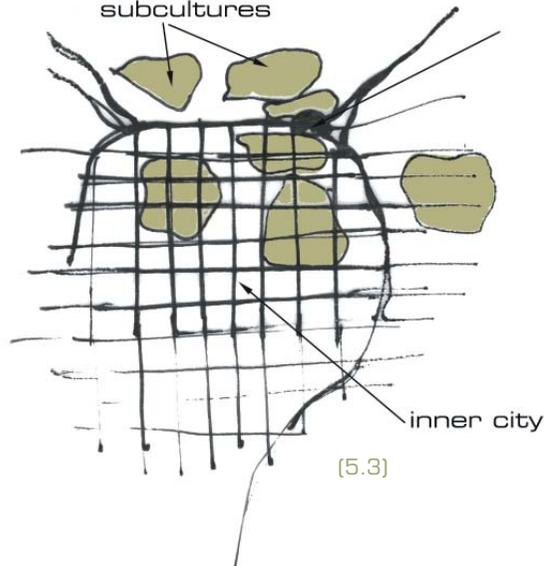
hundreds of different subcultures



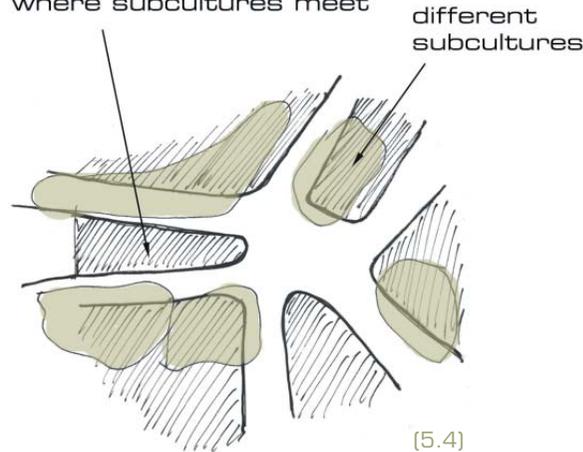
different subcultures



different subcultures



transport interchange:  
where subcultures meet



### 5.1.3 Developing a Pattern Language

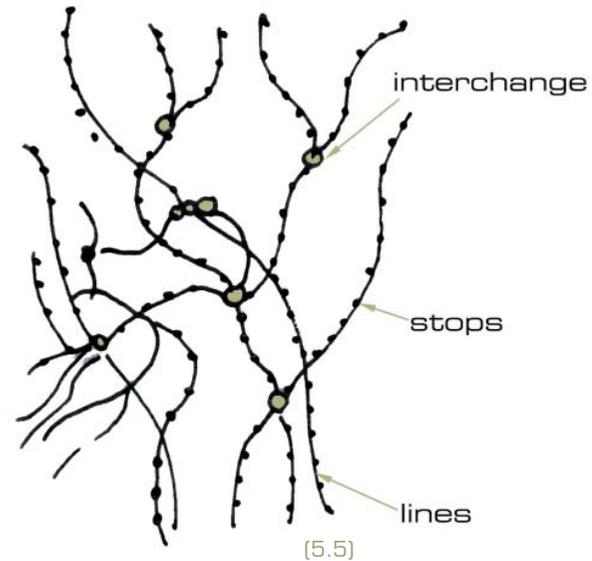
The following patterns were chosen as design tools and applied during the design development:

#### Pattern 8: Mosaic of Subcultures

The city is a landscape of cultural diversity and subcultural differentiation, thus, a mosaic of social worlds. This great variety of human groups co-existing together seems rich, but the modern city dampens all significant variety and encourages conformity. According to Alexander this homogeneous and undifferentiated character kills the richness of variety of life styles and the growth of individual character (Alexander, Ishikawa & Silverstein 1977:43). He therefore suggests that these cultures and subcultures be enriched by breaking the city into a vast mosaic of spatial territories. (ibid.) However, there are still areas - beyond the boundaries of these subcultures, within the interstices - where people have access to the full diversity of lifestyles. The transport interchange is such vicinity. The proposed design therefore aims to accommodate all styles and cultures, irrespective of the locality.

### Pattern 16: Web of public transportation

As mentioned in chapter 2, the system of public transportation within the city, can only work if all the parts are well connected. The traditional way of looking at public transportation assumes that the lines are primary and that the interchanges needed to connect the lines to one another are secondary. Alexander proposes the opposite: namely, 'that interchanges are primary and that the transport lines are secondary elements...' (ibid:93) This approach redefines the importance of the transport interchange.

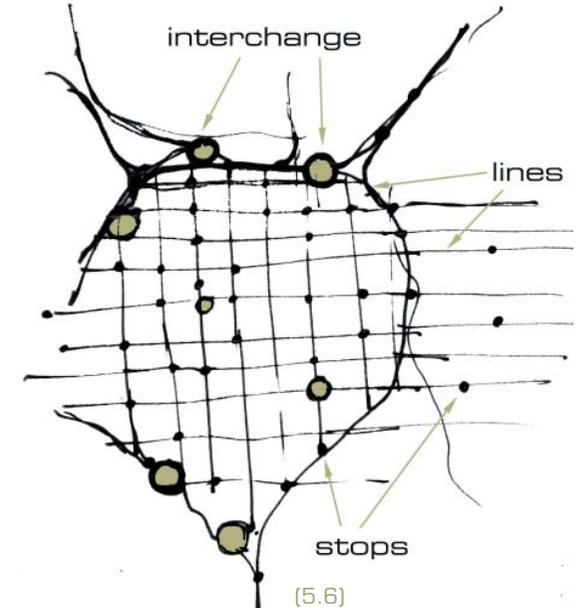


**Figure (5.5):**

Conceptual diagram showing the relationship between interchanges, stops and lines

**Figure (5.6):**

Interchanges, stops and lines illustrated as concept within the CBD of Pretoria



**(Following page) Figure (5.7) & (5.8)**

Sketches illustrating the concept of the four storey limit

**Figure (5.9):**

Section through the design intervention

### Pattern 21: Four storey limit

High buildings have no genuine advantages, except in speculative gains for banks and land owners. They are not cheaper, they do not help create open space, they destroy the townscape, they destroy social life, they promote crime, they are expensive to maintain, they wreck the open spaces near them, and they damage light and air and view. But apart from this, which shows that they aren't very sensitive, empirical evidence shows that they can actually damage people's minds and feelings. (Alexander, Ishikawa & Silverstein 1977:115)

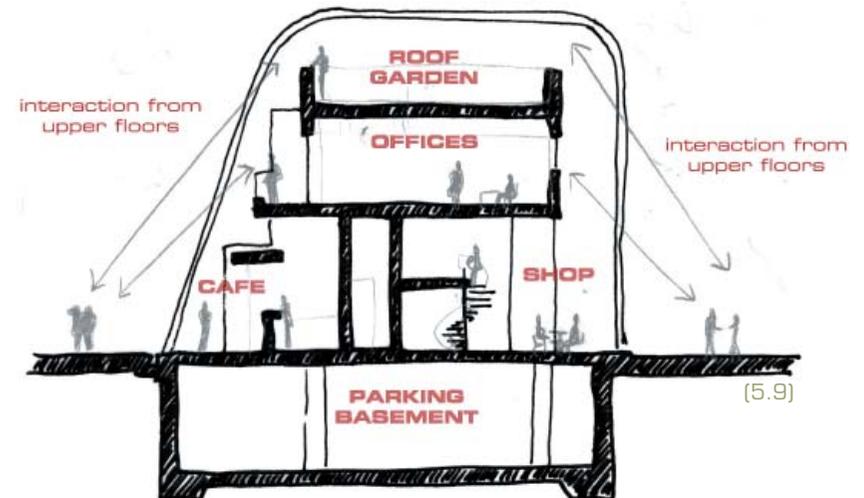
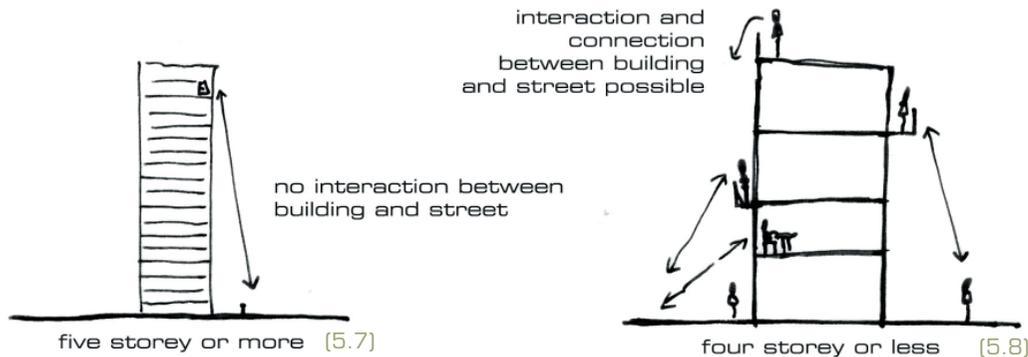
The density of building fluctuates within the urban area. Generally it will be higher towards the center and lower towards the edges. As the site lies on the periphery of the inner city,

it is not subjected to being a skyscraper. The above problem statement introducing the pattern has a simple explanation: high-rise living takes people away from the ground, and away from the casual, everyday society that occurs on the sidewalks and streets. This individual isolation causes social breakdowns.

At three or four stories, one can still walk comfortably down to the street, and from a window you can still feel part of the street scene. Alexander argues that in both housing and offices buildings, the problems begin when buildings are more than four stories high. (ibid: 118) At less than four stories, you can see

detail in the street – the people, their faces, shops. From these stories you can yell out, and catch the attention of someone below. Above four stories these connections break down. Visual detail is lost; the connection to the ground and to the fabric of the city becomes tenuous. The building becomes a world of its own.

The architectural intervention will therefore be limited to three stories, with the additional use of the roof. This will ensure interaction and the proper connection between building height and the users.



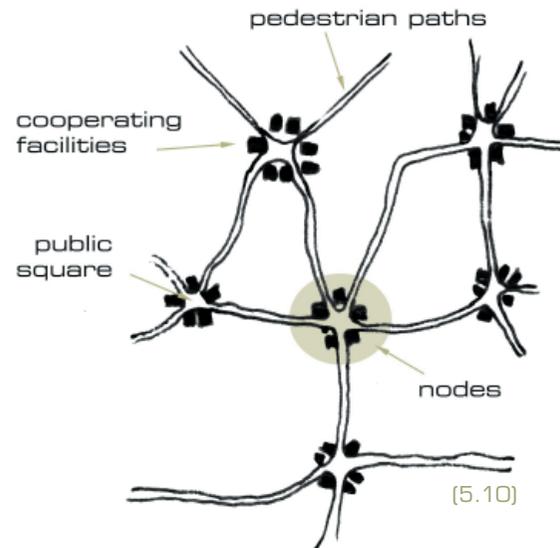
### Pattern 30: Activity nodes

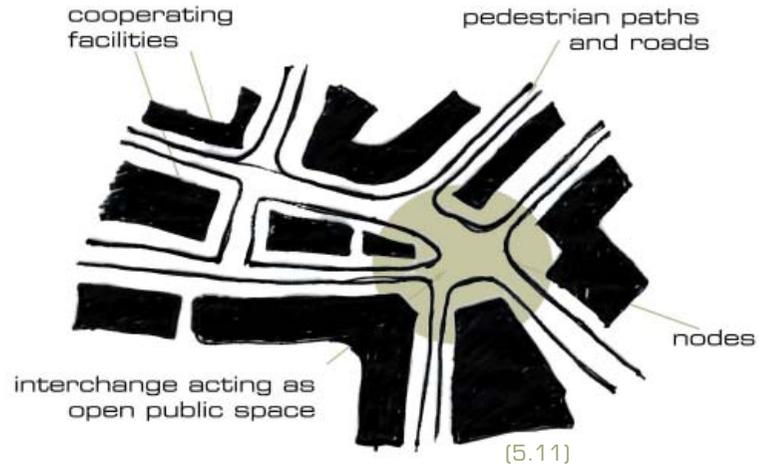
One of the greatest problems within the urban environment is the lack of open public space. Available public life in cities is spread so thin that it has no impact on the community. Studies of pedestrian behaviour make it clear that people seek out concentrations of other people, whenever they are available. (Alexander, Ishikawa & Silverstein 1977:164) Also, due to the fractured nature of South African cities, community facilities are scattered individually through the city and do not work for the life of the city. To address this problem, Alexander suggest that facilities be grouped together densely round very small public squares which can function as nodes. (ibid.) All the pedestrian movement must also be organized to pass through these nodes. (ibid:165)

The intersection at Bloed and Boom Street is an important spot where action seems to concentrate itself. The next step would then be to modify or adjust the layout of the paths in the community to bring as many as possible of them through this interchange. The interchange will then function as a 'node' in the path network, Alexander (1977:167) further proposes that the center of each node be developed as a small public square, with

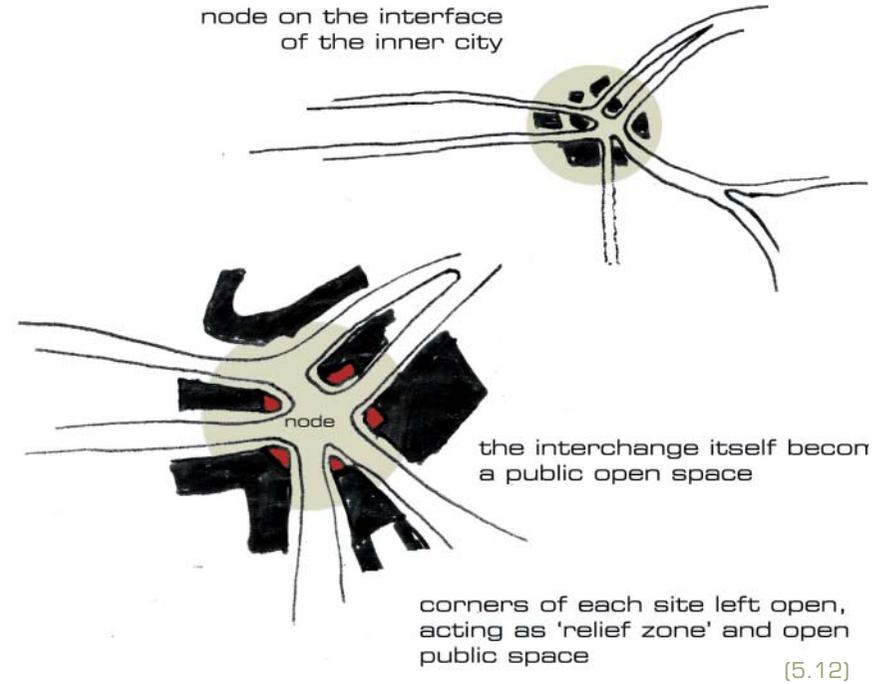
a combination of shops and facilities which are mutually supportive. In this case, the Boom Street intersection will be treated as a 'public square' itself. It is suggested that the corner of each site be treated as open public space, with the supportive facilities and shops adjacent to the immediate building. This will be implemented within the design intervention.

**Figure (5.10):**  
Pedestrian routes to pass through public nodes





**Figure (5.11):**  
 The intersection itself will be treated as a public node  
**Figure (5.12):**  
 Drawing illustrating how, by treating the corners of each site as open space, will contribute to the node as successful public space



**Pattern 33: Night life**

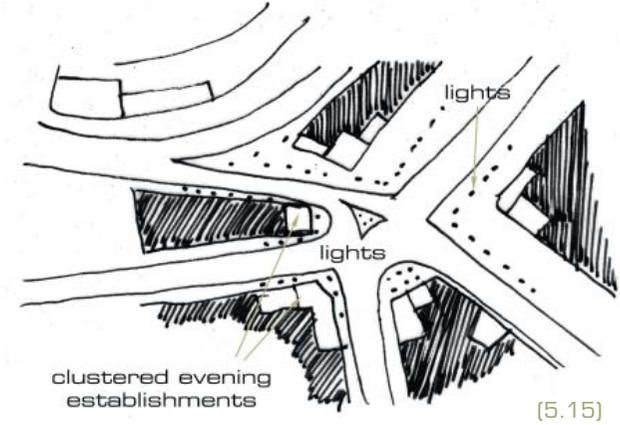
Most of the city's activities close down at night; those which stay open won't do much for the night life of the city unless they are together. (Alexander, Ishikawa & Silverstein 1977:180)

Alexander's argument suggests small, scattered centers of mutually enlivening night spots, where the services being grouped together to form cheery square, with lights and places to loiter (Alexander, Ishikawa & Silverstein 1977: 180-182). The intervention, being multi-functional with facilities varying from dining to overnight accommodation, will easily function as a small group of sustaining night facilities.

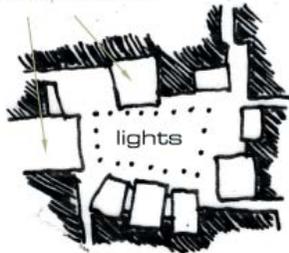
**Figure (5.13) & (5.15):**

Sketches illustrating the concept intervention

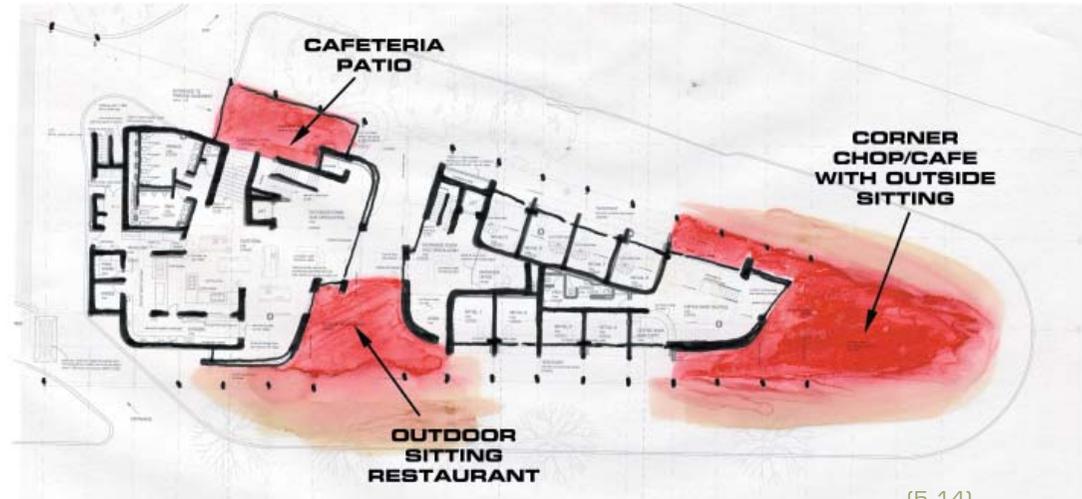
**Figure (5.14):** Potential night spots centered around dining facilities



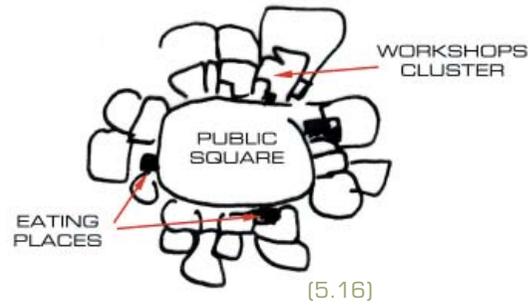
clustered evening establishments



(5.13)



(5.14)

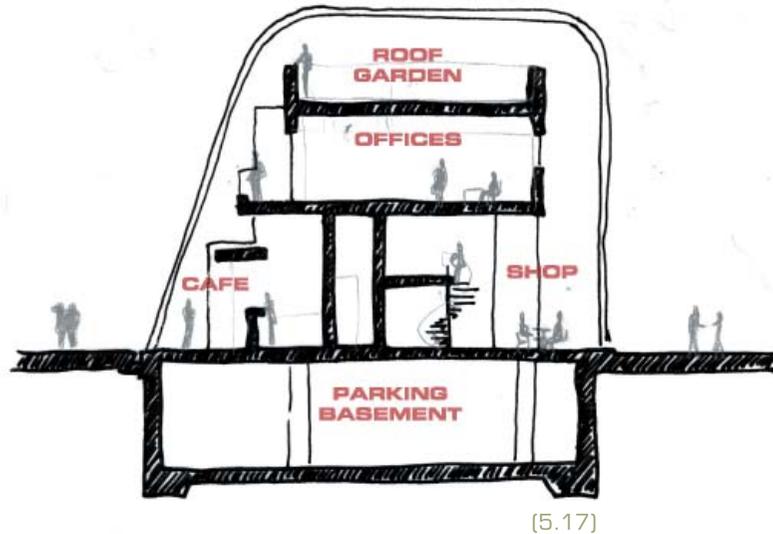


**Figure (5.16):**

Alexander's concept illustrating a work community

**Figure (5.17):**

Section through the building showing the different uses



### Pattern 41: Work community

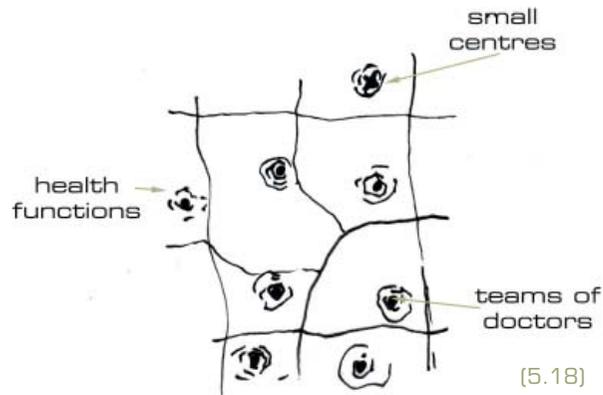
With this pattern Alexander challenges the work environment, as being part of where en how we live. According to him, the people of our culture believe that they are less alive when they are working than when they are at home (Alexander, Ishikawa & Silverstein 1977:223). The word 'live' applies to every moment of our waking lives. By making this distinction, we settle for a work environment less part of our lives and 'alive'. The work environment created within the intervention becomes part of the energy and activity of the intersection and vibrant transport interchange.

### Pattern 47: Health center

This pattern runs hand-in-hand with the problem statement (chapter 2) and forms part of one of the main functions of the intervention. Alexander states it clearly:

Hospitals put the emphasis on sickness. They are enormously expensive; they are inconvenient because they are too centralized; and they tend to create sickness, rather than cure it... (Alexander, Ishikawa & Silverstein 1977:252)

A system of healthcare which is actually capable of keeping people healthy must put its emphasis on health, not sickness. It must therefore be physically decentralized so that it is as close as possible to people's everyday activities. The transport interchange therefore becomes the ideal spot for the proposed TB testing site. It must also be able to encourage people in daily practices that lead to health, which is exactly what the incentive of the cafeteria is.



**Figure (5.18):**  
 Alexander's illustration on the concept  
**Figure (5.19):**  
 Location of municipal clinics and hospitals  
 around the CBD of Pretoria



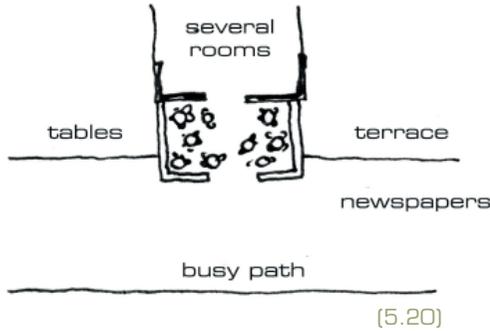
**Pattern 88:** Street café

People enjoy mixing in public, whether in parks, squares, promenades or avenues. The street café also provides a unique setting where people can sit lazily, legitimately, be on view, and watch the world goes by (Alexander, Ishikawa & Silverstein 1977:437). Alexander (ibid: 438) concludes that the ingredients for a successful street café seem to be:

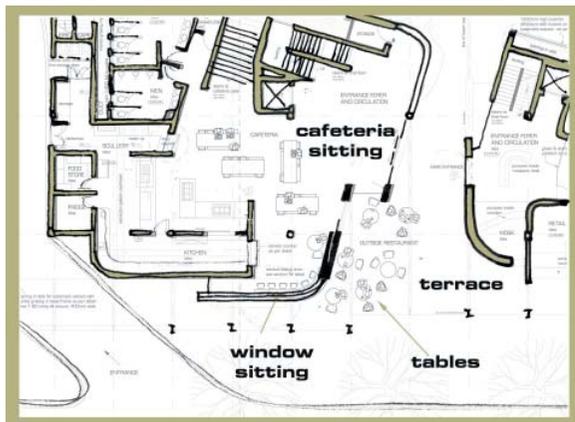
1. The café must be anchored within the neighbourhood, with an established local clientele. As the intervention is located next to the transport interchange, the same people using public transport on a daily basis will become the main clients of the proposed street café.

2. In addition to the terrace which is open to the street, the café must contain several other spaces which will encourage a variety of people to start using it (figure 5.20). The proposed cafeteria and the café each have different areas which will accommodate the different social styles.

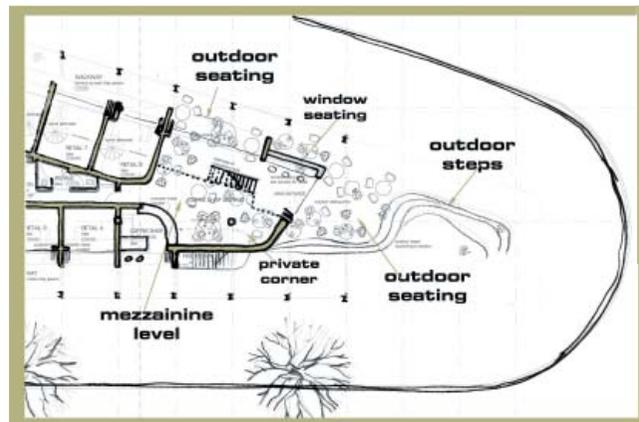
3. The café must serve simple food and drinks – but is not a bar. It must be a place which you will be likely to go in the morning to start the day, as in the evening for a nightcap. Due to its location next to the taxi rank, the cafeteria and the café on the corner will be used very early in the morning as well as late at night.



(5.20)



(5.21)



(5.22)

**Figure (5.20):**

Sketch illustrating the concept of the street cafe

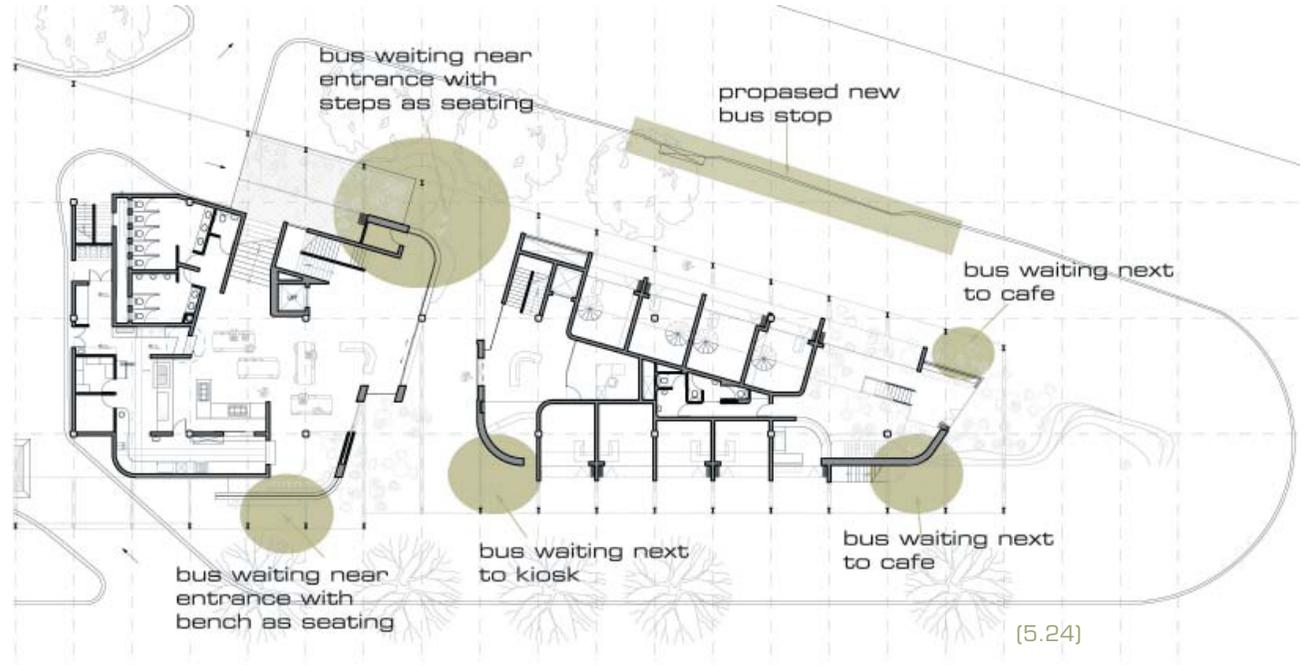
**Figure (5.21) & (5.22):**

Sketch plans indicating the various different spaces within the cafeteria dining area and corner cafe

**Pattern 92: Bus stop**

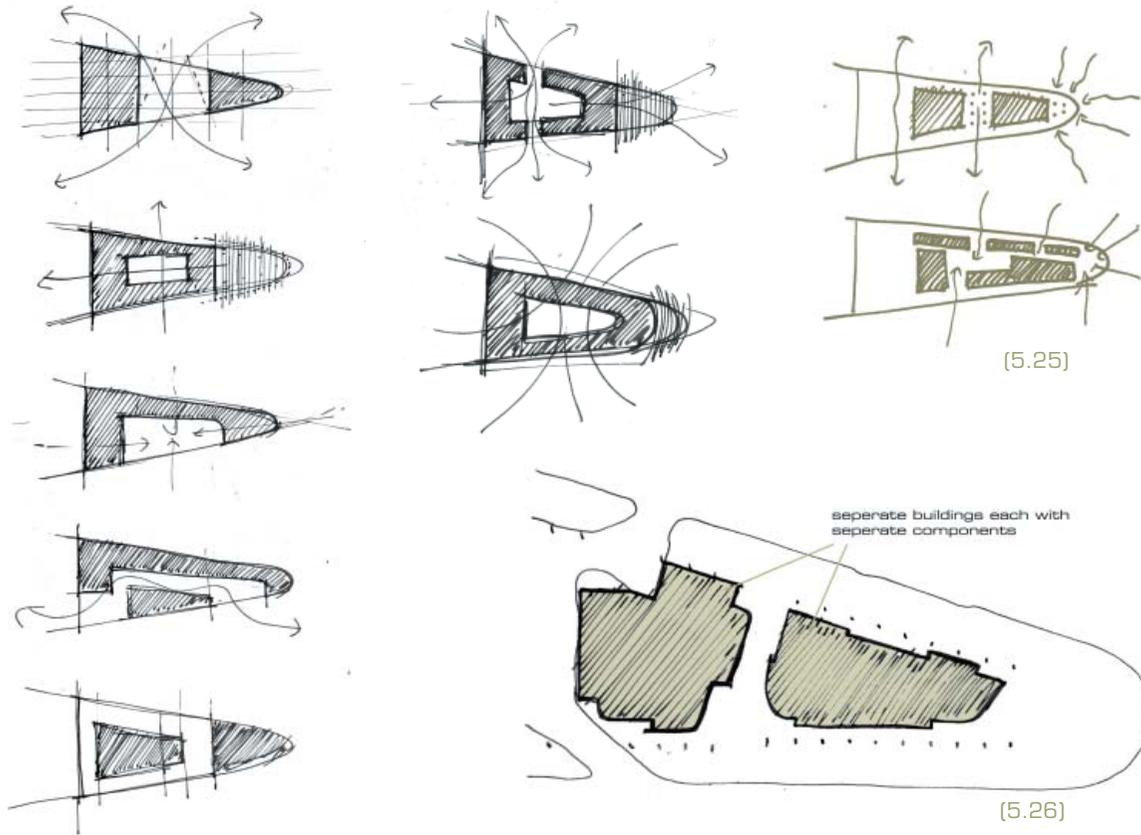
Bus stops must be easy to recognize, and pleasant, with enough activity around them to make people comfortable and safe. (Alexander, Ishikawa & Silverstein 1977:452)

Bus stops are often set down independently, with very little thought given to the experience of waiting there. The relationship between the bus stop and the surroundings must be carefully considered. Bus stops must be designed in such a way that they form tiny centers of public life. Within the proposed design, the bus stop is part of the transport interchange and will also work together with several other activities for example outdoor shelter, seats, the corner café and a newsstand.



**Figure (5.23):**  
A pleasant bus stop with activities around

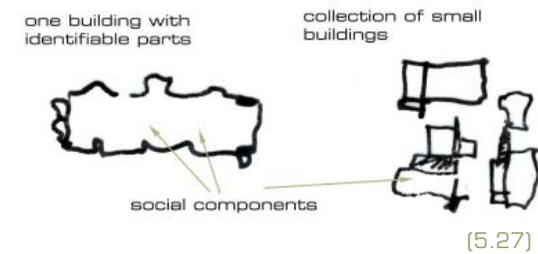
**Figure (5.24):**  
Location of potential bus stops in the design intervention, incorporated with additional facilities



**Figure (5.25):**  
First concept sketches exploring  
building complex footprint  
**Figure (5.26):**  
Final building footprint

### Pattern 95: Building complex

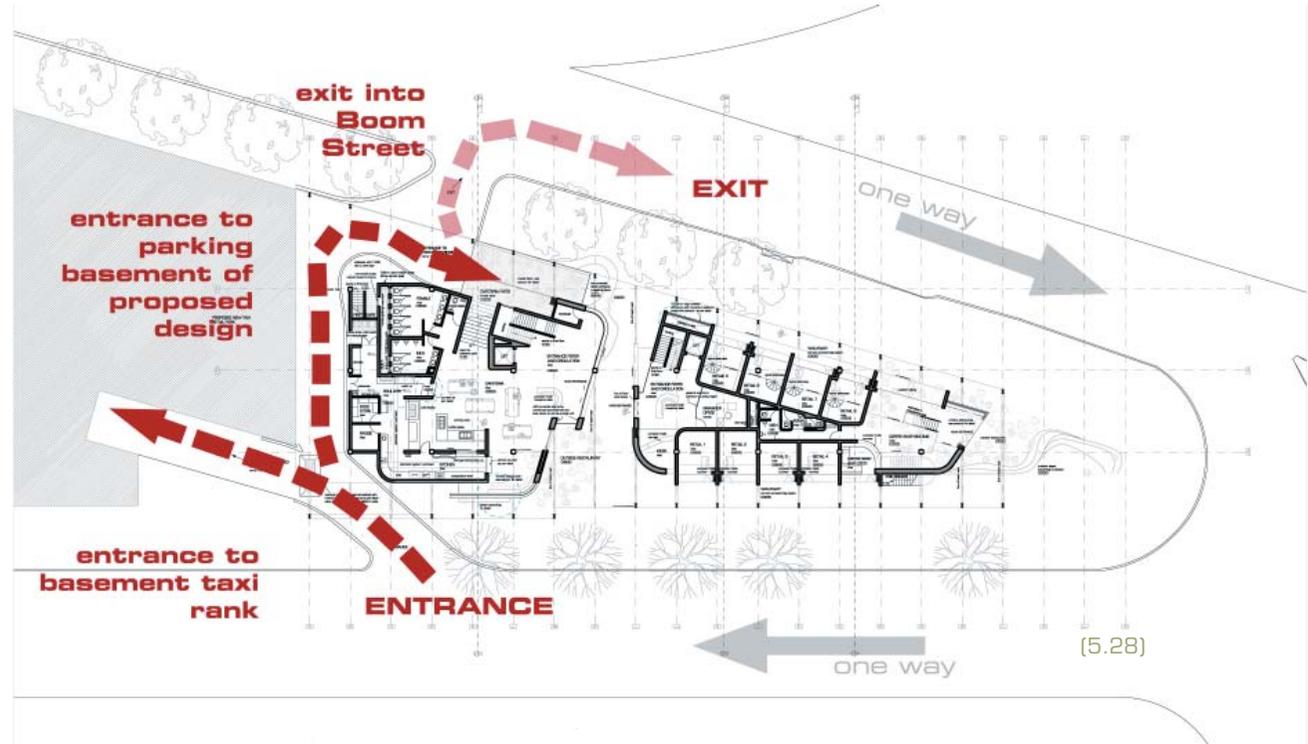
Alexander argues that a building is a visible, concrete manifestation of a social group or social institution (Alexander, Ishikawa & Silverstein 1977:469). And just as every social group has smaller groups within it, a human building will also reveal itself as a complex of smaller institution. Alexander feels that the more monolithic a building is, the more it presents itself as in-human. The one example he uses, was also used by the author in the precedent of the Constitutional Court of South Africa, namely that of the African hut. A group of huts is 'human' too, because it is a complex of buildings, not one huge building by itself. Alexander suggests that whenever possible, a building program must be translated into a building complex, whose parts also manifest the actual social facilities of the situation (ibid: 476). The following diagram illustrates Alexander's concept (figure (5.27):



### Pattern 97: Shielded parking

Large parking structures full of cars are inhuman and dead buildings – no one wants to see them or walk by them. At the same time, if you are driving, the entrance to a parking structure is essentially the main entrance to the building – and it needs to be visible. (Alexander, Ishikawa & Silverstein 1977:478)

Alexander's solution to this problem is to put all parking lots or parking garages behind some kind of natural wall, so that the cars and parking structures cannot be seen from outside. However, if the parking garage is a parking basement – as within the case of the intervention – this is very easy to achieve. The difference comes in the fact that the main entrance to the building is not through the parking garage as within Alexander's example, but from the street. The entrance to the parking garage would therefore be rather hidden behind structures or walls. This is achieved by using the existing basement entrance of the taxi rank as the entrance to the intervention's parking garage. See figure 5.28.



**Figure (5.280):**

Entrance and exit indication

**Figure (5.29) & (5.30):**

Concept sketch explaining shielded parking

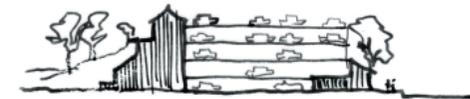
shield



parking enclosure

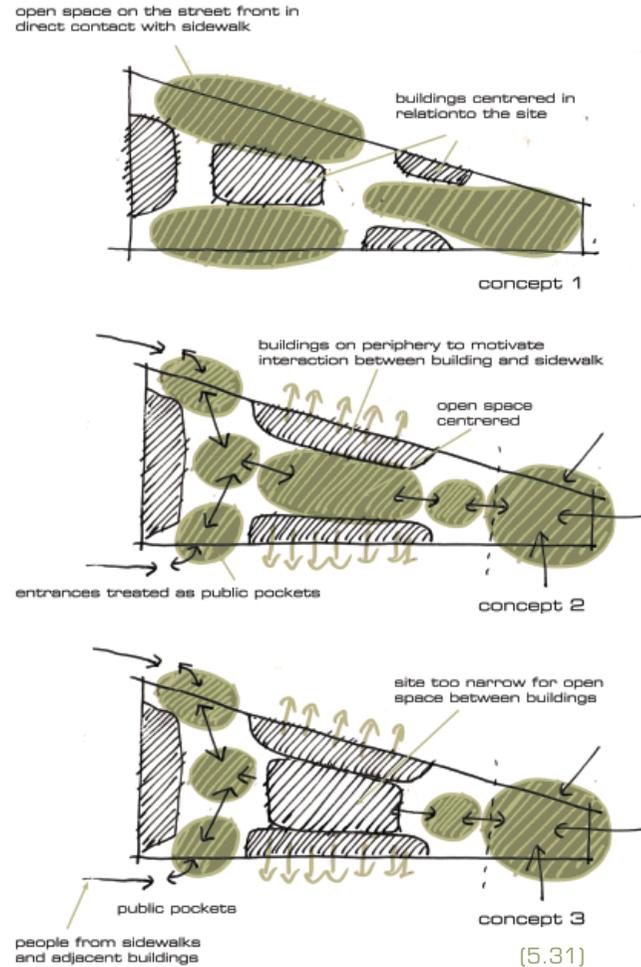
parking gates

(5.29)



example of a shielded parking structure (5.30)

**Figure (5.31)**  
 Concept sketches 1 to 3 illustrates the responsive design bulk form generated from the constraints and possibilities derived from the site analysis. Concept 3 would maximize on-street interaction and the generation of a pedestrian street



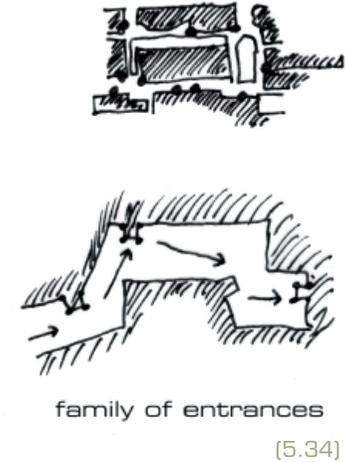
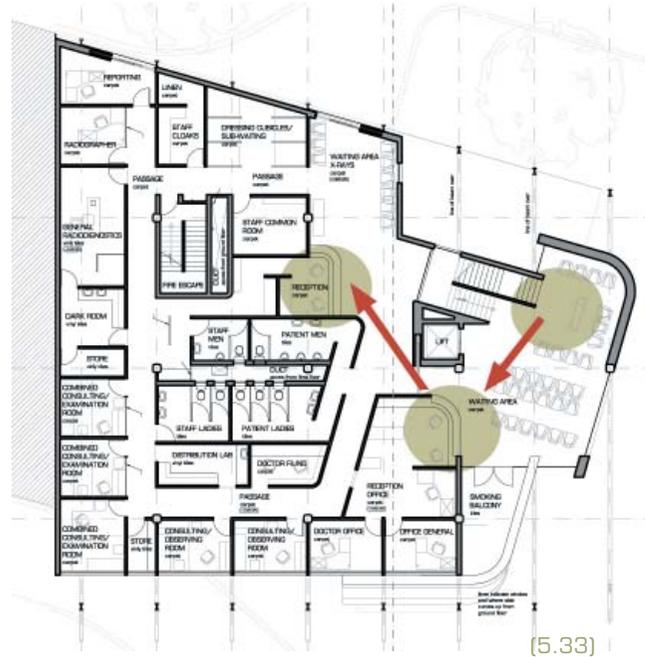
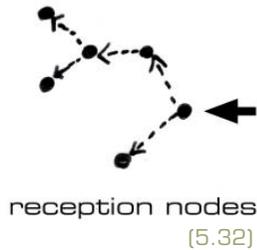
### Pattern 100: Pedestrian street

In today's societies, the social intercourse created when people rub shoulders, and the actual process of movement is now taken place in indoor corridors and lobbies, inside malls, instead of outdoors. This robs the street from people and the streets become abandoned and dangerous. Even the new Taxi Retail Park next to the design intervention is developed as a mall with a range of shops only accessible from the inside. This encouraged the author to approach the intervention different, forcing people to use the sidewalks and open air walkways rather than the inside lobbies and corridors. To create the social intercourse of public movement, as far as possible, the movement between rooms, offices, departments, buildings within the building complex, must also be outdoors, on sheltered walks, arcades, paths and streets.

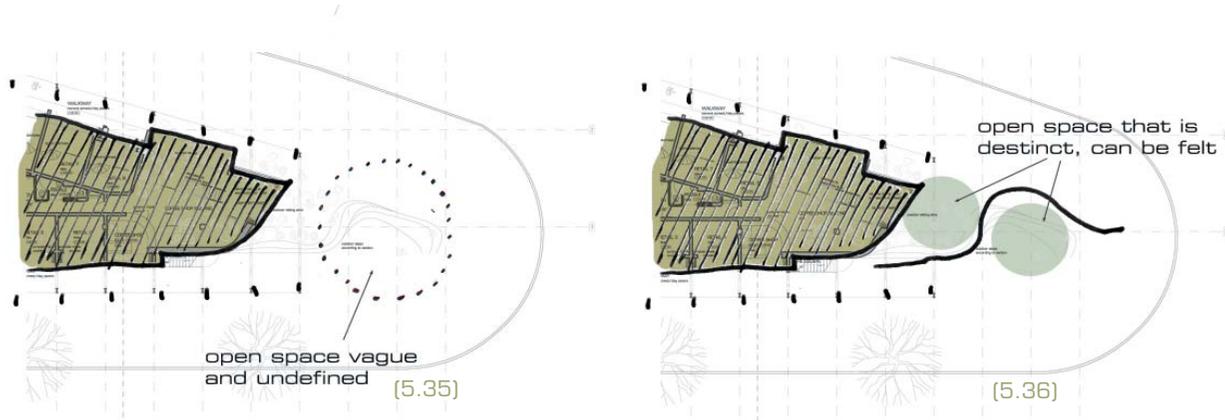
Alexander concludes: 'Arrange buildings so that they form pedestrian streets with many entrances and open stairs directly from the upper stories to the street, so that even movement between rooms is outdoors, not just movement between buildings' (Alexander, Ishikawa & Silverstein 1977:490).

**Pattern 102:** Family of entrances

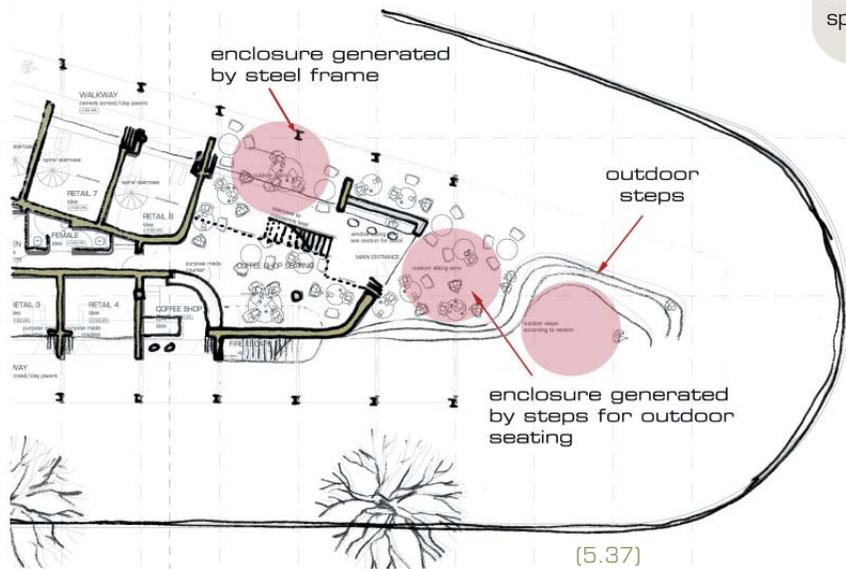
When a person arrives in a complex of offices or services, there is a good chance he will experience confusion unless the whole collection is laid out before him, so that he can see the entrances of the place where he is going. This principle was mainly applied in the TB testing facility, as for the different departments must be clearly visible to avoid confusion (figure 5.32). Alexander proposes that the entrances be laid out as to form a family, meaning they form a group; are visible together and each is visible from all the others.



**Figure (5.33):**  
Relation between the entrance and receptions on first floor



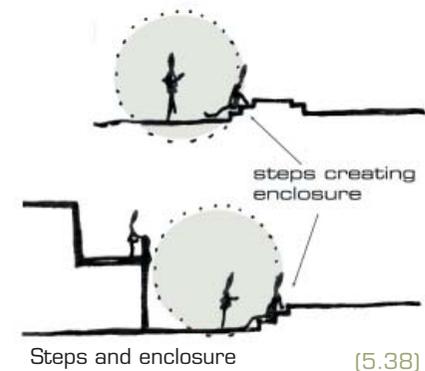
**Figure (5.35), (5.36) & (5.37):** Sketch illustrating open undefined space versus defined space



**Pattern 106: Positive outdoor space**

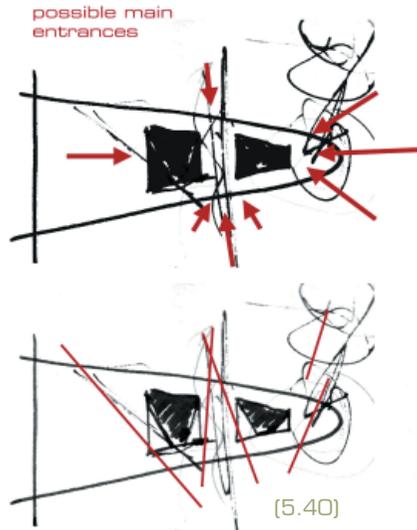
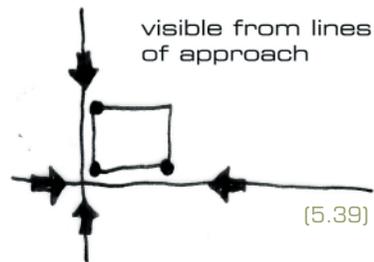
Outdoor spaces which are merely 'left over' between buildings will, in general, not be used. (Alexander, Ishikawa & Silverstein 1977:518)

There are two fundamentally different kinds of outdoor space: negative space and positive space. Alexander describes negative outdoor space as shapeless, the residue left behind when buildings – which are generally viewed as positive – are placed on the land. Accordingly, outdoor space is positive when it has a distinct and definite shape, and when its shape is as important as the shapes of the building which surround it (Alexander, Ishikawa & Silverstein 1977:518). The open space in the corner of the site will be given some degree of enclosure by treating it with steps on which people can sit and relax. See figures 5.35 to 5.28.

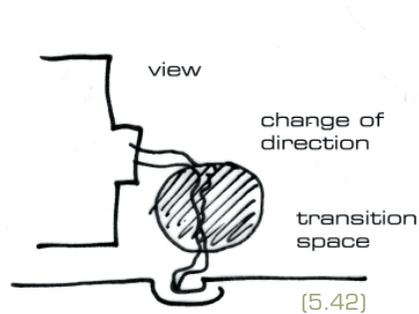


### Pattern 110: Main entrance

Placing the main entrance(s) is perhaps the single most important step one takes during the evolution of a building plan. Alexander (1977:540) feels that the position of the main entrance controls the layout of the building. This was indeed experienced by the author during the design process. It controls the movement to and from the building, and also all the other decisions about the layout and flow. The following sketches indicate the design development of the entrance, being inseparable from the shape of the building. (figures 5.40 and 5.41)



**Figure (5.39):**  
Alexander's illustration of the concept  
**Figure (5.40) & (5.41):**  
Sketches showing the design development  
of the entrance

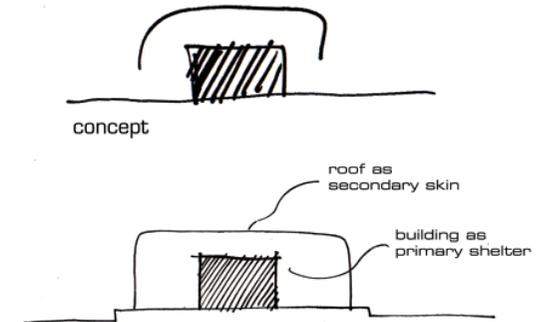


### Pattern 112: Entrance transition

The experience of entering a building influences the way you feel inside the building (Alexander, Ishikawa & Silverstein 1977:548). If the transition is too abrupt there is no feeling of arrival, and the inside of the building fails to be an inner sanctum (figure 5.42). As discussed previously in this dissertation, the author explored the transition from 'outside' to 'inside' with the possibility of working with an additional skin which will present the 'in-between'. This will then enrich the experience between the street and the enclosure of the building. Within this transitional space, the change of light, the change of sound, the change of direction, the change of surface will all be ways in which this pattern can be investigated.

### Pattern 117: Sheltering roof

This is perhaps the pattern which comes closest to the essence of this dissertation. Challenged with the notion of dwelling and our 'being' in the world, the concept of 'shelter' becomes part of the debate whether we as humans reflects the ideal way of this being.



#### Figure (5.42):

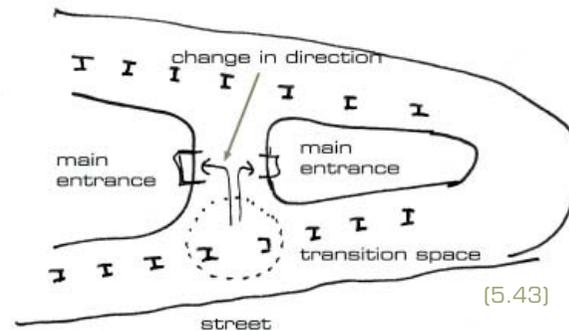
Alexander's concept of the entrance transition

#### Figure (5.43):

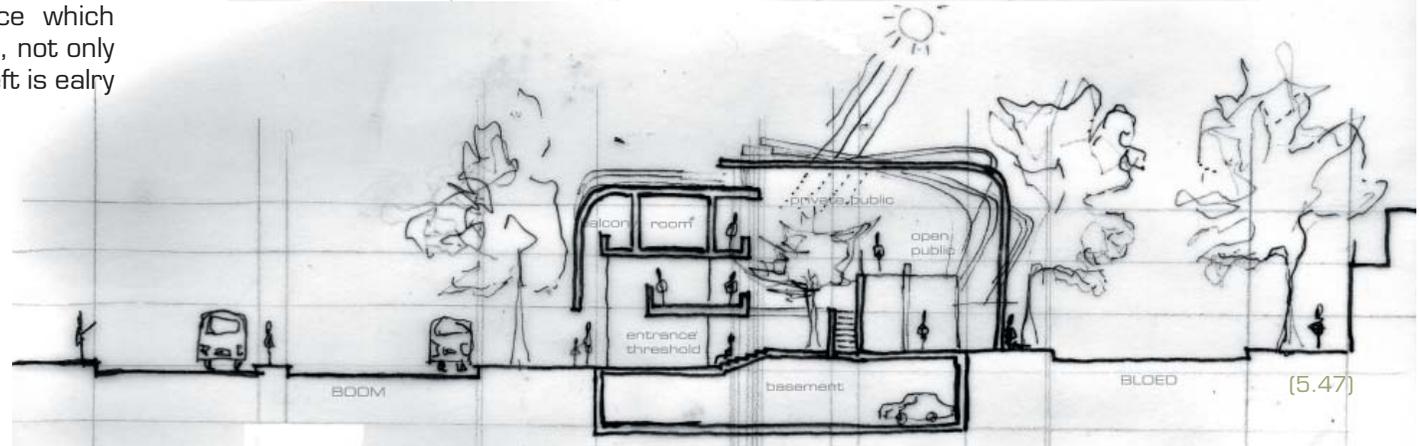
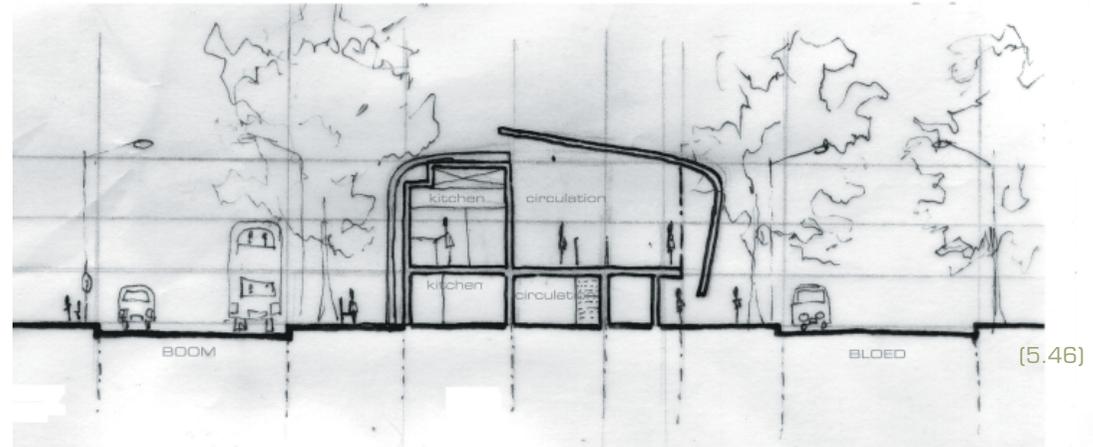
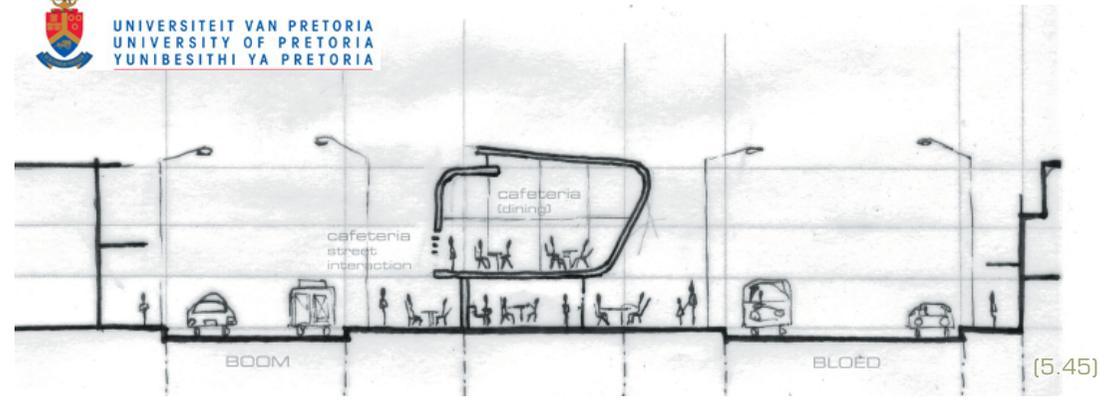
Sketch showing the transitional entrance of the design intervention

#### Figure (5.44)

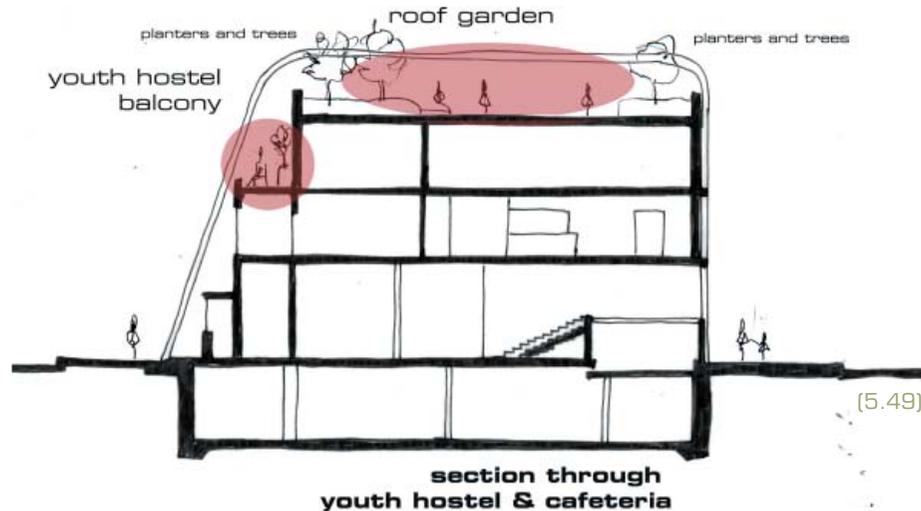
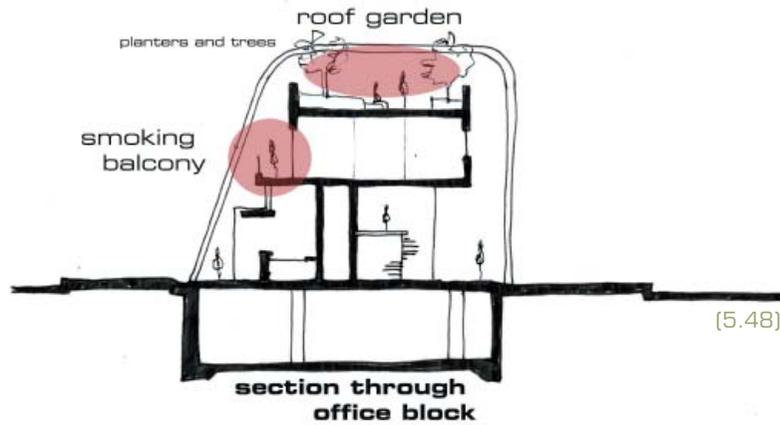
Sketches showing the first concept of 'shelter' as being used in the design investigation



The roof in this instance plays a primal role in our lives. The most primitive buildings are nothing but a roof. Alexander (1977:570) argues that if the roof is hidden, if its presence cannot be felt around the building, or if it cannot be used, then people will lack a fundamental sense of shelter. This sheltering function cannot be created by a roof which is merely added to the top of an existing structure. The roof itself only shelters if it contains, embraces, covers and surrounds the process of living (ibid.). It is in this sense that the space under or on the roof becomes useful space; space that people come into contact with daily. The whole feeling of shelter comes from the fact that the roof surrounds people at the same time that it covers them. Implementing the pattern within the design intervention becomes the most dramatic feature of the building. The additional skin the author worked with, takes on the function of the roof as secondary shelter while simultaneously defines a space which includes living space within its volume, not only underneath it. The sketches on the left is early concepts exploring this feature.



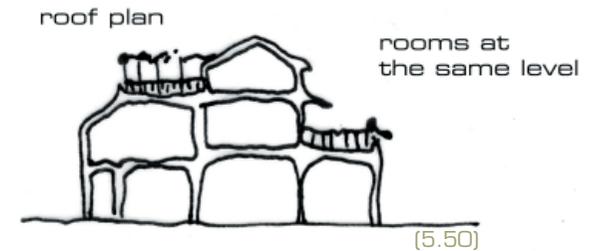
**Figure (5.45), (5.46) & (5.47):**  
Early concept sketches exploring  
the roof as enclosure



### Pattern 118: Roof garden

A vast part of the earth's surface, in a town or city, consists of roofs. Couple this with the fact that the total area of a town which can be exposed to the sun is finite, and you will realize that it is natural, and indeed essential, to make roofs which take advantage of the sun and air. (Alexander, Ishikawa & Silverstein 1977:576)

This pattern was embraced and almost every part of the concrete roof system was designed as usable roof gardens. It was also incorporated as balconies where one can walk out directly out onto it from the lived-in parts.

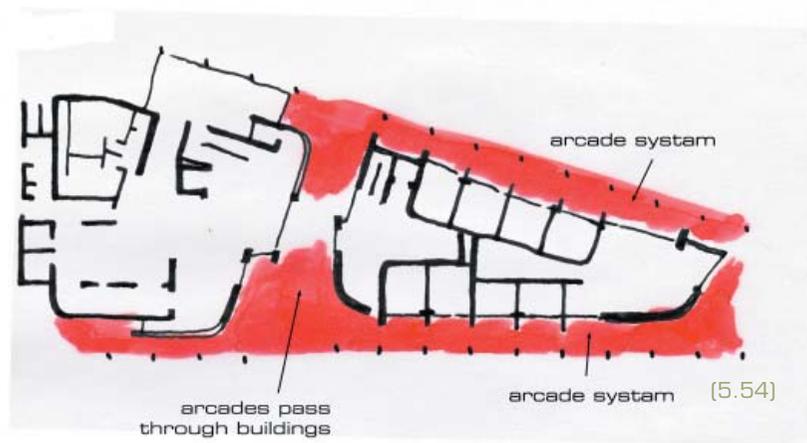
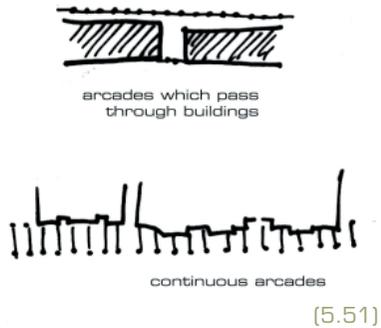
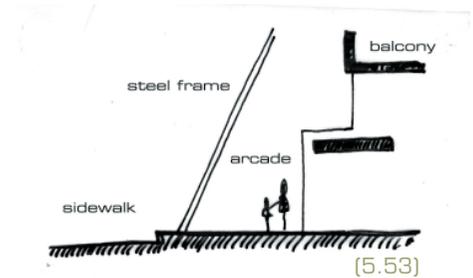
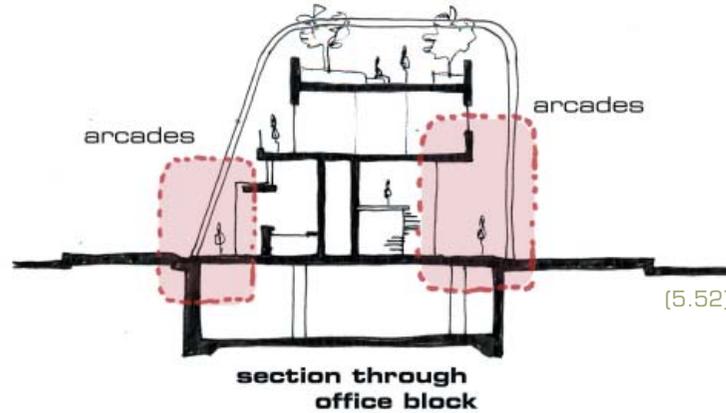


**Figure (5.48) & (5.49):** Sections indicating roof gardens and balconies  
**Figure (5.50):** Sketch indicating rooms at the same level as the roof garden

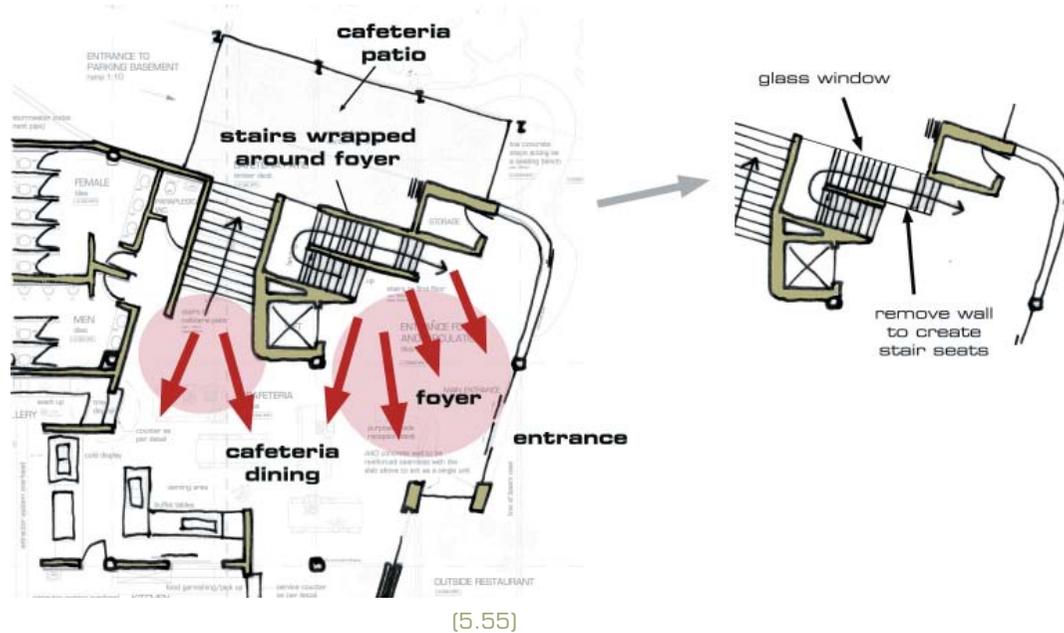
**Pattern 119: Arcades**

This pattern suggests that wherever paths run along the edge of buildings, one needs to build arcades, and use the arcades, above all, to connect up the buildings to one another, so that persons can walk from place to place under the cover of the arcades (ibid:583).

The steel structure which covers the building automatically creates an arcade system that itself becomes a place that is partly inside the building (figures 5.52 and 5.53). This effect is also increased by the path of the arcade opening directly into it the space created by the building complex. (Figure 5.45)



**Figure (5.51)**  
 Alexander's illustration of the concept  
**Figure (5.53):**  
 Concept section through shop front  
**Figure (5.54):**  
 Plan indicating in red the arcades alongside the building



(5.55)

**Figure (5.55):**  
 Development of the staircase  
 and its position in the design process

**Pattern 133:** Staircase as a stage

A staircase, according to this pattern, is not just a way of getting from one floor to another. The stair is itself a space, a volume, and a part of the building; and unless this space is made to live, it will be a dead spot, and work to disconnect the building and to tear its processes apart (Alexander, Ishikawa & Silverstein 1977:638). The staircase provides for a special situation: from providing a place to sit or being a place where someone can make a graceful or dramatic entrance or even a place from which someone can speak. This suggests that the staircase should always be made rather open to the room below it, embracing the room, so that the stairs together with the room form a socially connected place (ibid.). Figure 5.55 indicates the development of the staircase – its position and character – within the design intervention.



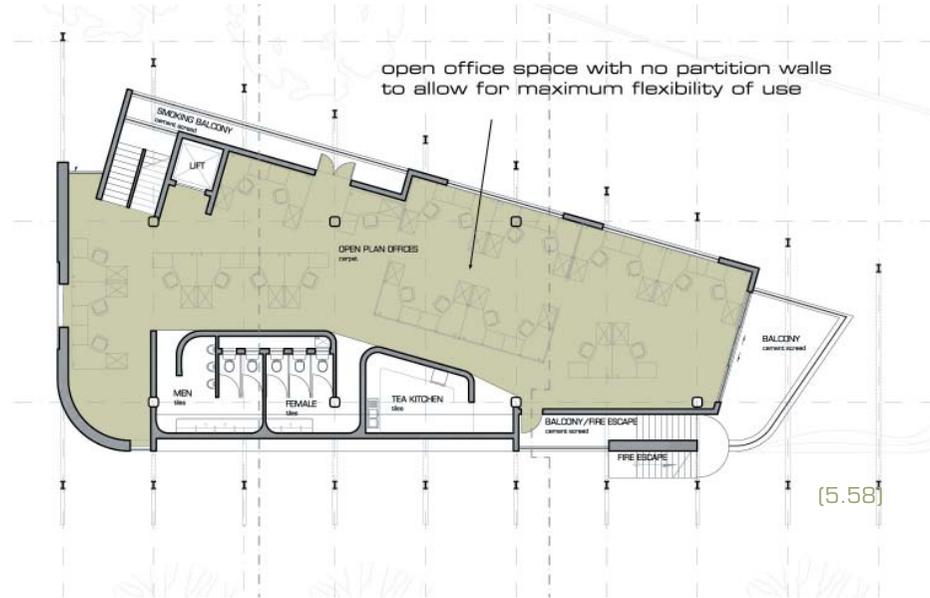
stair seats (5.56)



examples of stair rooms (5.57)

**Pattern 146:** Flexible office space

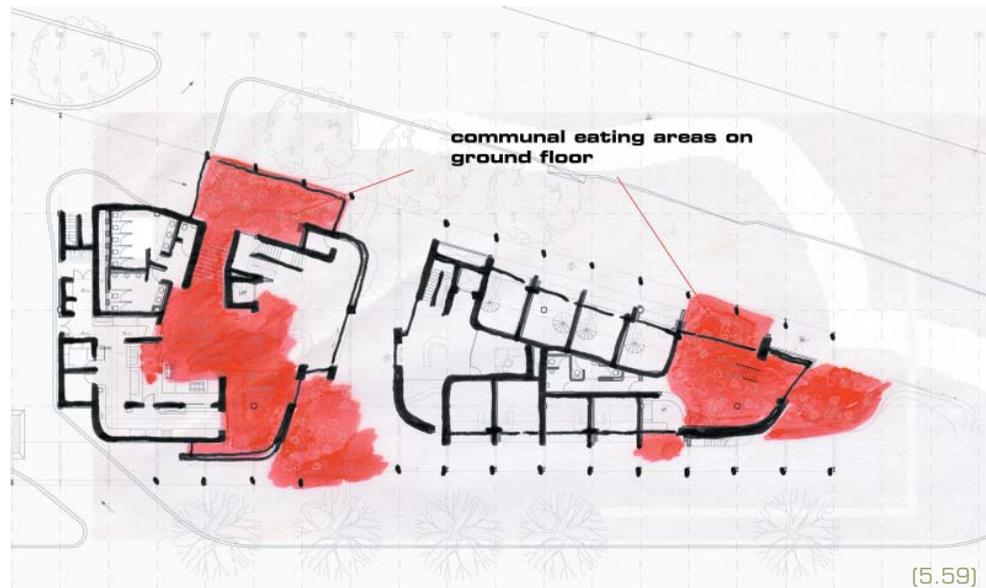
This pattern poses the question whether it is possible to create a kind of space which is specifically tuned to the needs of people working, and yet capable of an infinite number of various arrangements and combinations within it (Alexander, Ishikawa & Silverstein 1977:690). The diagrams illustrate how the proposed office space was designed as an open wing of space in order to ensure the flexibility of a variety of different users.



(5.58)

**Pattern 147:** Communal eating

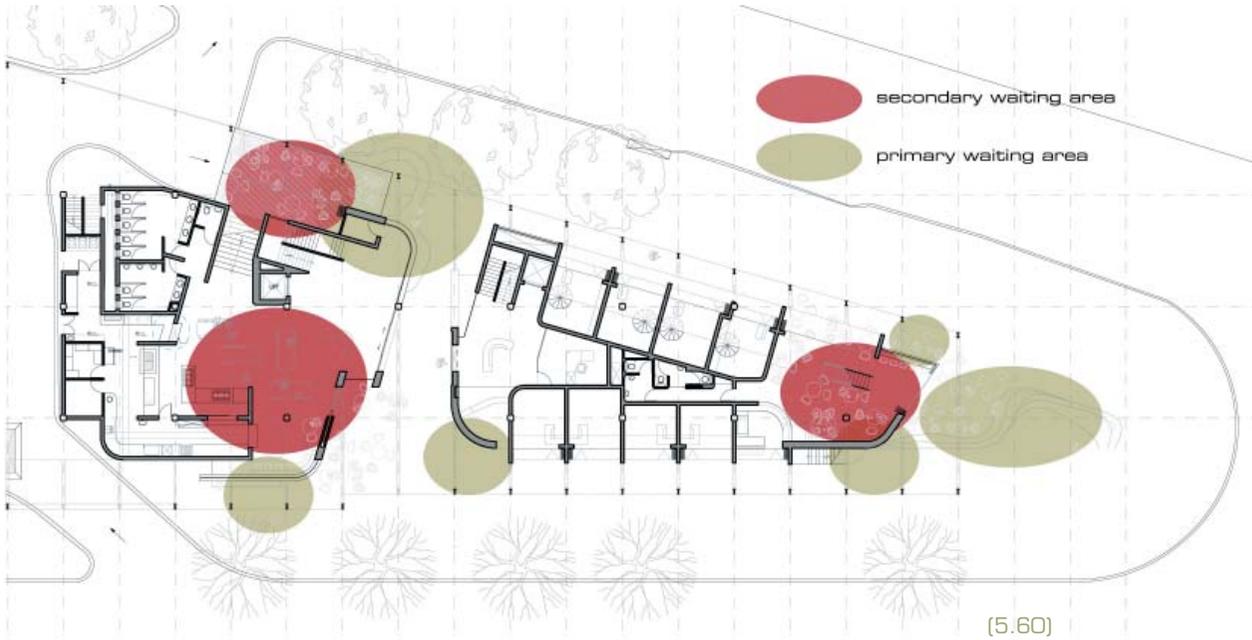
The importance of this concept is clear in all societies, and it plays a vital role in almost all social groups as a way of binding people together. Additionally, within the metropolitan society, it creates the possibility of meeting a wonderful variety of new people (Alexander, Ishikawa & Silverstein 1977:699). Communal eating becomes one of the main functions within the design and eating together becomes an important, comfortable, and daily event.



(5.59)

**Figure (5.58):**  
First floor plan showing the open office space

**Figure (5.59):**  
Sketch indicating the areas of communal eating

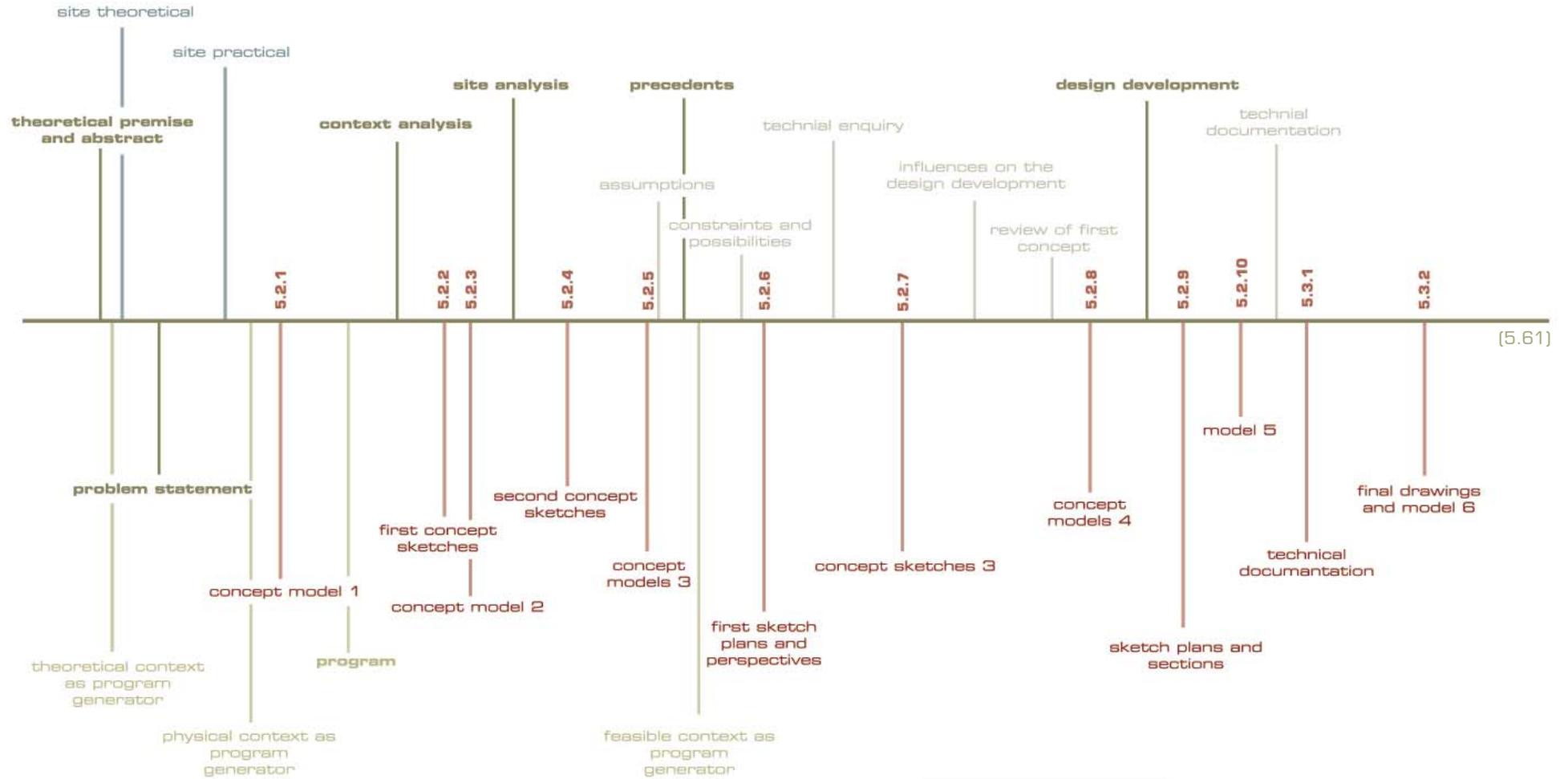


**Figure (5.60):**  
Primary and secondary waiting  
areas on ground floor

### Pattern 150: A place to wait

Waiting is one of the daily rituals for a great amount of people within the study area. Some wait for transportation, some for work, some for service and others for meeting someone else. Alexander (1977:708) argues that the process of waiting has inherent conflicts in it. On the one hand, whatever people are waiting for, has built in uncertainties, which make it inevitable that they must spend a long time hanging around, waiting, and doing nothing. On the other hand, they cannot usually afford to enjoy this time. Because it is unpredictable, they cannot even take a stroll or sit outside/inside. Alexander suggests that the places where people end up waiting must be designed in such a way which makes the waiting possible.

## 5.2\_Design Development



**Figure (5.61):**  
 Timeline indicating the transition of the design process in relation to the development of the project



(5.62) First Concept Model - April 2007



(5.65) First Concept Model - April 2007



(5.63) First Concept Model - April 2007



(5.64) First Concept Model - April 2007

The first concept model explores the theoretical and practical isolation of the building surface as the subject of the design. The autonomy of the surface, the 'free facade,' presumes a distinction between the structural and nonstructural elements of the building, between the frame and the cladding. Once the skin of the building became independent of its structure, it could just as well hang like a curtain, or like clothing. The focus of the relationship between structure and skin is the architectural surface. The concept also manifests influences of pattern 117 (pg. 124), indicating how the principles of the 'sheltering roof' can be applied.



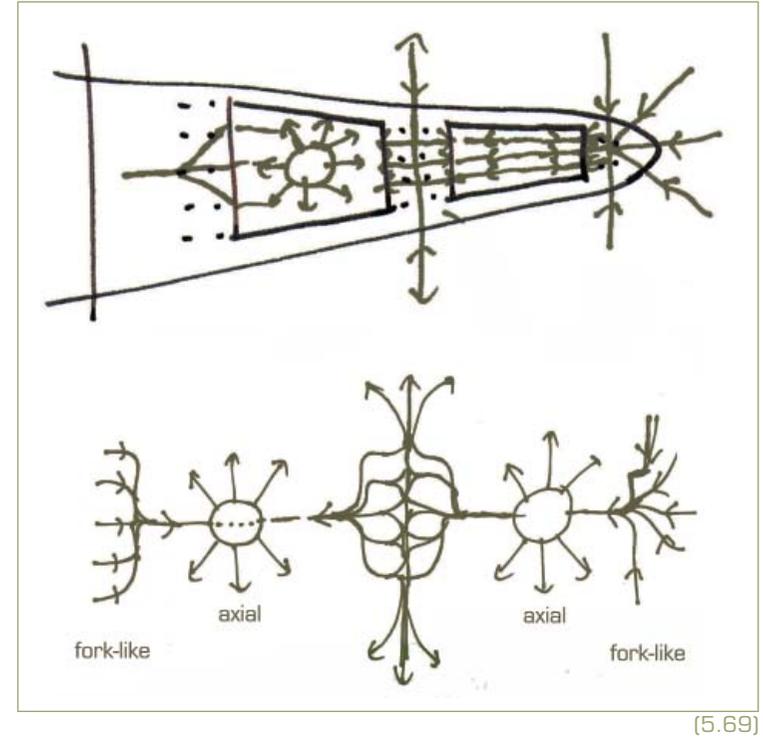
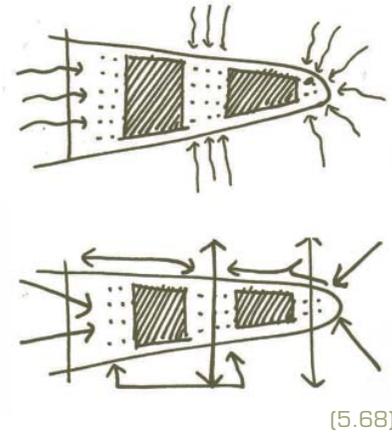
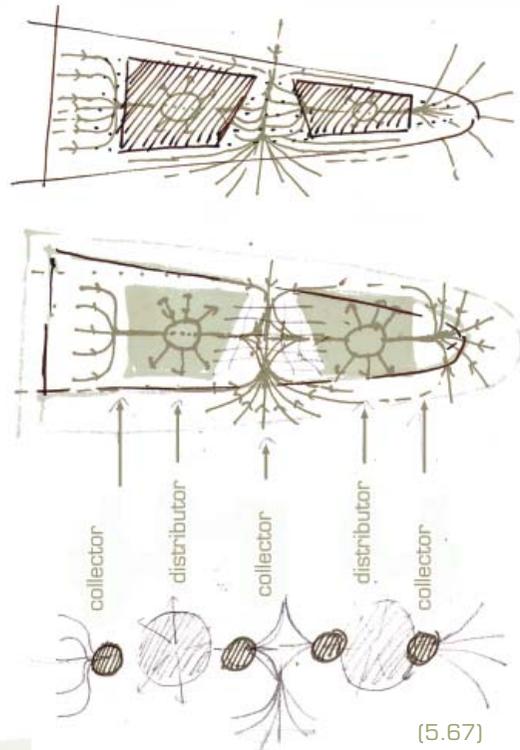
(5.66)

**Figure (5.66):**

Sketch illustrating the 'growth' of the skin from being a structural to a non-structural element

## 5.2.2\_First Concept Sketches

The specific functions of a building may suggest various constructional forms that channel working routines and modes of behaviour. The first concept sketches investigate the organisation of functional sequences by illustrating explorative systems of enclosure. Orientation, that is 'to find one's way', plays a dominant role in this.



**Figure (5.67):**

Sketch illustrating graphically the sequence as processes of collectors and distributors

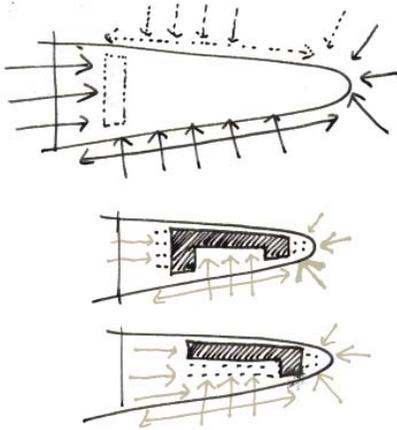
**Figure (5.68):**

Sketch exploring systems of collectors

**Figure (5.69):**

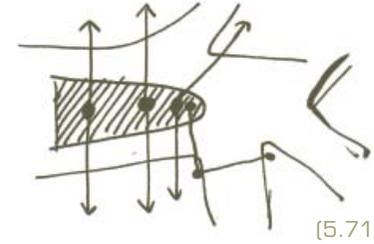
Systems of enclosure as part of the transition process

**REAL SCENARIO:  
RESPONSIVE**

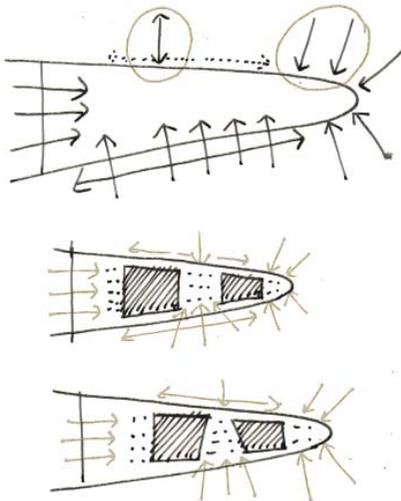


**Figure (5.71):**  
 Points from which collectors accumulate  
**Figure (5.72):**  
 Sketch exploring permeable and responsive footprints

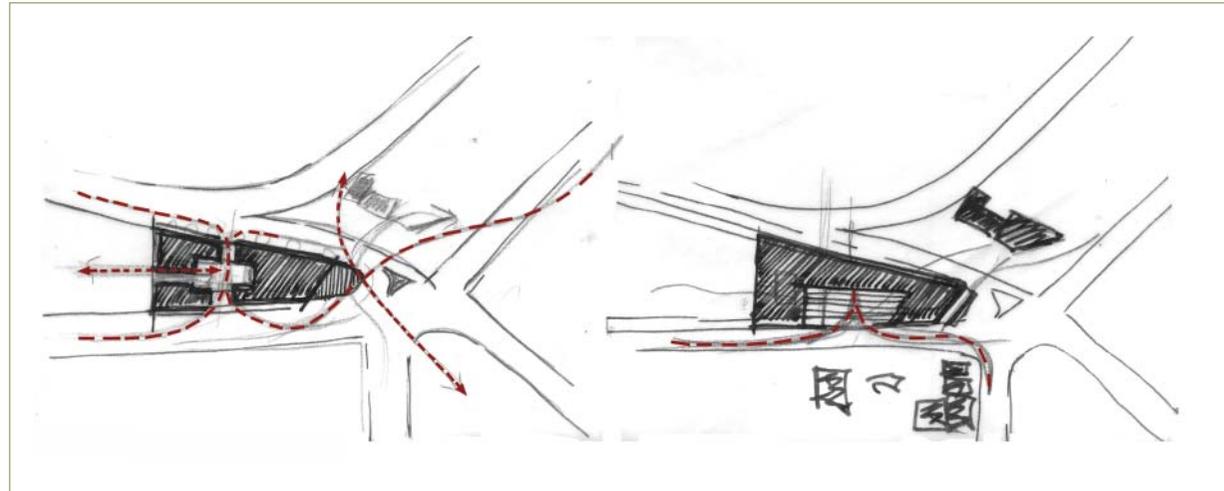
As within the Constitutional Court (pg. 87, figure 4.15), the interconnectivity and character of these functional sequences will contribute to the relation between the ideas of 'inside' and 'outside'.



**PROJECTED SCENARIO:  
RESPONSIVE**

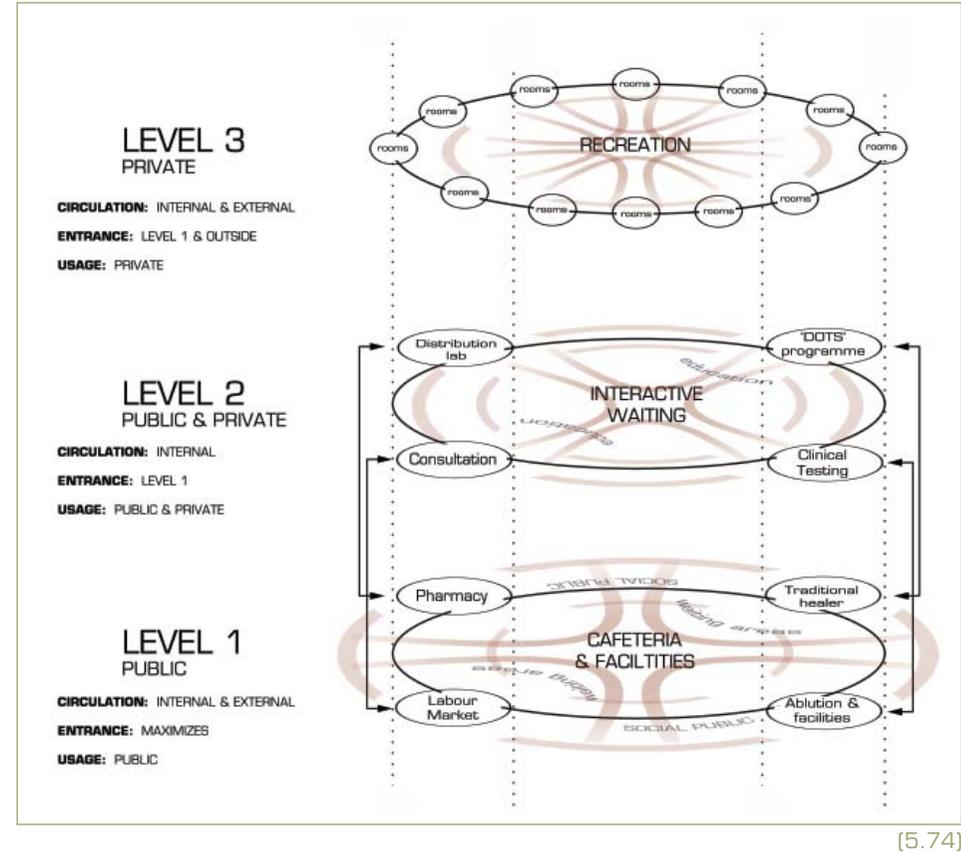
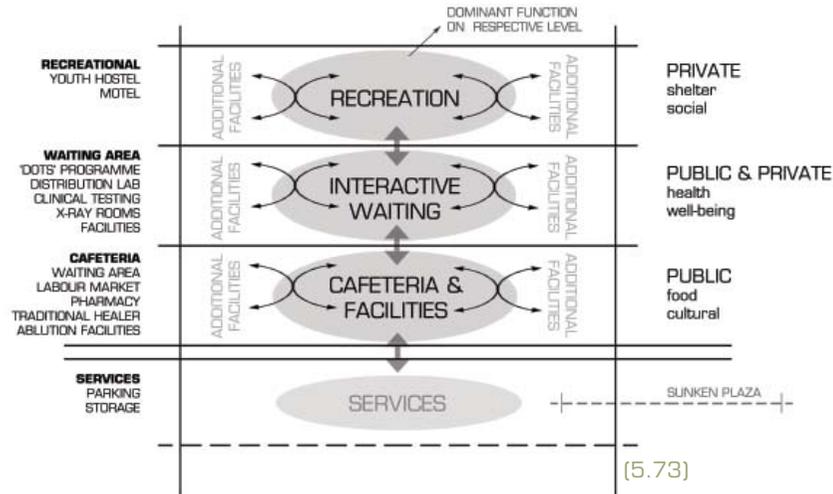


(5.70)



(5.72)

The following diagrams were developed during a very early stage in the design process (March 2007), and illustrates the ordering of facilities within the intervention. It also indicates the relation between the different levels, which accordingly influenced the relation between inside and outside space.

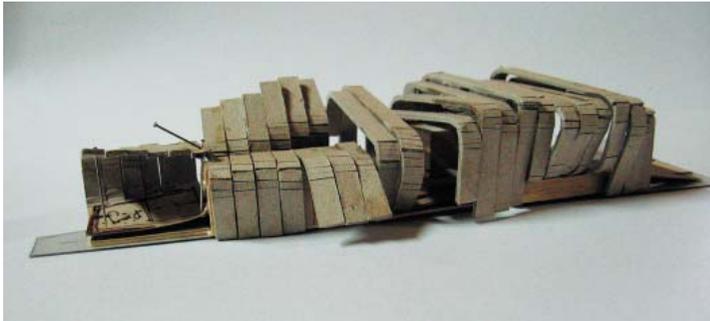


**Figure (5.73) & (5.74):**  
Diagrammatic ordering of facilities,  
March 2007

**Figure (5.75) - (5.80):**

At this stage the concept lack the direct link to the transitional context as described on pages 87, 88 and 124

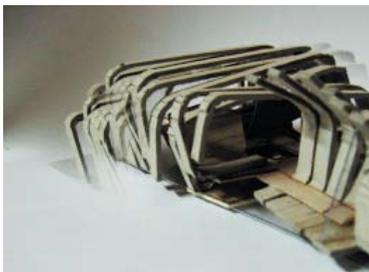
As within the first concept model (page 132), this model also explores the building surface as subject to the design. However, giving the illusion of being a solid mass, the properties of the building surface – whether it will be made out of concrete, metal, glass, or any alternative materials – are not merely superficial; it construct the spatial effects by which the architecture communicates. Through its surfaces the concept model declares both its autonomy and its participation in its surroundings.



[5.75] Second Concept Model - May 2007



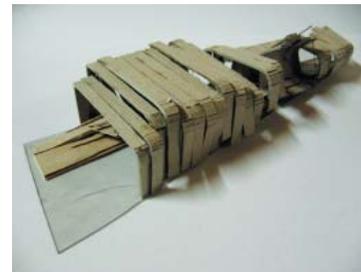
[5.76] Second Concept Model - May 2007



[5.77] Second Concept Model  
May 2007



[5.78] Second Concept Model  
May 2007



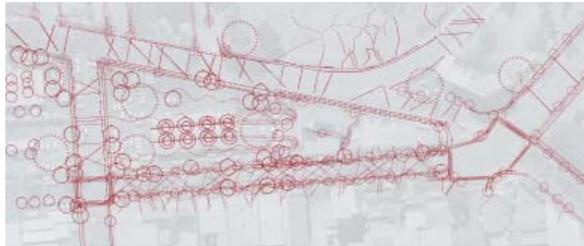
[5.79] Second Concept Model  
May 2007



[5.80] Second Concept Model  
May 2007

## 5.2.4\_Second Concept Sketches

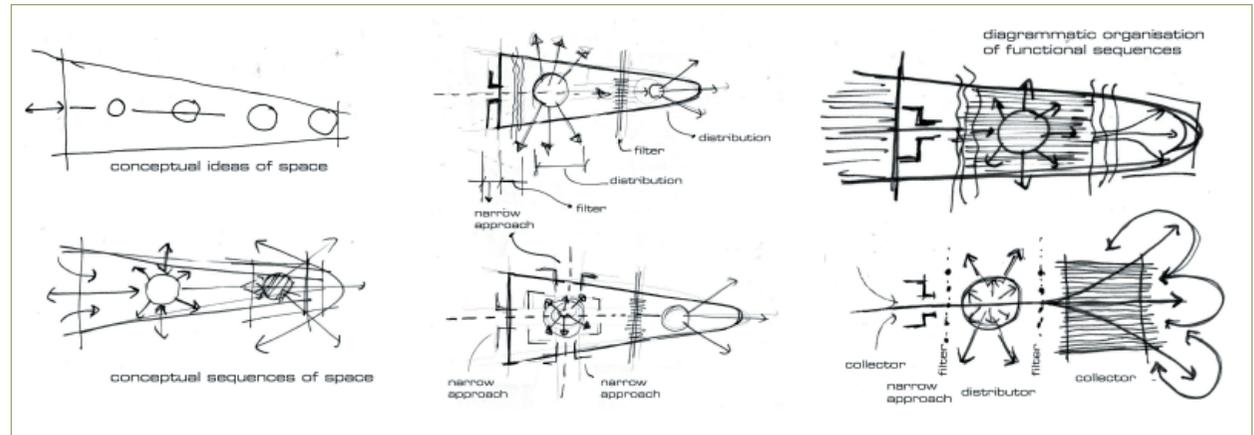
The ordering of functional sequence are still the subject of investigation, but in addition, superimposed with the circulation patterns derived from the site analysis. The sketches also illustrate responsive lines and form generated from these concepts.



(5.81)



(5.82)

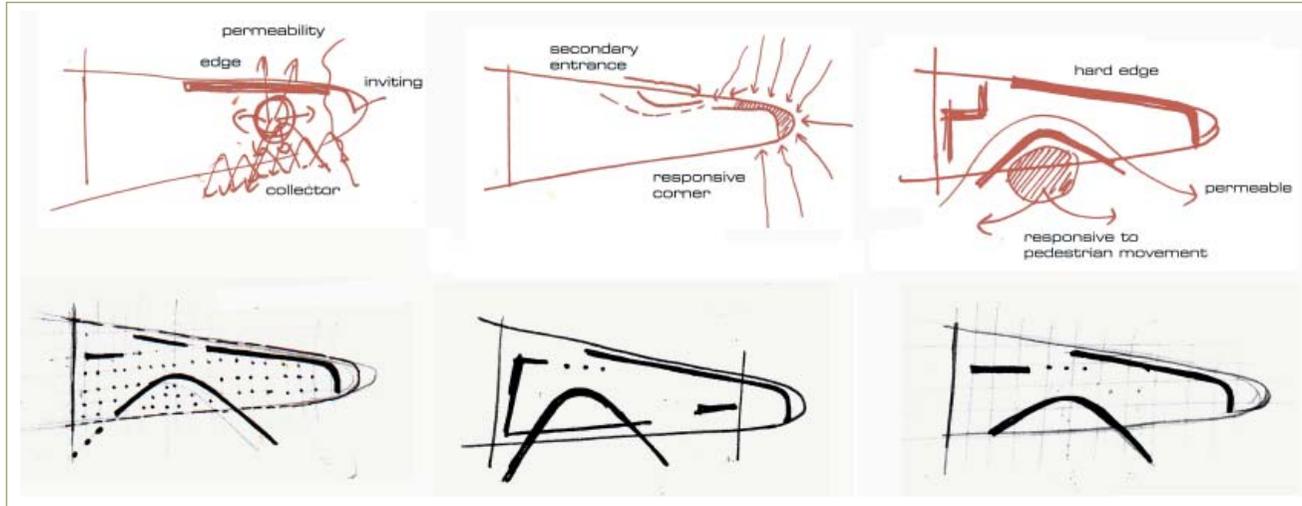


(5.83)

**Figure (5.81):**  
Existing pedestrian patterns

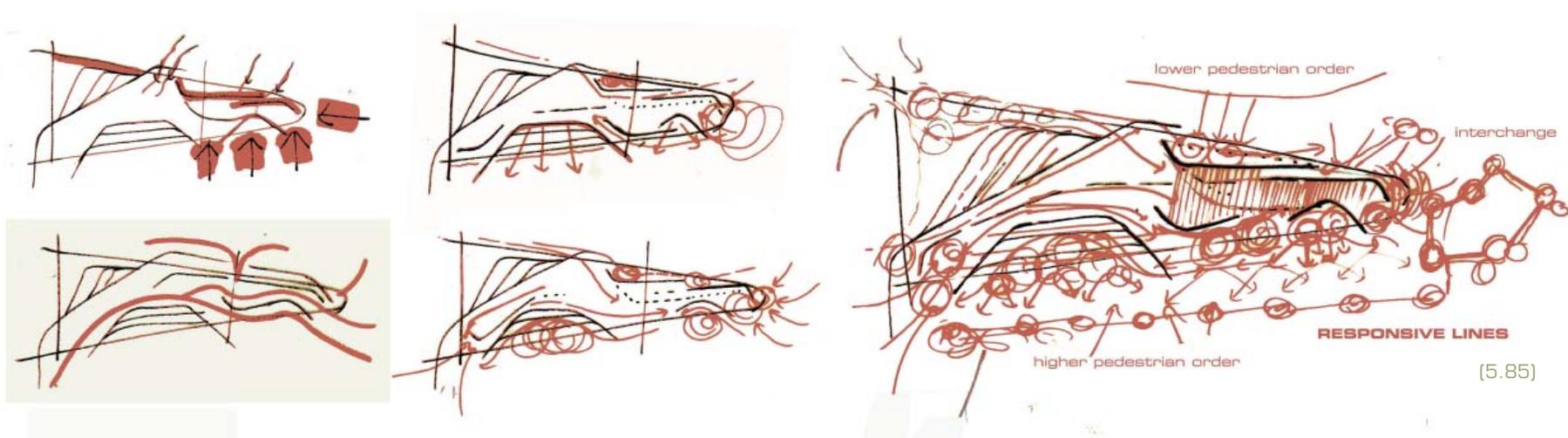
**Figure (5.82):**  
Future pedestrian patterns

**Figure (5.83):**  
Sketches exploring the ordering of functional sequences superimposed with pedestrian patterns



(5.84)

**Figure (5.84):**  
 Sketches responding to pedestrian patterns (red) and responsive lines (black)  
**Figure (5.85):**  
 Responsive sketches later in the conceptual design process



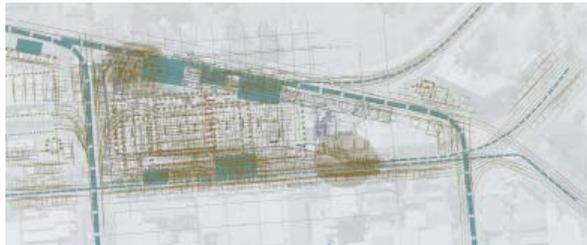
(5.85)

The conceptual design considered a taxi rank development as part of the intervention proposed by the author, and only at a later stage assumed the Bloed Street Taxi Rank, as to be built by the RAI-group, as a given. The sketches illustrate these early concepts - responsive to the vehicular circulation patterns.

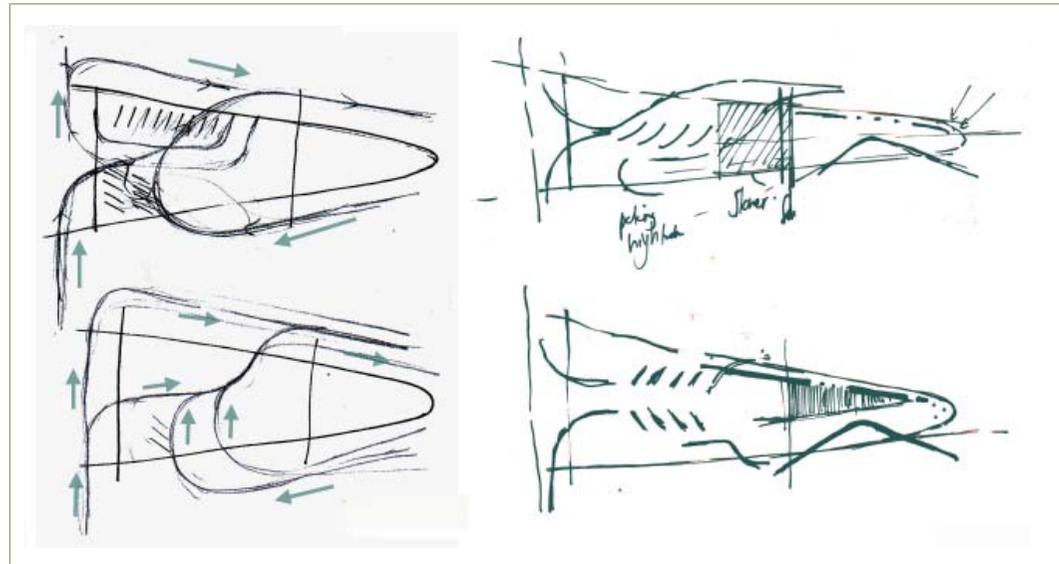
**(Following page) Figure (5.89):**  
Early concept sketches considering the vehicular circulation as influential to the design process



(5.86)

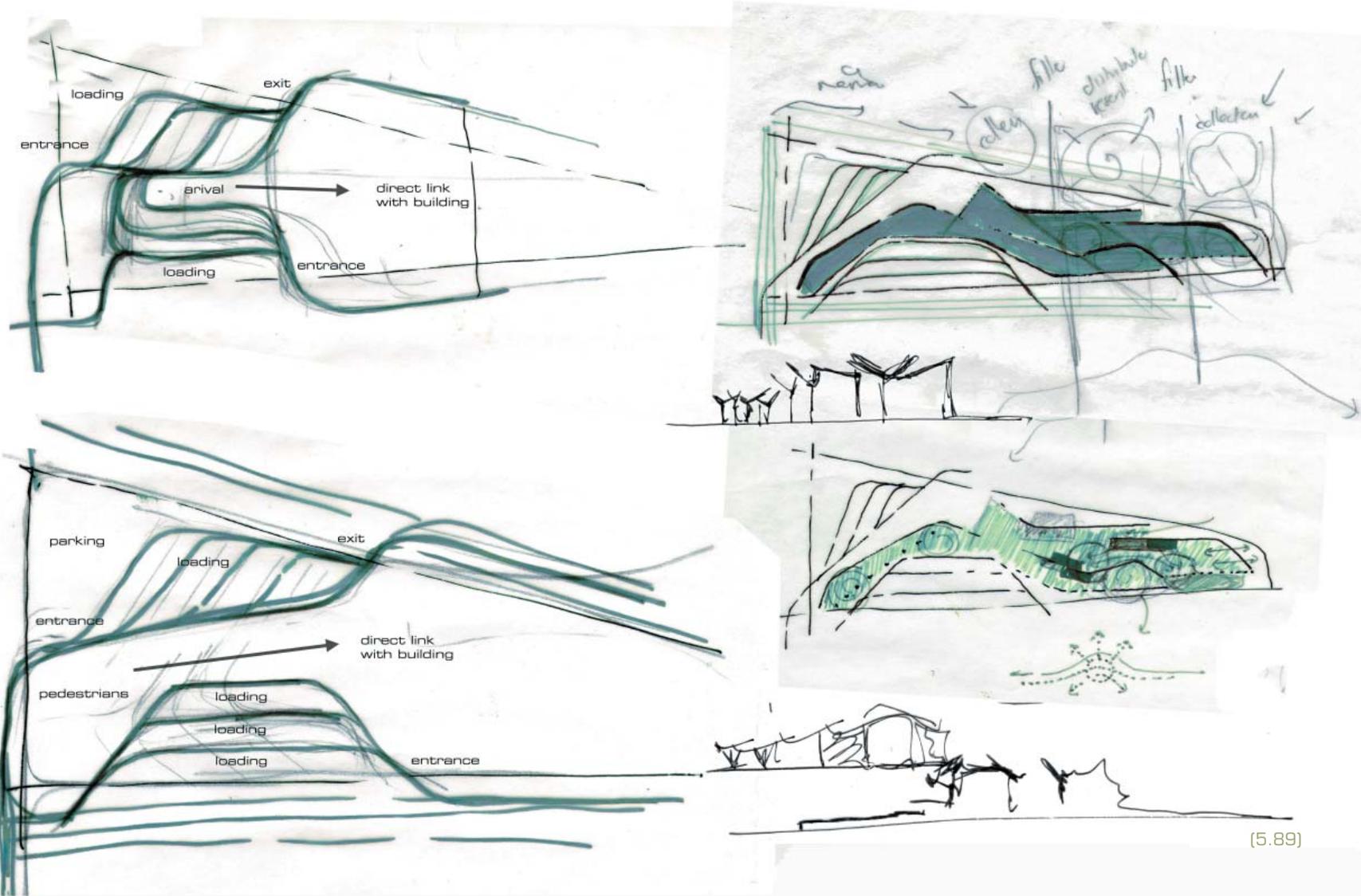


(5.87)



(5.88)

**Figure (5.86):**  
Existing vehicular circulation patterns  
**Figure (5.87):**  
Future vehicular circulation patterns  
**Figure (5.88):**  
Sketches exploring the ordering of functional sequences and circulation superimposed with vehicular patterns

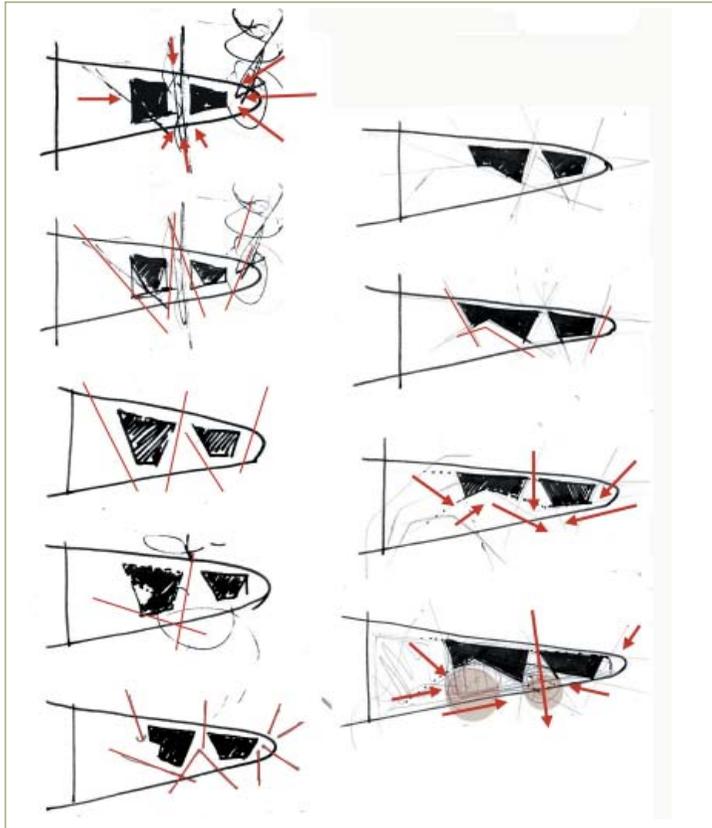


(5.89)

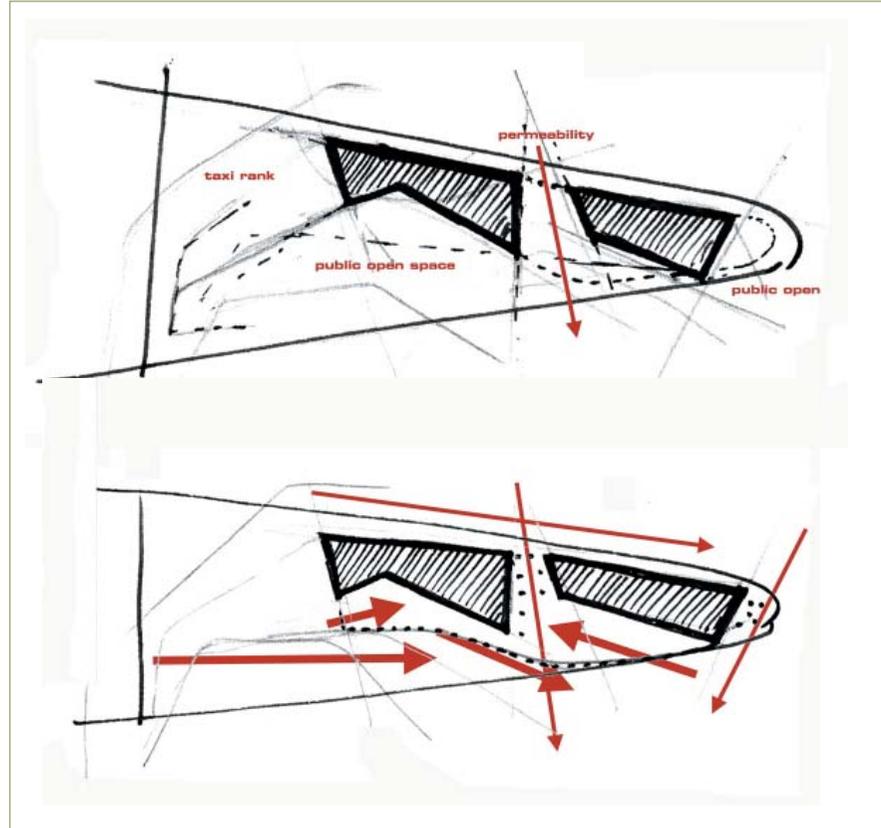
### 5.2.5\_Concept Models 3

These sketches illustrate the development of 'bulk mass' and introduce the form to which a third range of concept models were developed. This form was predominantly influenced by existing and proposed circulation patterns.

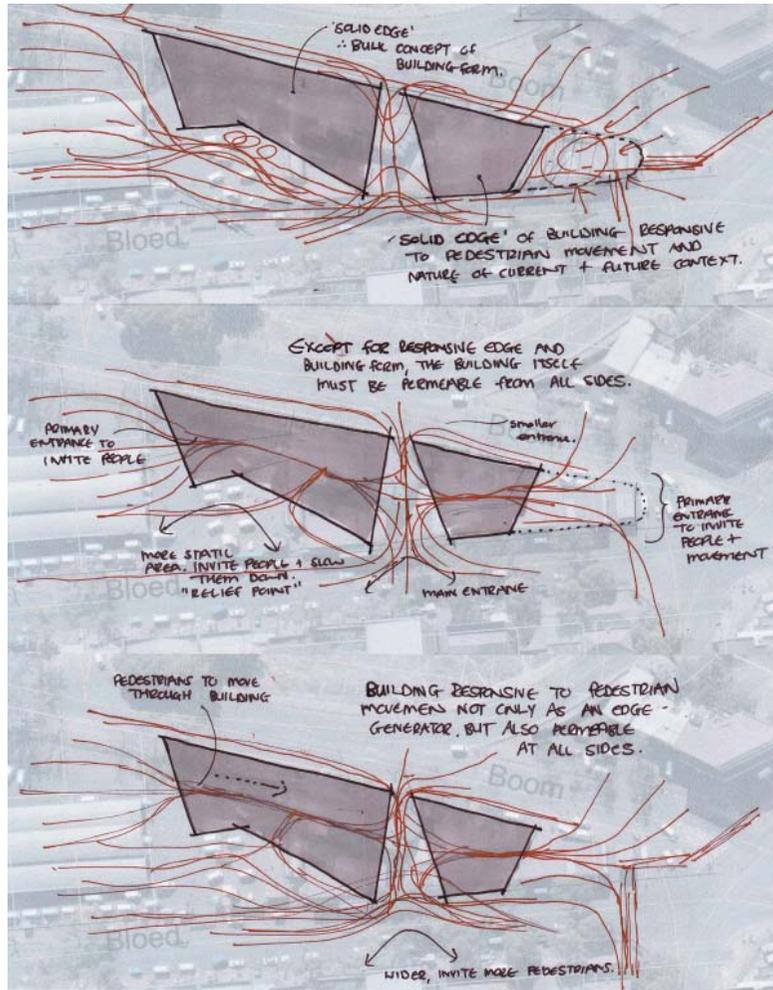
**Figure (5.90):**  
The development of 'bulk form'  
**Figure (5.91):**  
Final footprint of the 'bulk form'



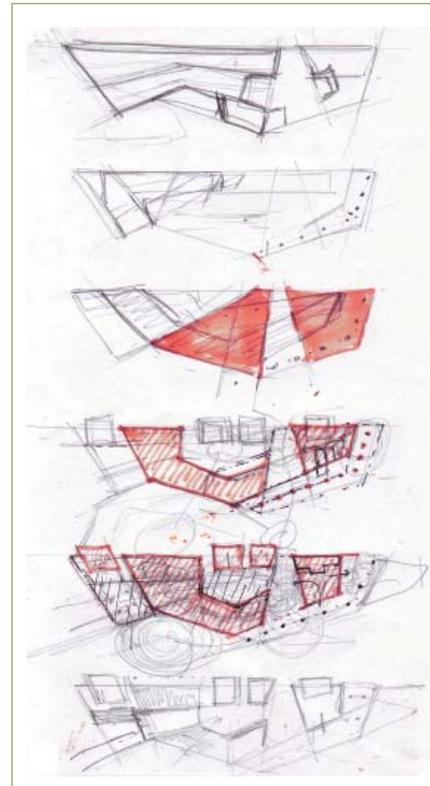
(5.90)



(5.91)



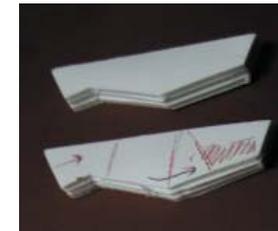
(5.92)



(5.93)

The bulk form is arranged in such a way that it forms a pedestrian street; with many entrances it will result in a highly permeable building. This principle is derived from pattern 100, 'the pedestrian street' (pg. 120). To create the social intercourse of public movement as far as possible, the movement between rooms, offices, departments and buildings within the building complex, must also be outdoors, on sheltered walks, arcades, paths and streets.

**Figure (5.92):**  
 Development of initial bulk form model (figure 5.94)  
**Figure (5.93):**  
 Development of bulk form model 2 (figure 5.95)  
**Figure (5.94) & (5.95):**  
 Bulk form models '1' and '2'

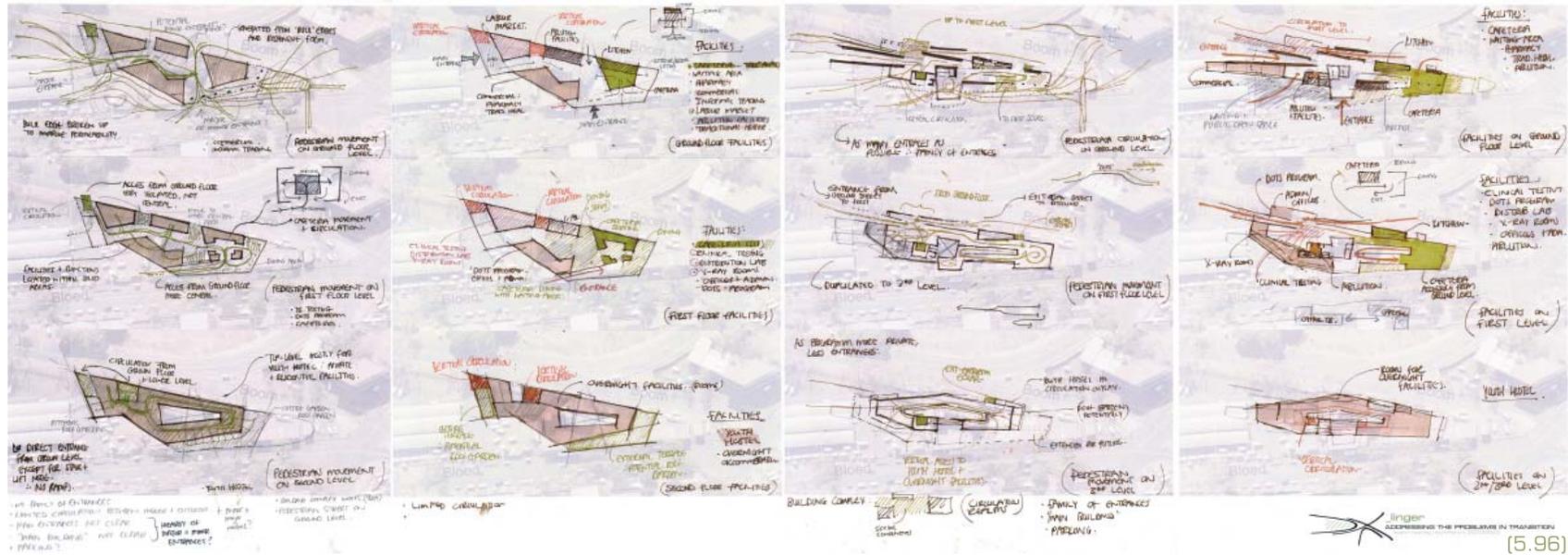


(5.94)



(5.95)

Figure (5.96):  
Development and aspects of the  
concept models



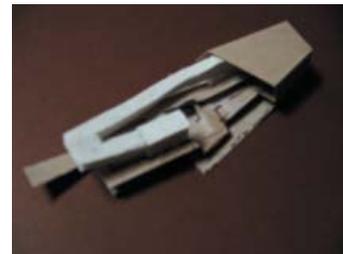
(5.96)



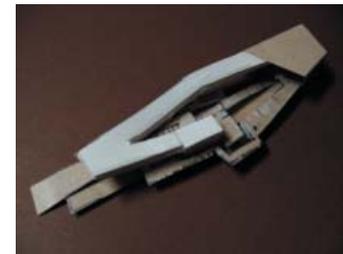
(5.97) Concept Models 3 - May 2007



(5.98) Concept Models 3 - May 2007

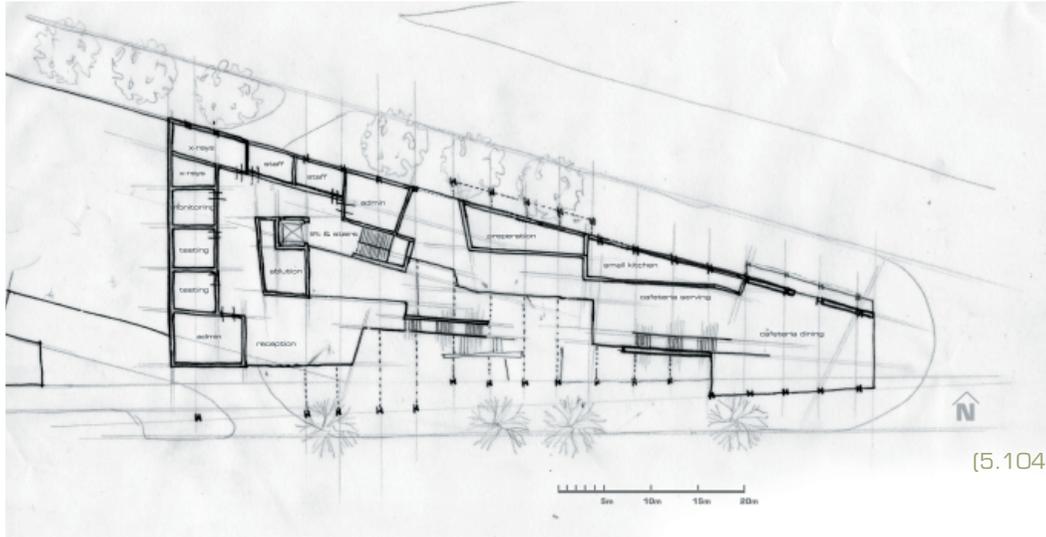


(5.99) Concept Models 3 - May 2007

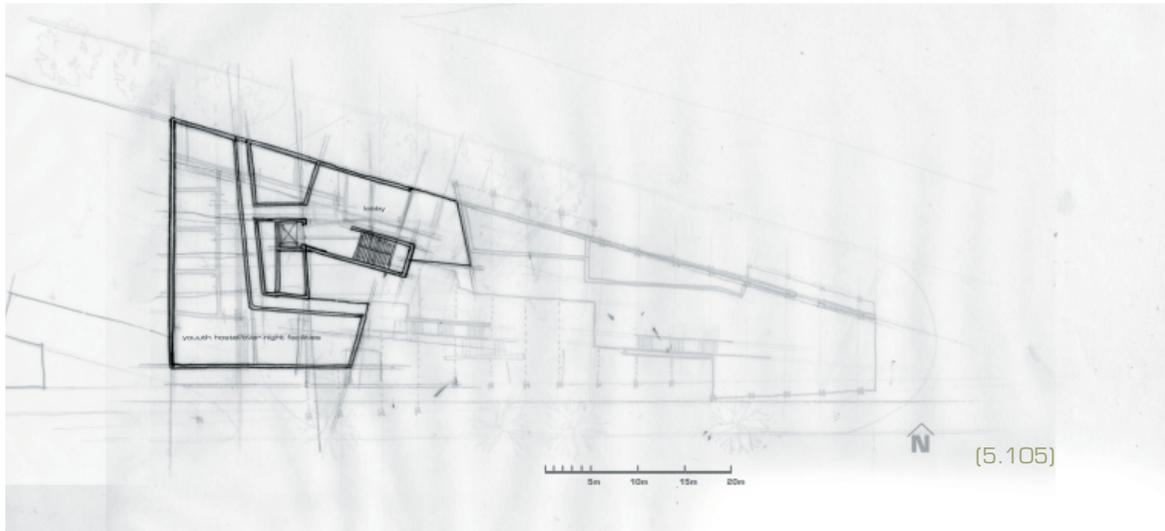


(5.100) Concept Models 3 - May 2007



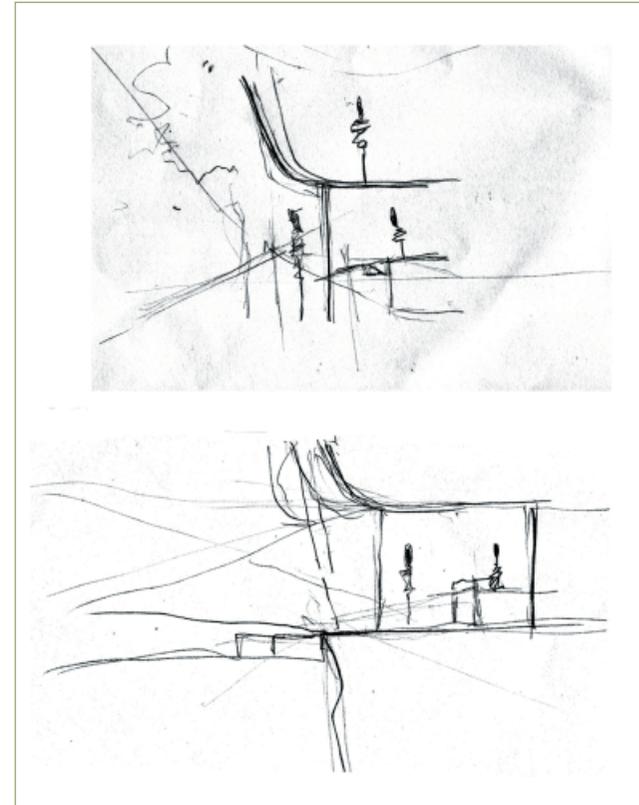


(5.104)



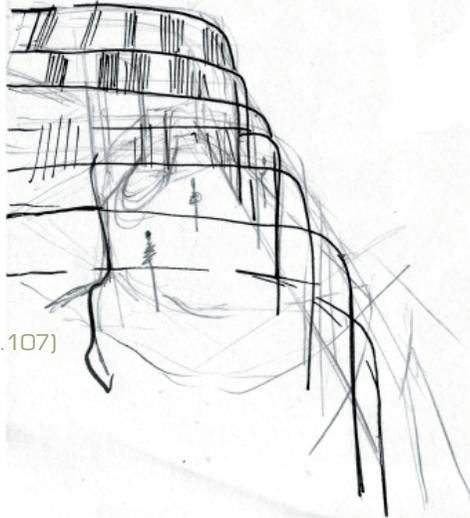
(5.105)

**Figure (5.104):**  
First floor plan - June 2007  
**Figure (5.105):**  
Second floor plan - June 2007  
**Figure (5.106):**  
Concept sketches exploring interaction  
between building and sidewalk



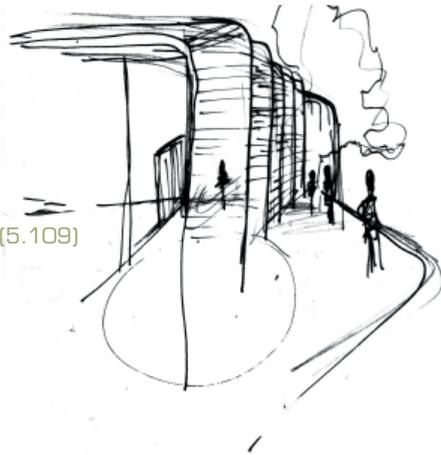
(5.106)

(5.107)

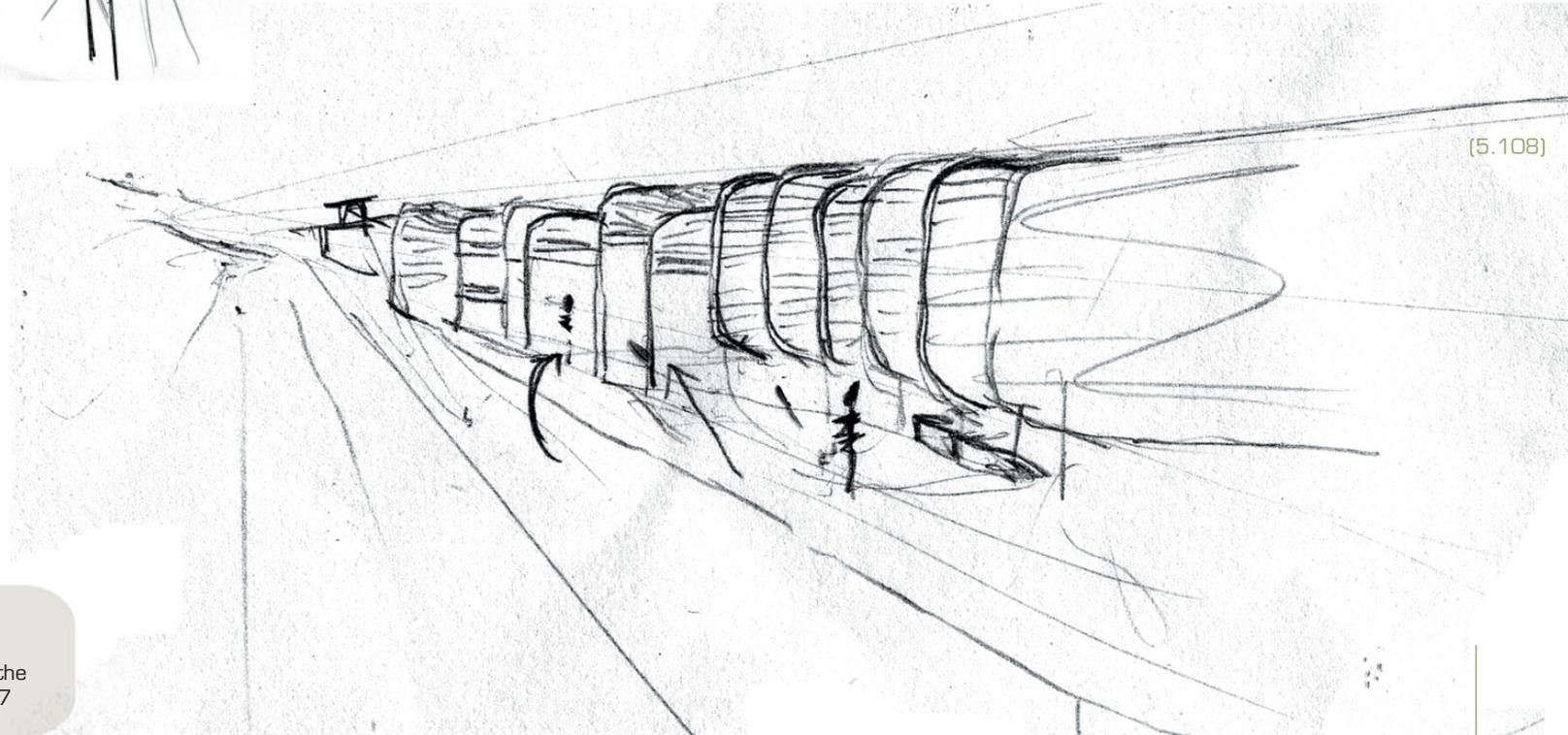


Defining an edge itself manifests the theoretical concept of the border, reflecting the process of transition by initiating an alternative urban fabric; one in which the segregation of 'inside' and 'outside' is being enriched by a third dimension of the 'in-between'.

(5.109)



(5.108)



**Figure (5.107), (5.108) & (5.109):**

Perspectives and views of the proposed building - June 2007

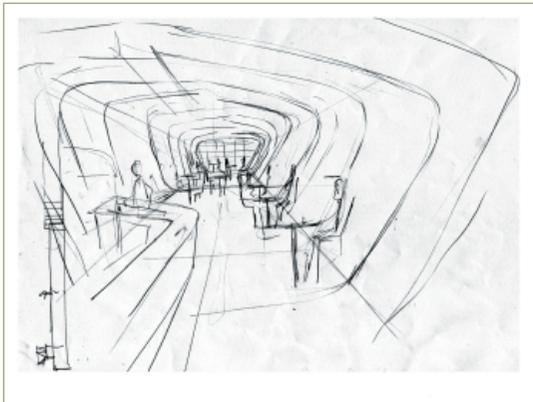
The aim is to design a place in which all people would feel welcome, where Africans from urban and rural areas, the young and the old, could gather without inhibition, and have a connection, a sense of belonging and identity.

**Figure (5.110) & (5.111):**

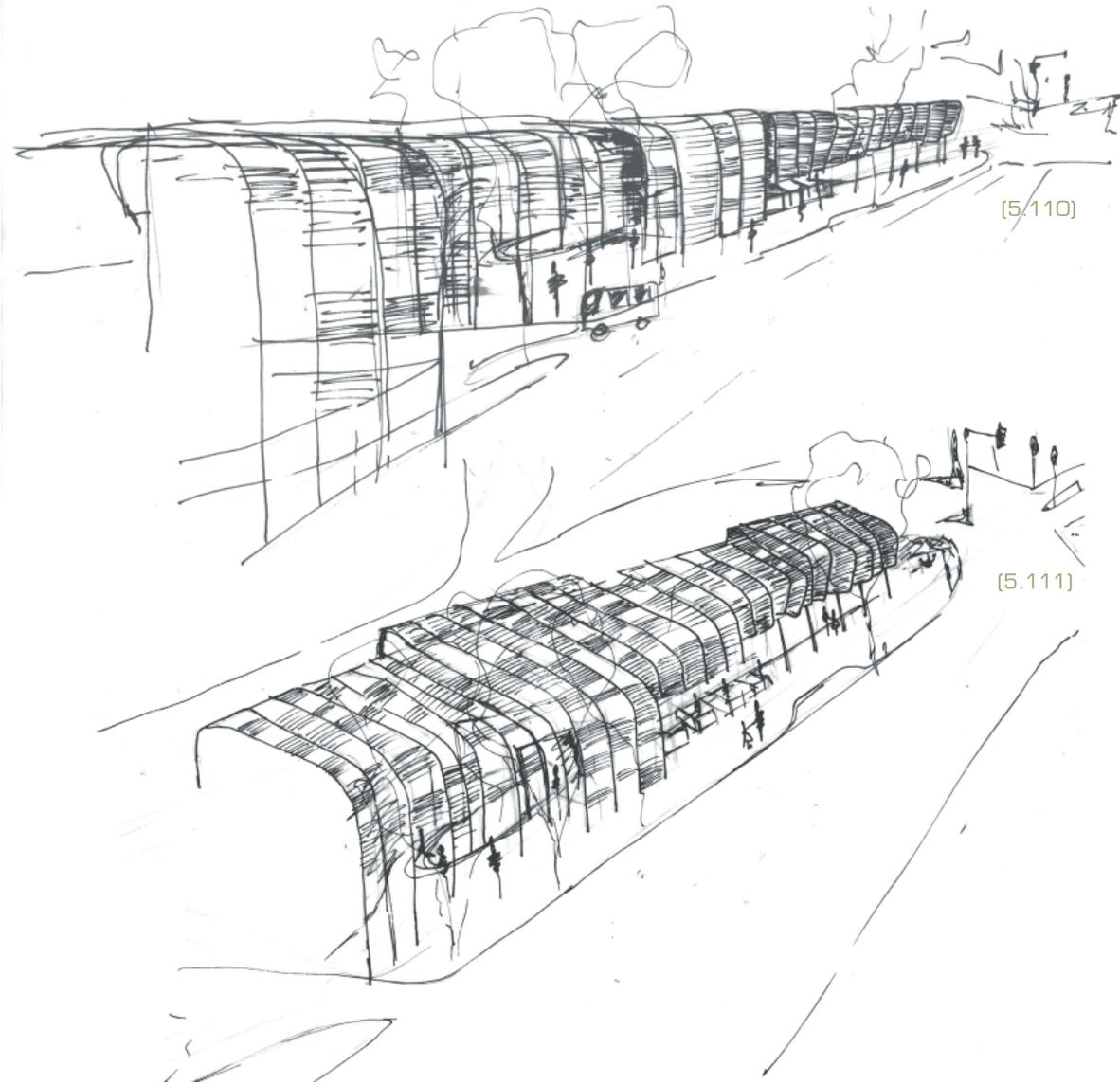
Views as approached from the north-eastern side

**Figure (5.112):**

View from inside of the cafeteria towards the intersection



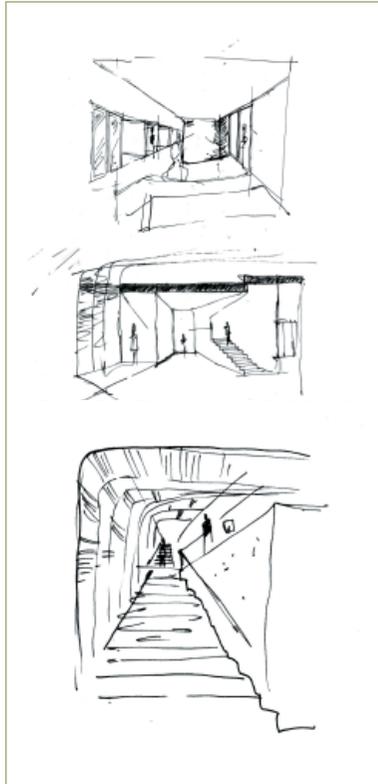
(5.112)



(5.110)

(5.111)

The intervention encourages active participation and accessibility, offering safe and legible places for people to gather, while everyday activities can happen all around them.



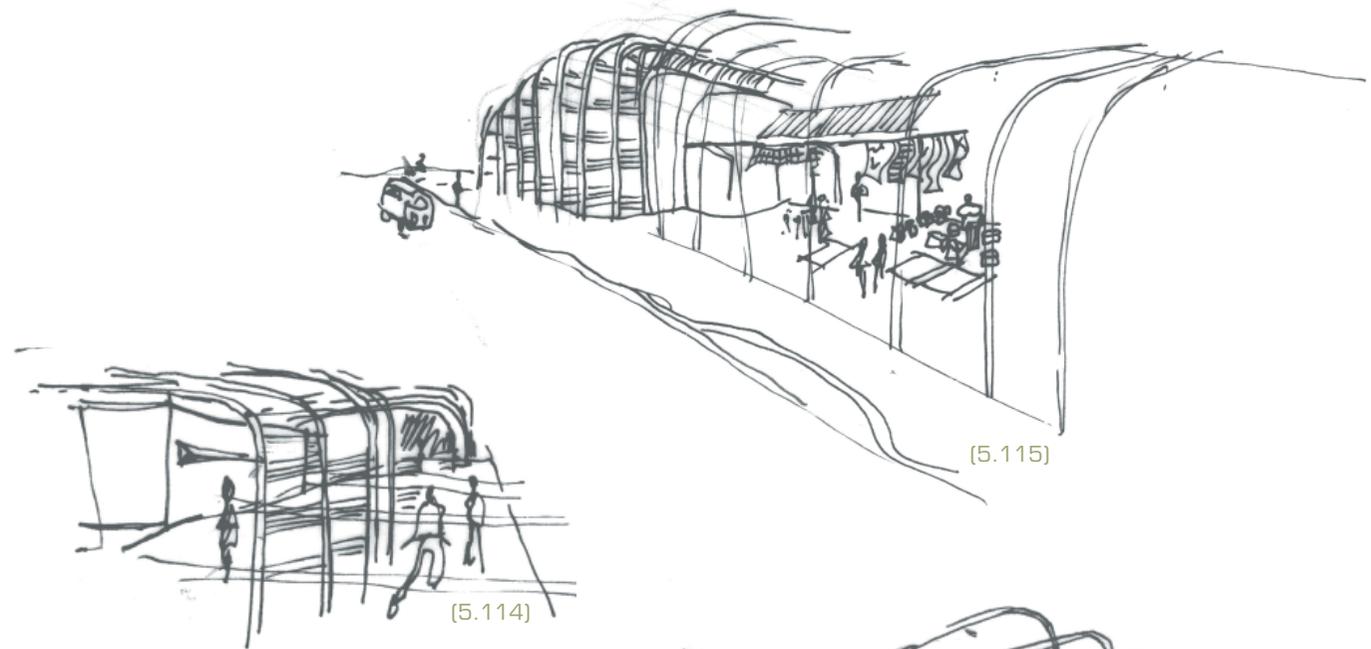
(5.113)

**Figure (5.113):**

Interior views and perspectives

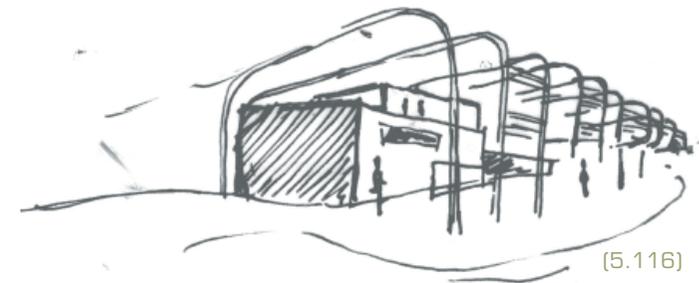
**Figure (5.114) - (5.116):**

Sketches illustrating everyday activity around the building within open public space



(5.115)

(5.114)

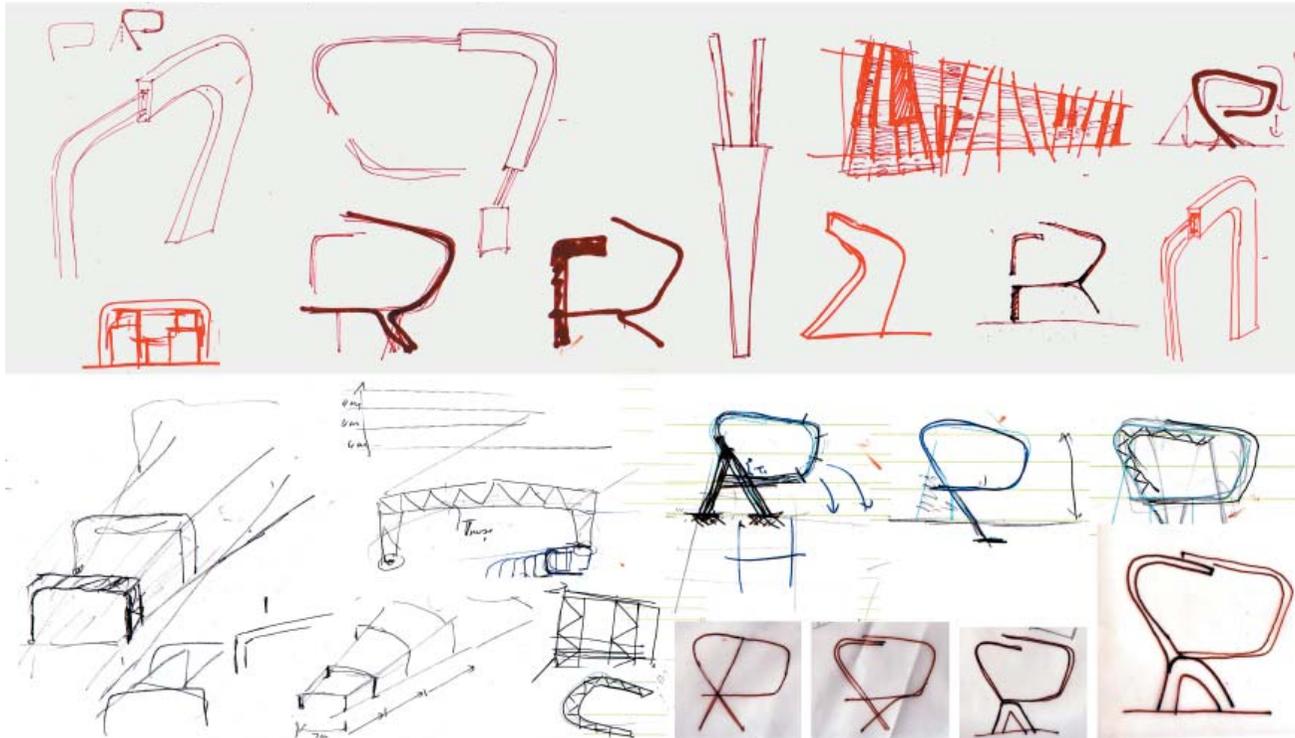


(5.116)



**Figure (5.118):**  
Concept sketches exploring potential structural solutions

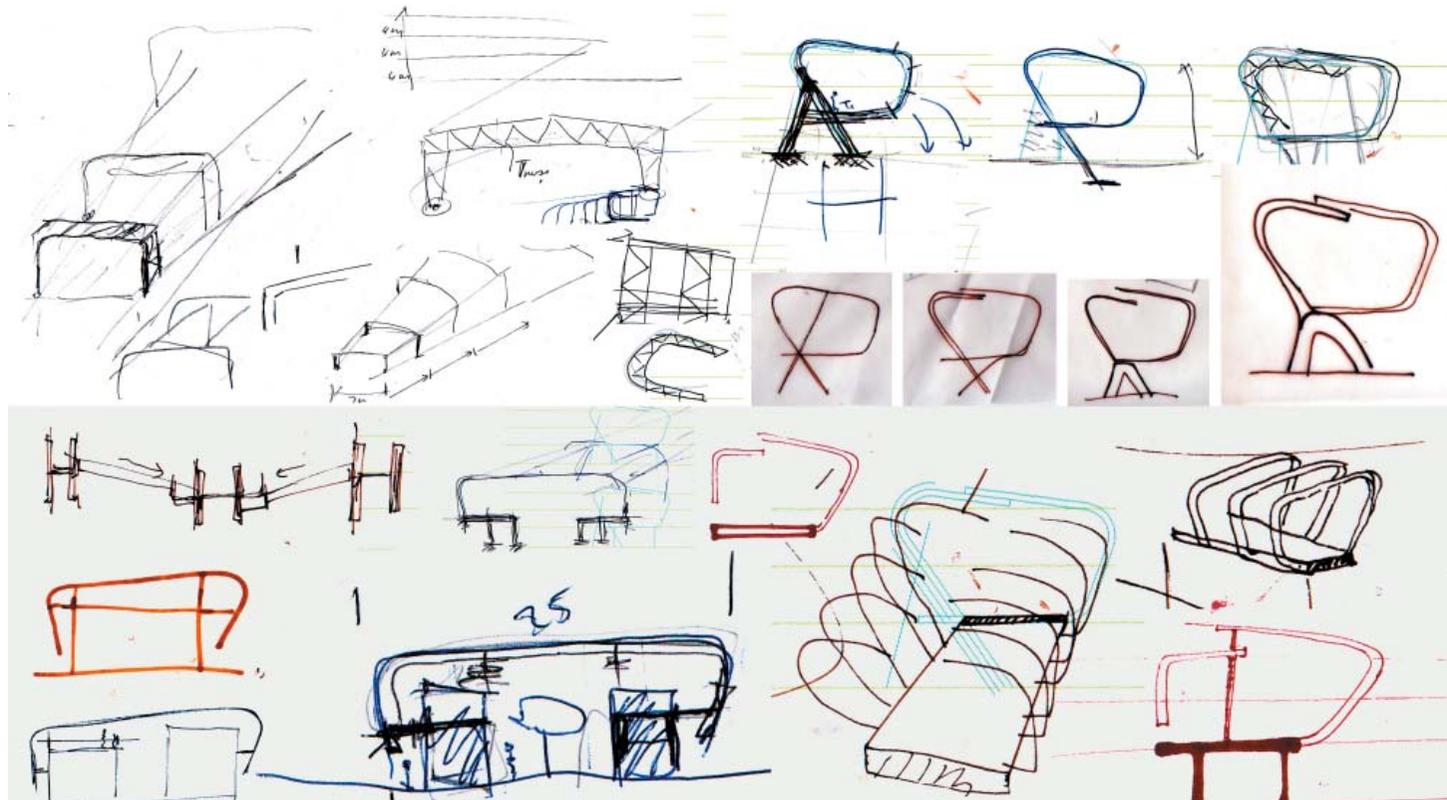
At this stage of the design process, the structure of the building was of primary concern in the dissertation. An investigation of possible structural solutions enabled the designer to have a better concept of the building and the tectonics involved.



(5.118)

**Figure (5.119):**  
Conceptual sketches investigating  
alternative load bearing structures

The aim was to reveal the structural system of the building to the user, through honesty of construction. Precedents were also sought that dealt with folding planes and alternative load distribution systems.



(5.119)



(5.120)



(5.121)

The structural design of the building evolved increasingly towards the end of the design resolution. It was at this stage that the designer did a revision of her first conceptual ideas and intentions. Cluttered with a vast amount of information, precedental inspiration and external input, the designer was forced to make elementary decisions regarding the structural participation of the additional skin. (Refer to pg. 124 & pg. 88) Retrospectively, the transitional context became an indisputable aspect of the initial concept and this could not be ignored.

**Figure (5.120) & (5.121):**

The work of Rem Koolhaas influential as subjected to folding planes

**Figure (5.122) & (5.123):**

Santiago Calatrava: Marousi, Athens and City of Science, Spain. His work was chosen as alternative precedent after revision of the designer's initial concepts

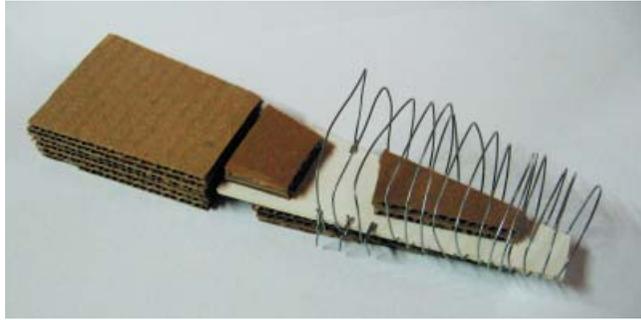


(5.122)

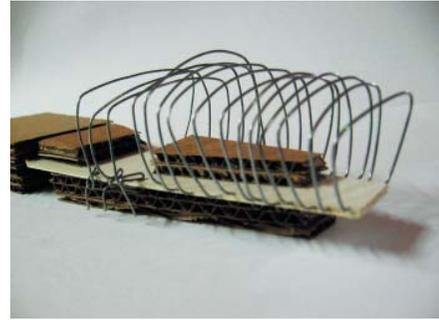


(5.123)

## 5.2.8\_Concept Models 4



(5.124) Concept Models 4 - July 2007

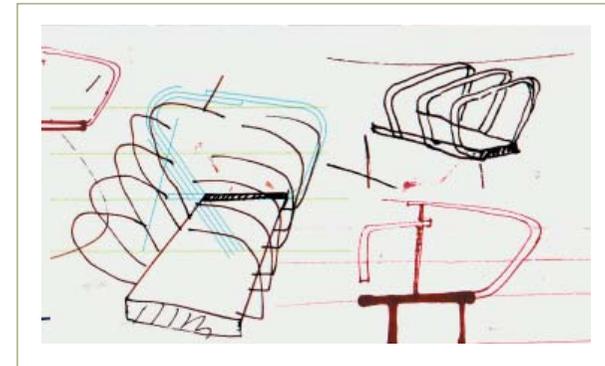


(5.125) Concept Models 4 - July 2007



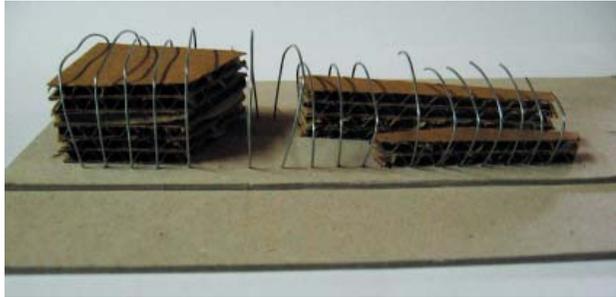
(5.126) Concept Models 4 - July 2007

This concept model is still very much concerned with the skin as being unseparable from the structure of the building. However, as mentioned earlier, the 'free facade' presumes a distinction between the structural and nonstructural elements of the building, between the frame and the cladding.



(5.127)

**Figure (5.127):**  
Conceptual sketches investigating alternative loadbearing structures

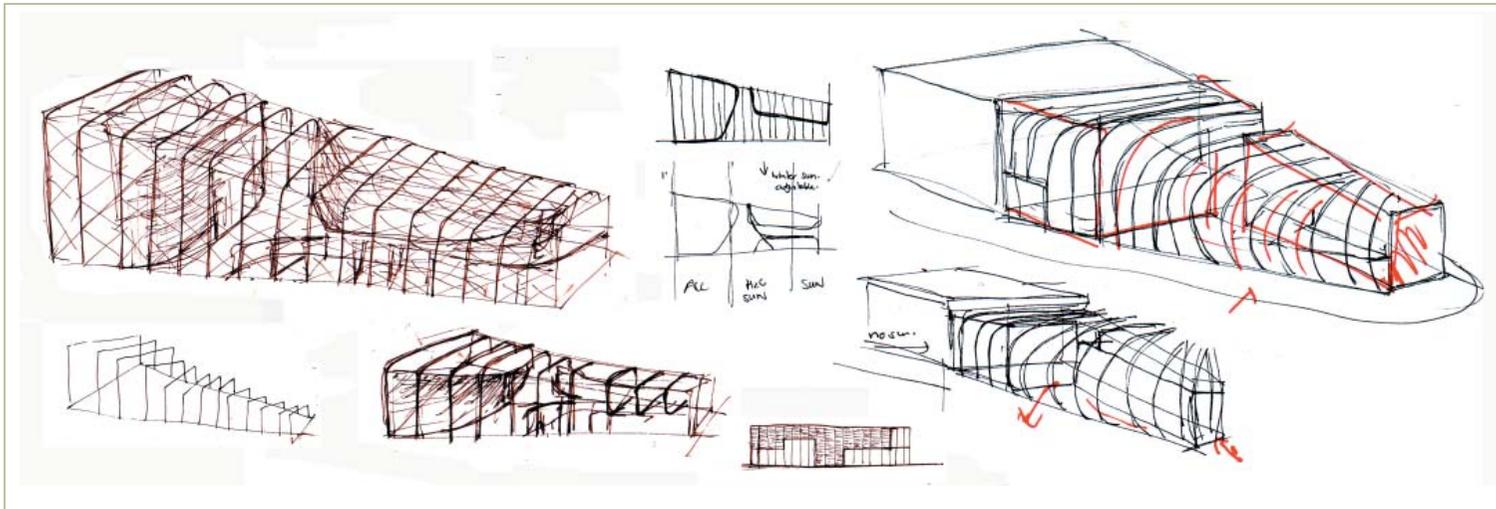


(5.128) Concept Models 4 - July 2007



(5.129) Concept Models 4 - July 2007

The influence of National School of Theater as precedent, can be directly linked to the investigation of this model (see pg. 94 and pg. 95). The articulated forms represent a model of controlled disruptive order. This contradiction between random appearances and a calculated order creates a paradoxical dynamism among the enclosed forms.

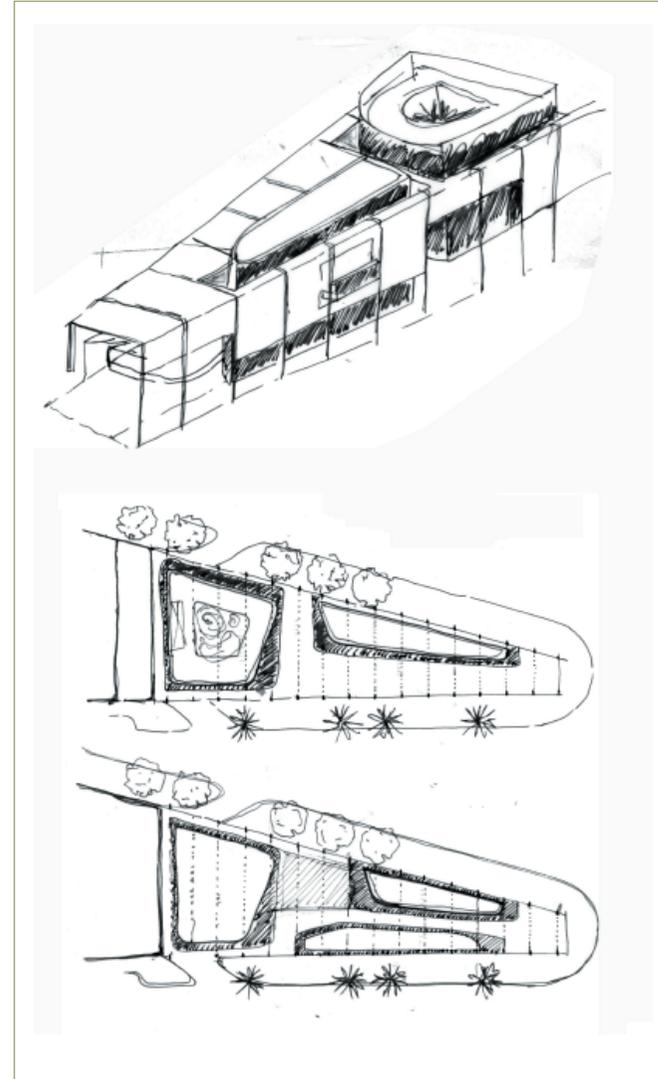
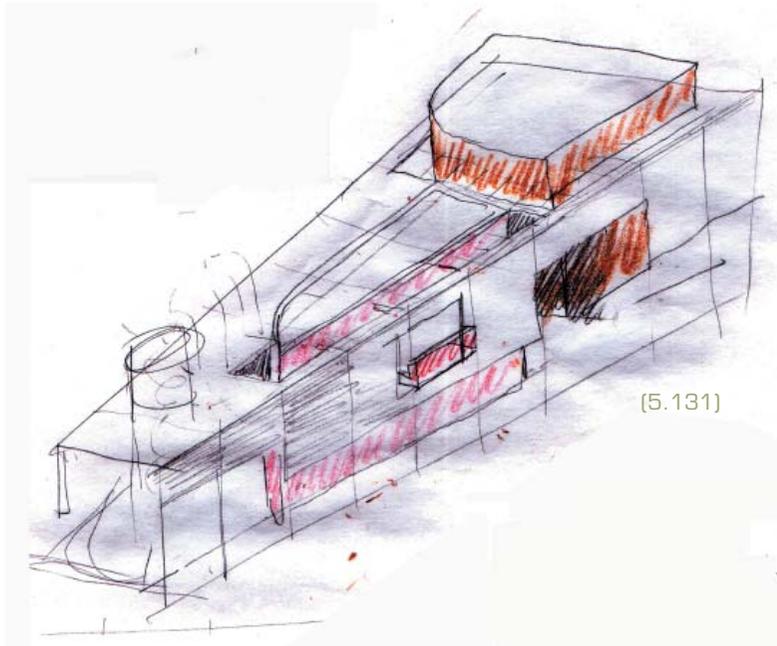


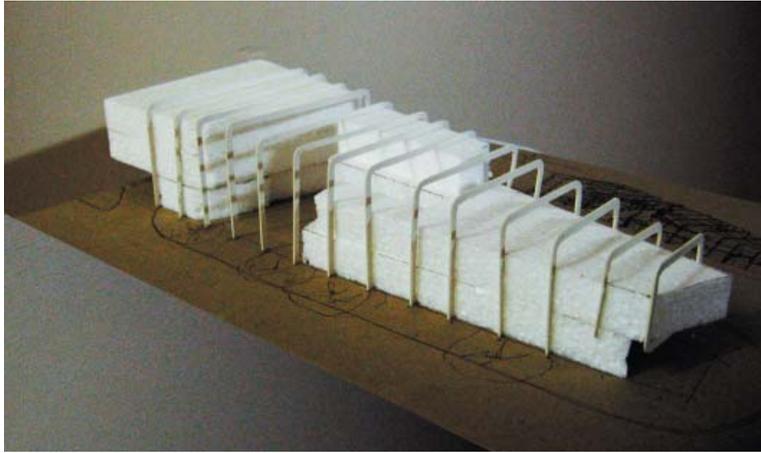
(5.130)

**Figure (5.130):**  
The sketches explore the relation between controlled space and random enclosure

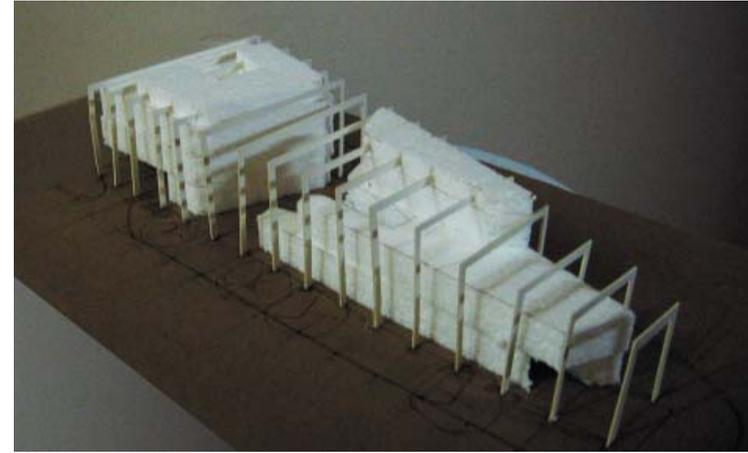
**Figure (5.131) & (5.132):**

The sketches is part of the experimental model in figure on the following page

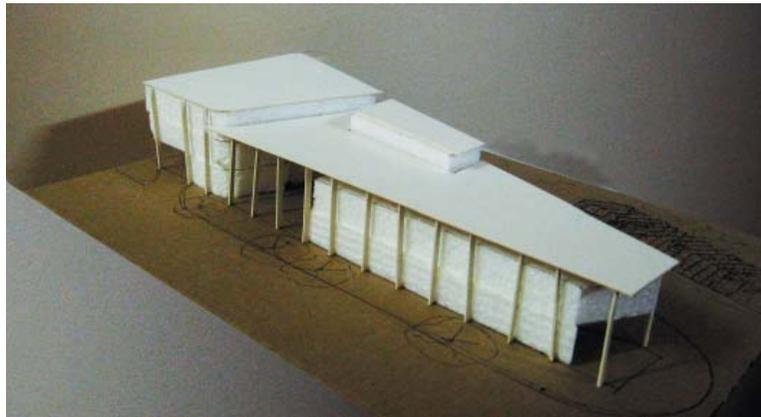




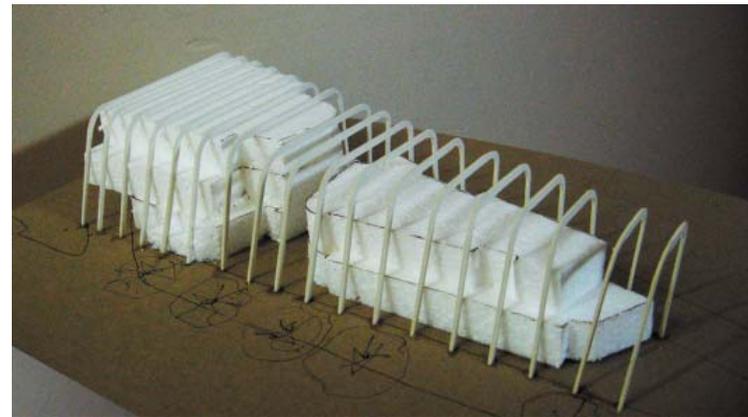
(5.133) Concept Models 4 - July 2007



(5.134) Concept Models 4 - July 2007



(5.135) Concept Models 4 - July 2007

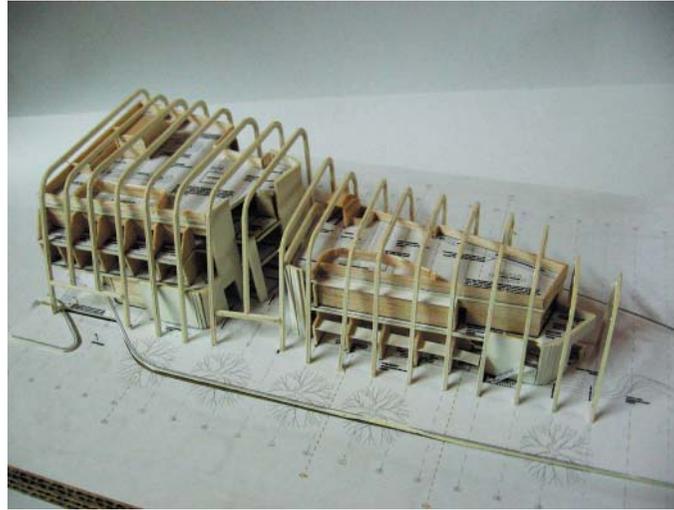


(5.136) Concept Models 4 - July 2007

5.2.10\_Design Development\_Model 5



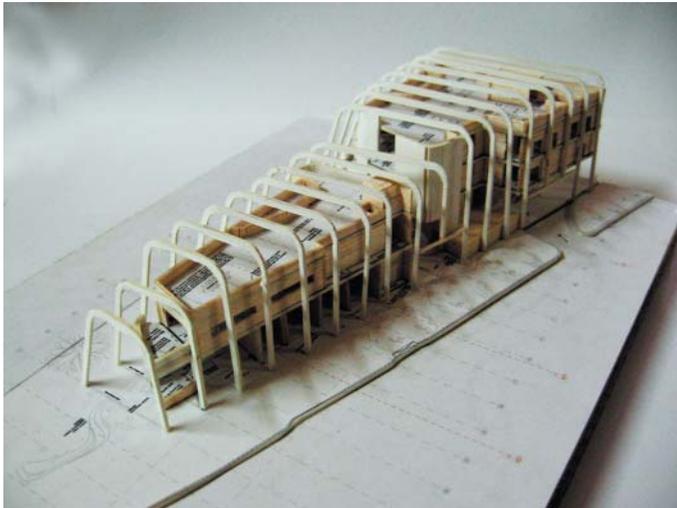
(5.137) Model 5 - September 2007



(5.138) Model 5 - September 2007



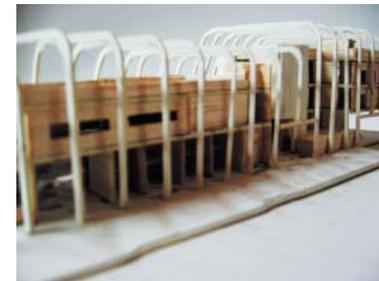
(5.139) Model 5 - September 2007



(5.140) Model 5 - September 2007



(5.141) Model 5 - September 2007



(5.142) Model 5 - September 2007