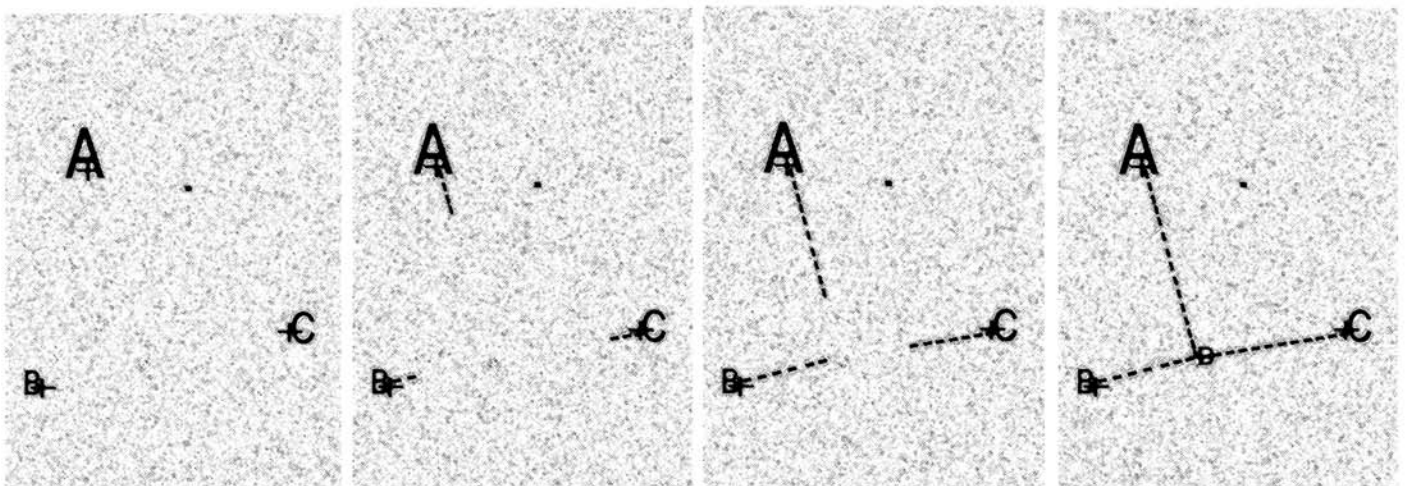


### 3.5 Emotional context

#### 3.5.1 Unpacking the network

This study finds itself in an ever-changing and unpredictable time and place. It is unpredictable because there is not a set of rules, which is being followed uniformly. It is ever-changing and so never the same as the day before. The context is not as simple as one would think. It can be likened to a fluid that is a jumble of colours, maybe a nebulous grey that is always in between destinations, and yet at the same time is connected to so many things, places, situations and journeys. Within this nebula, connections are being forged and broken constantly. Previously, something would only have been an island, but in this network, nothing can exist on its own. Nothing exists on its own.

fig 3.49-52, fig 3.59 Diagram showing how people travel from the townships surrounding Pretoria to the taxi rank in Bloed Str



25 network of realizations is materialized that need not be formalized in the present, but which exists in some imminent state for future mobilization when necessary.

"Potential network" is the active phrase in this quotation and also the generating factor in this project.

According to Adjaye (2005), one can either limit this network, by monotonous codified architecture, or one can set the parameters in which this activity can emerge in its own time and way.

fig 3.18-48 Early morning traffic as one enters the

city through van der Walt Str

fig 3.56 "African rural dream". All space is seen as public, except for space designated as private through ritually contrived building methods

fig 3.57 "European rural dream" all space is private and designated so through graphics and legal orders

fig 3.58 Household groups, Doringberg

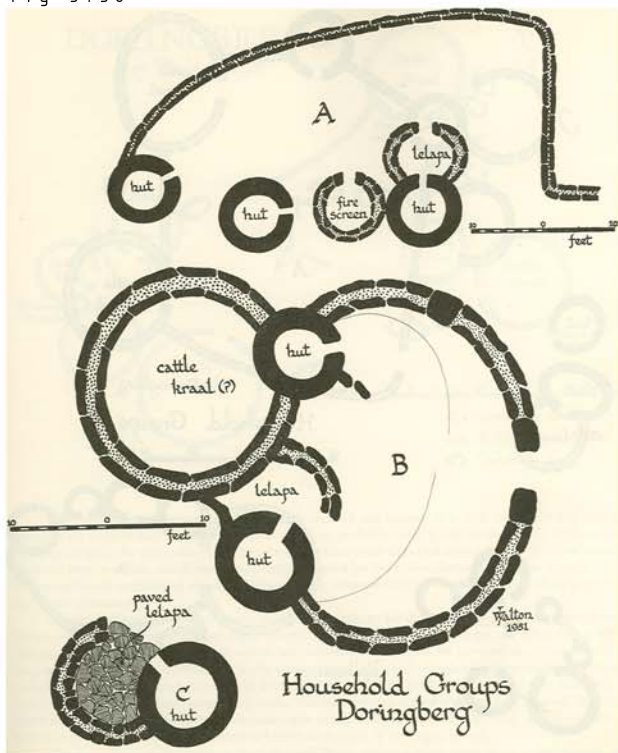
- 24 An indigenous person sees the entire piece of land as completely public. What becomes private, is defined by ritual. That is, the ritual of sleeping in the same place every night would be translated into a bedroom or a place to sleep (see fig 3.56).

Adjaye in his article *Learning from Lagos: a dialogue on the informal habitation*, describes the relationship between the "colonial" city and the informal city by looking at the previously Belgian-ruled Kigali in Rwanda. He describes the modernist buildings' interaction with the informal activity that exists around it and how these informal activities, humanize the architecture. He writes that architecture should not be desensitized to human interactions and activities and by allowing this interaction, it is not.

Abdoumalique Simone (2005) writes that:

Public space is elaborated not only to re-confirm social ties or legitimate everyday practices and attitudes, but also to create the impression that certain social realities, alliances, loyalties and political and economic activities are taking place, regardless of whether or not they are taking place in actuality. Working assessments are made of potential opportunities and prevailing realities and a potential

fig 3.58







22 After having walked through the study area of the city, it can be concluded from the experience, that there is little or no place to relax in this area, no public toilets, and very few places to sit on the sidewalk. It was noted that people who use this area frequently, pass through, vandalize, add to, or utilize the existing infrastructure and then leave. It feels as if and (there is no hard data to support this) that the frequent users are not proud of this part of the city. How could this part of the city better address its users and invite inhabitants and users of other parts of Tshwane to use it as well? It seems that this part of the city was designed, it was intended to be used more formally than it is being used now. Many buildings are empty from the first floor up. The ground floors of all the buildings are subdivided and occupied by shops which, from their appearance do not intend to stay for any length of time.

### 3.4 My city fails me



fig 3.56

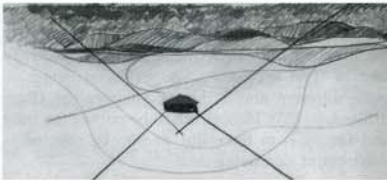


fig 3.57

Lloyd (2003) in an article in which he attempts to define African spatial perceptions, describes how differently colonialists and indigenous people see rural land. Colonialists would divide a piece of land into blocks, and define this as private land; the public areas would be the roads connecting the various blocks. Thus these properties would live inward, rather than out of their boundaries onto the street (see fig 3.57).



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fig 3.17  
 somebody doing  
 somebody is high  
 on the side walk.

fig 3.10-3.12 Early morning activity  
 along van der Walt Str.  
 fig 3.13 View along Brown Str.  
 fig 3.14- 3.17 Early morning activity  
 along Blood Str.

fig 3.11

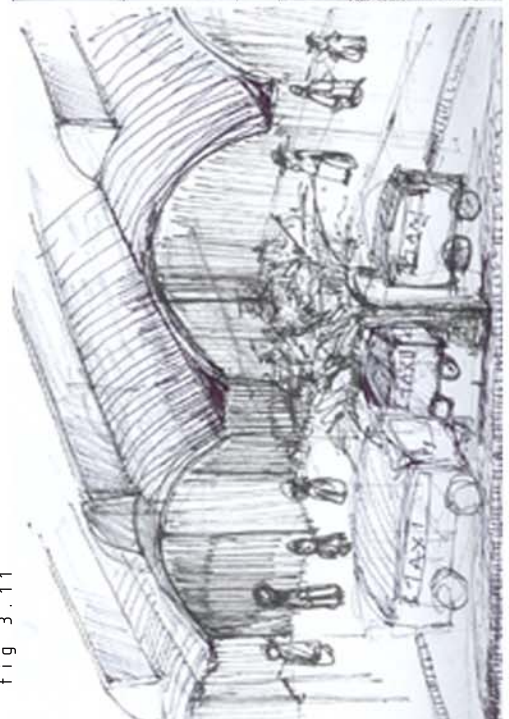


fig 3.12

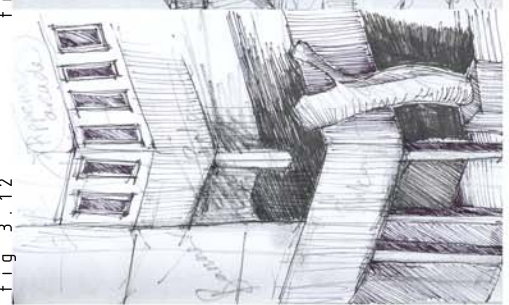


fig 3.13

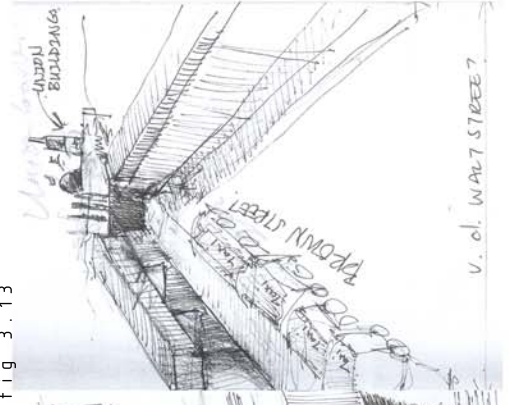


fig 3.14

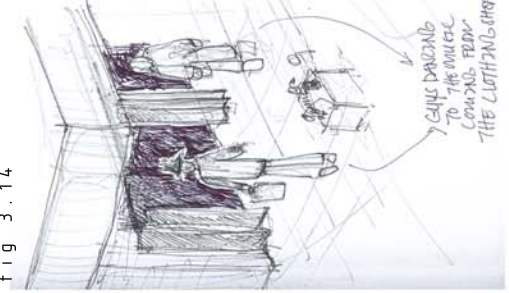


fig 3.15



fig 3.16





fig 4.1

Although it is simple and obvious in the organization of the plan, the user of this building has a different experience, due to the changing light and the staggered bookcase (Futagawa 2007).



fig 4.2



fig 4.3

- fig 4.1 Library's counter
- fig 4.2 Bookcases
- fig 4.3 Ground floors are placed between bookcases
- fig 4.4 First floor plan, longitudinal and cross section



fig 4.4

## 5.2 Concept development<sup>49</sup>

After close inspection of the site, it appeared that people were using the eastern side of it as a thoroughfare from the taxi rank to Brown Street. That gave a clue as to how the circulation could work. After realizing this, many options were investigated, to try and think of what the journey through the site could be like. Many of these options were too constraining and limited the use of the site by being too prescriptive.

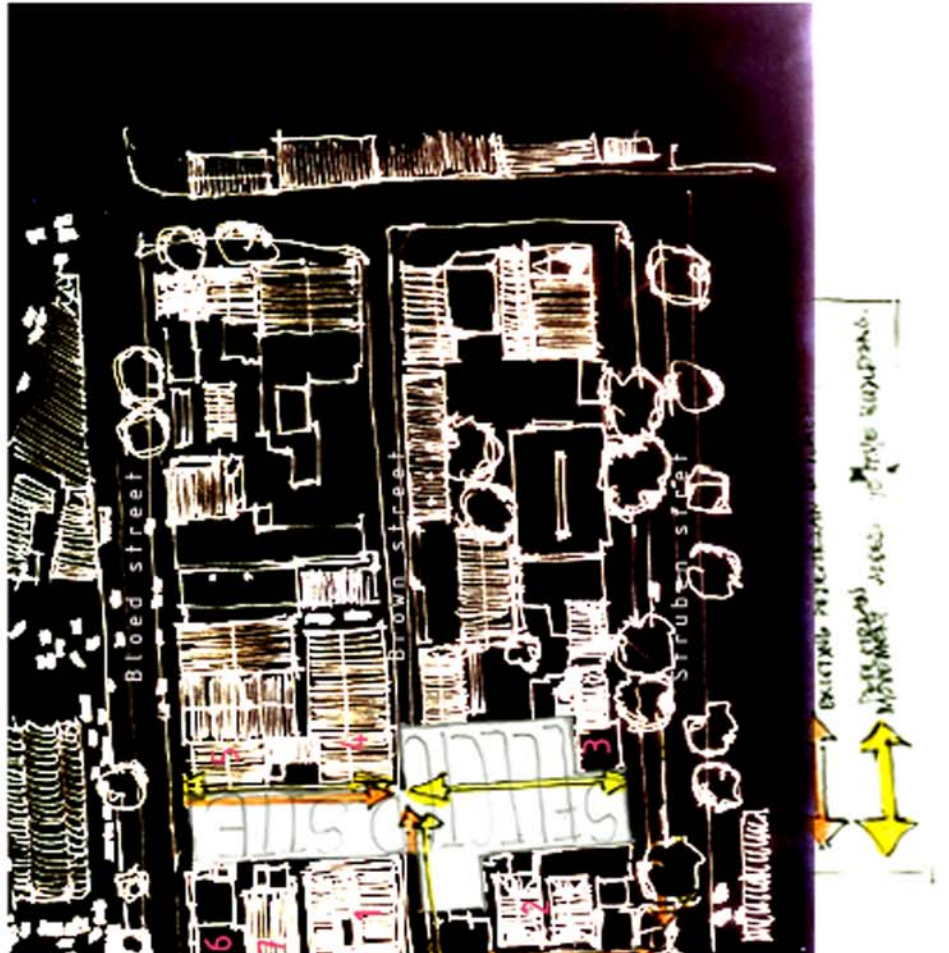
A schedule of accommodation, or rather, the spaces needed within an educational facility, was generated from investigating my own process of learning.

A brief explanation of the diagram (see figure). In starting the learning process, you are uncertain. The process of gaining more knowledge is never complete; you are always in between knowing, and not knowing, and knowing and knowing more. You can never know everything, and in actual fact, you are always in some state of uncertainty or in between.

To start the learning process, you need to get new information; this could happen through a teacher, or friend, the internet, a book, and probably in years from now, in ways that we could never have imagined now. After getting the information, you have to work with it, explore it, think about it, talk about it, taste it, see it,



ected site. Analysis of pedestrians routes.  
 buildings that surround site.



1



2



3



4



5



6



7

fig 5.4-5.10 Buildings around site







## 5. Design investigation

### 5.1 Site selection

After carefully considering the activities in and surrounding the study area, a site was selected that would result in an agglomeration and subdivision of existing sites. The intention of this site, amidst existing buildings, is to open-up the centre of the block to activity, and also to increase its value, socially and economically, as this would remove the underground activity. The buildings in the centre of the block are especially dilapidated.

fig 5.1 Analysis of activities around study area before site selection

fig 5.2 Further analysis of activities around site, especially formal and informal trade as well as pedestrian and vehicular movement

## 5 . D e s i g n i n v e s t i g a t i o n

The intention of this park, was not to be complete once it was finished initially. Many years after it was built, changes are still being made to the structures, which was the intention of the project.

Parc de la Vilette also challenges the convention of what a park or green space is. The structures in the landscape allow one to orientate oneself, on this otherwise flat plane (see fig 4.17).

Some of the programmes of the spaces in the park have been predetermined, and allow for activities, from exercises to mass entertainment. Other "left-over" spaces allow for complete programmatic freedom (Tschumi 1984:8).

With its concentrated multitude of activities, this park becomes a city within a city.

fig 4.16 Superimposition of three systems: line, point, surface  
 fig 4.17 Sequence  
 fig 4.16 Detail of north-south gallery

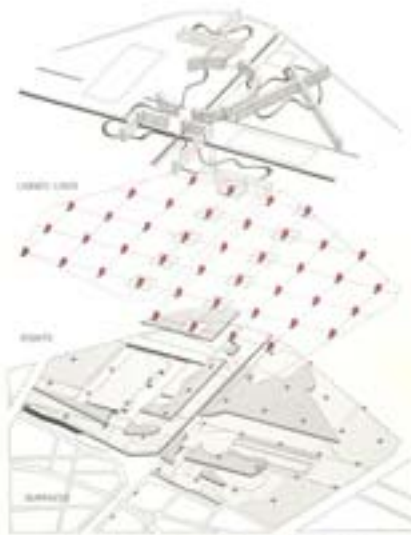


fig 4.16



fig 4.17

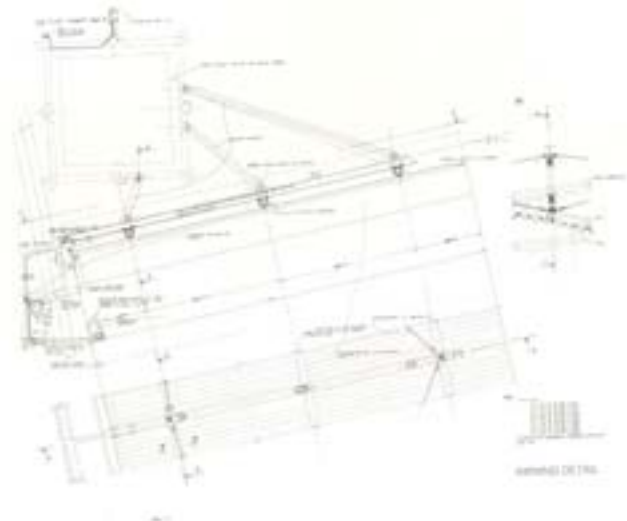


fig 4.18



## 4.2 Ideological precedent

### 4.2.2. Bernard Tschumi, Parc de la Vilette, Paris. (1987)

The design of Parc de la Vilette was the result of a competition held by the French government in 1982. The commission was won by Bernard Tschumi, a well-known Swiss-schooled architectural theorist, professor and designer.

The park is built on a site that was once the location of a slaughter house. Thus this "urban park" returns one of the large sites in Paris, to the people.

The park is a piece of the city with its own complexity. It is meant to functions in the domain of the interpretation and use characteristics of the city, and to push these further. Tschumi said that its' architecture is about movement, the event, the user of the building (see fog 4.116). There is constant confrontation between the architecture of the park and the user.

The design of the park is influenced by the deconstructivist ideas of Derrida.

In an interview with Derrida, he wanted to know from Tschumi why architects are interested in deconstructivism, if deconstructivism does away with form, hierarchy and structure? Tschumi answered because the architects want to challenge these notions.



fig 4.12

The roof beams are spontaneously used to display drawings (see fig 4.12). This was Tschumi's intent. The building is robust to carry the bustling architectural students and their ever-growing clutter.

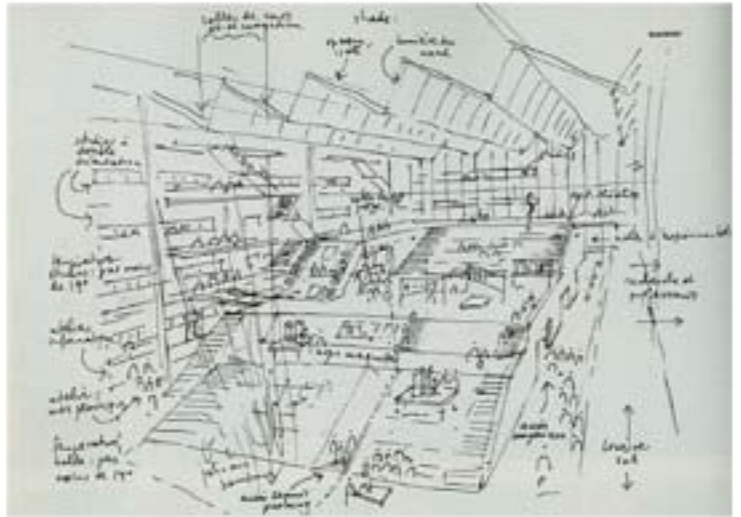


fig 4.13

- fig 4.15 Photo of elevation
- fig 4.14 Photo of Interior
- fig 4.13 Drawing by Bernard Tschumi
- fig 4.12 Interior

fig 4.14

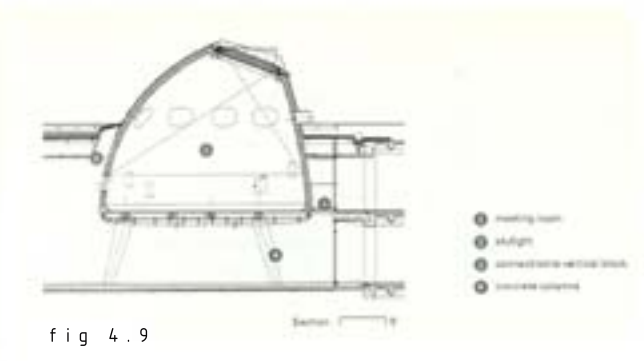
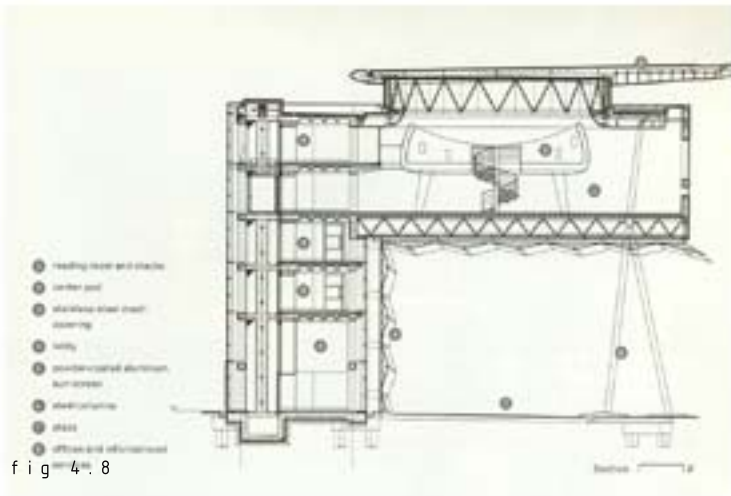


fig 4.15

4.1.4. Bernard Tschumi,  
School of architecture,  
Marne la vallée, France  
2000

The plan of this school is simple and economical. There is an emphasis on circulation as here are many crisscrossed walkways and staircases (see fig 4.13). It can be imagined that that because of this there would be many places to meet someone unexpectedly. These walkways surround an atrium, which forms the social centre of the building. Light enters the building through the glazed eastern and western façades (see fig 4.14). A lecture hall is suspended in the atrium. The sides of the lecture hall are clad with expanded mesh panels, giving it a glinting appearance (see fig 4.13). The building façades are a collection of opaque and transparent surfaces. The spaces of the building lend itself to both formal and informal study.





These pods are used to bring light into the library, by letting light in through their tops (Slessor 2000).

fig 4.8 Pod  
 fig 4.9 Section  
 fig 4.10 Fourth and ground floor plan  
 fig 4.11 Photo of elevation

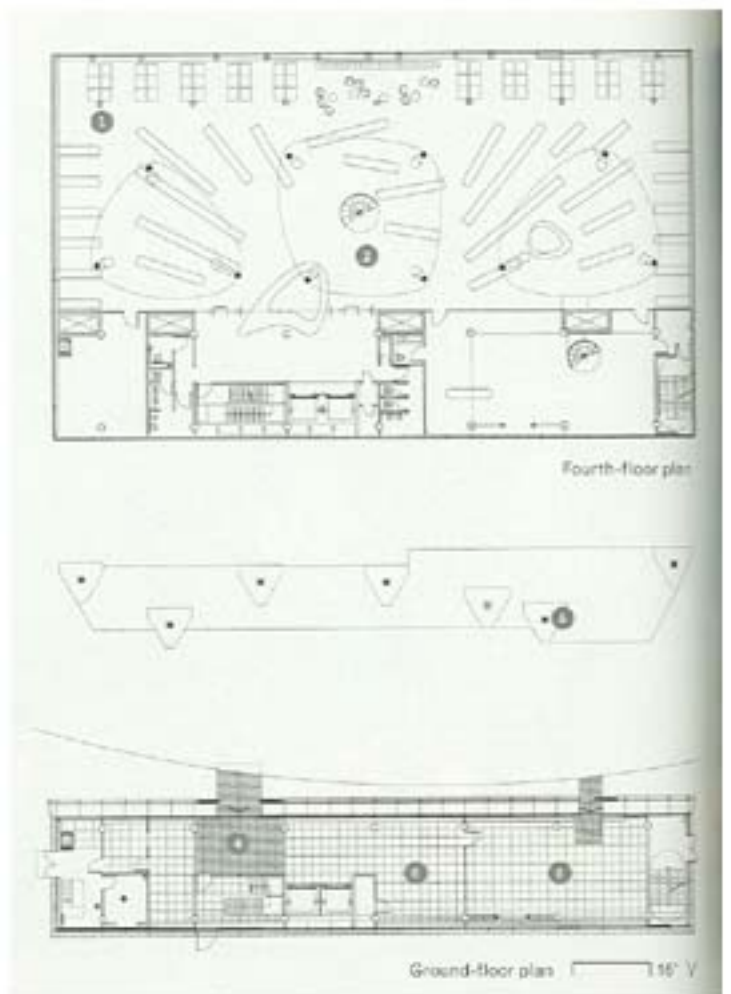


fig 4.10

4.1.3 Allsop and Störmer,  
Peckham library and  
media centre,  
London

This library was designed to uplift the surrounding community, by becoming an attraction to the Peckham area. It is a bold and iconoclastic building, with an exuberantly coloured exterior (see fig 4.11). It stands out in the otherwise industrial landscape. Its design is intuitive and fun, and sort-of outlandish as it differs so vastly from what is traditionally regarded as a library. Although it appears to be a rather strange structure and the interior seems to be filled with randomly arranged furniture (see fig 4.10), it is carefully designed to be ecologically friendly, by limiting its energy consumption. The main library space is contained in three ovoid pods (see fig 4.8).

The striped façade also reflects the striped roof of the nearby market.



fig 4.5

fig 4.5 Sidewalk of Whitechapel road  
fig 4.6 Ground floor plan,  
fig 4.7 First floor plan,

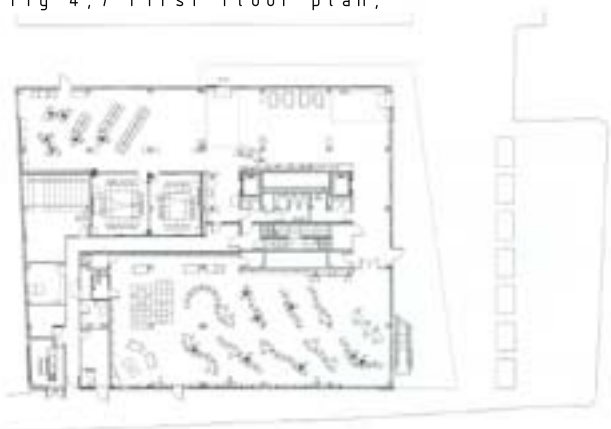


fig 4.6



fig 4.7

4.1.2 David Adjaye  
Idea store  
Whitechapel,  
2000-2005

David Adjaye with his "idea store" projects, looks at how a library can become more inviting and "commercial" in the sense that it will not be removed and elitist, but rather part of the comings and goings of people and their everyday lives. The interior reflects the bright and uplifting exterior of the building. Special allowances are made for people with disabilities, by modifying counters and creating accessible circulation, thus excluding no-one (see fig 4.6-4.7).

Circulation and entrances are used to animate spaces. The "idea stores" is a brand and the "idea" is that these buildings would uplift communities that use them. In a sense these stores become pillars in communities.

The Idea store in Whitechapel Road interestingly addresses the informal market on the sidewalk of the building, by allowing people to enter the building by walking through this informal market (see fig 4.5). This market is also visible from the inside of the building.

The striped façade also reflects the striped roof of the nearby market.

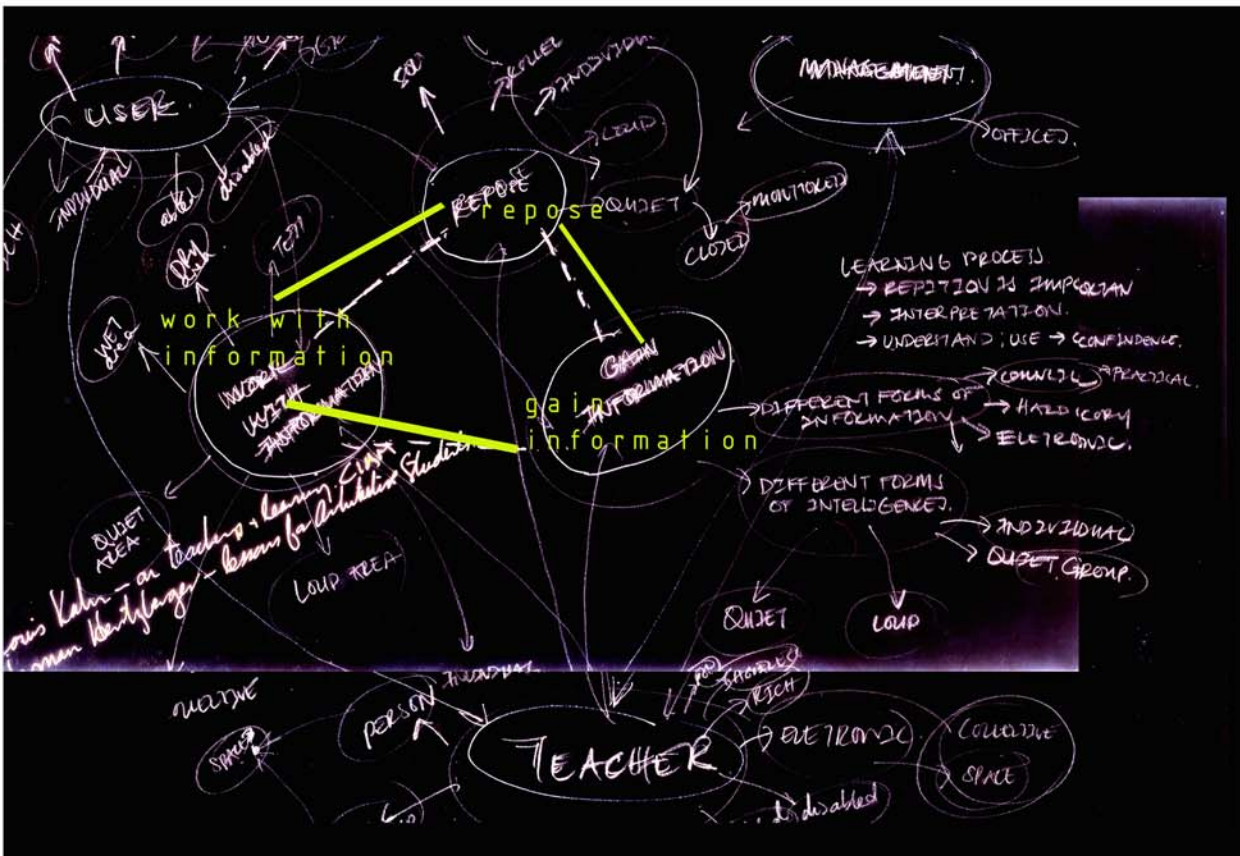


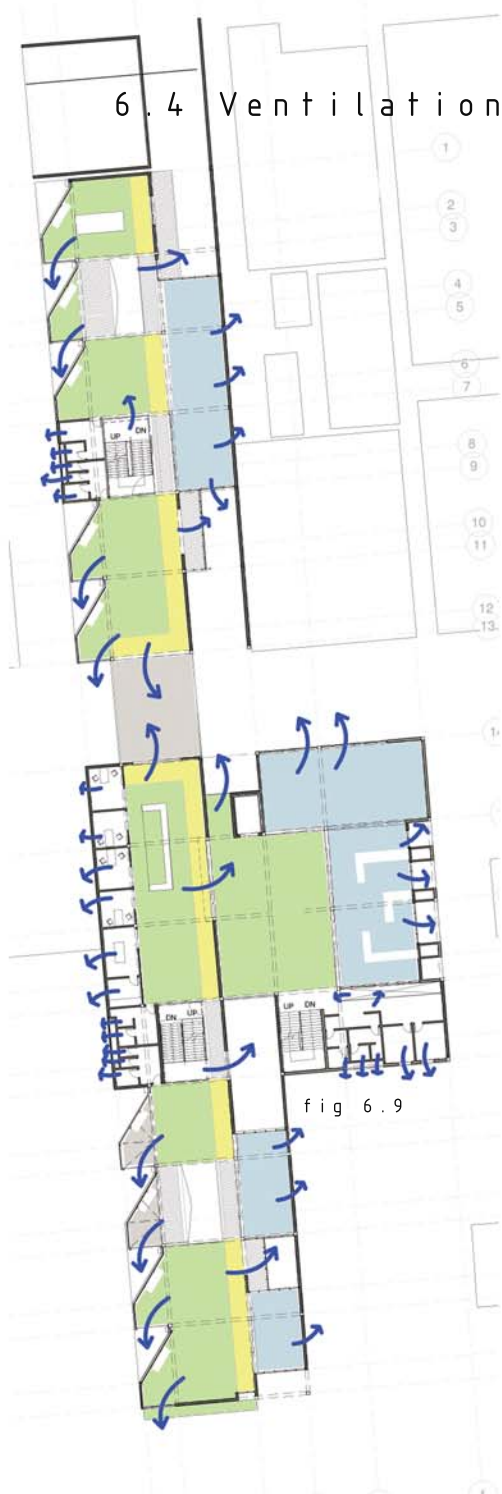
50 if you have to, thus a designated area for exploration and experimentation is needed.

Only after making the information part of your previous knowledge, have you truly learnt something.

From looking at this process, and the process of the management of the building, the concept plan of the building was derived. The overall idea of the building would be: a long narrow building stretching from Bloed Street through to Struben Street, with circulation in the furthest western third of the site. It was decided that the roof would be the single cohesive element over the entire building.

fig 5.11 Diagram of the study process





As this is a narrow building, natural ventilation is permitted as indicated in fig 6.9. Special allowance has been made for the windows on the western and eastern (experimental area) façades to ensure that the openings of the windows will not be constrained by the surrounding buildings as the area develops further.

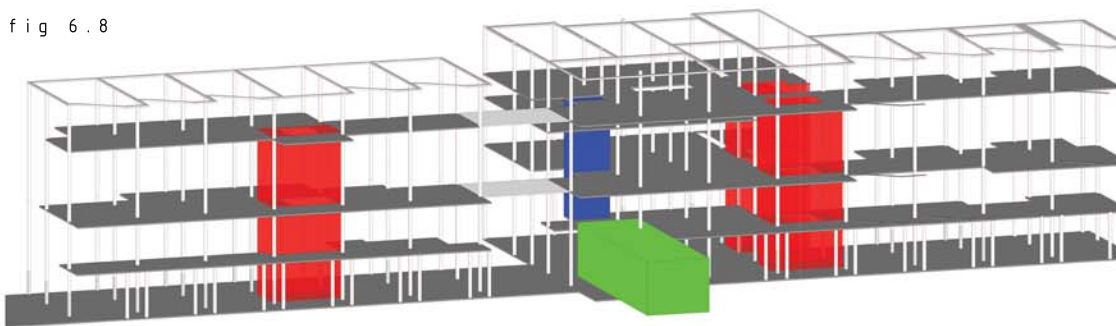
### 6.3.2 Vertical circulation

A ramp is accessed from Brown Street (green area in fig 6.8). From the first floor a lift can be used to access the other levels.

The space needed for the lift has been reduced by selecting an Otis GeN2™ lift. The cables of this lift are constructed of a combination of steel and plastic. This reduced the size of the motor and so, the motor can be fitted in the lift shaft.

The red areas in fig 6.8 indicate the location of the stairs that are the fire escape routes.

fig 6.8



6.3 Circulation  
6.3.1 Entry circulation

The building can be entered from Brown Street, Struben Street and Bloed Street (see fig 6.7).

fig 6.7 Entry circulation of building



fig 6.7



## 6.2 Enclosure

The various walls are indicated in fig. 6.6. Reinforced concrete walls (yellow walls in fig 6.6) were chosen to be a permanent wall, in that it would not easily be changed during the life of the building. Thus the adaptation of the building over time would include the cast in-situ concrete walls as a design constraint.



Concrete walls were chosen to emphasize the connection between the concrete floor slab and wall—in a sense the floor becomes the wall. It is also important in the passive heat cycle of the building during the course of the day. Heat would be gained during the day, and then reradiated during the night.

Brick infill (orange walls in fig 6.6) walls are used to allow the building to be adaptable over time as these walls could be broken out and changed. Red bricks are used to incorporate the architecture of the surrounding buildings. Red bricks are also a recognizable characteristic of Pretoria vernacular architecture.

Lighter walls (blue walls in fig 6.6) are used to enclose the office areas on the interior of the building. The intention of these walls is that the offices are not closed off and removed from the users. These walls allow for easy adjustability, as due to the light structure, it could easily be demolished.

The choice of the clipdek roof also incorporates the architecture of the many industrial buildings in the surroundings.

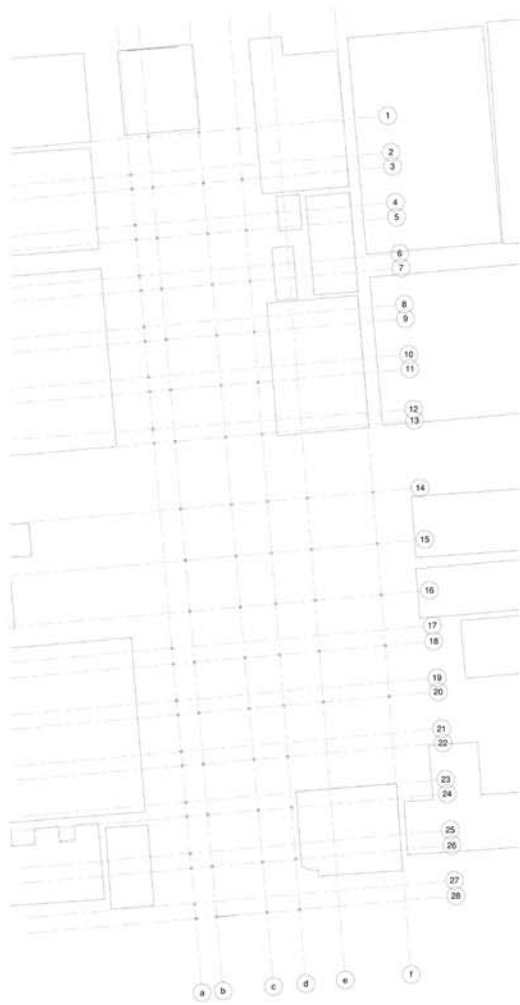


fig 6.4

The layout of the structural system (see fig 6.4) is designed to allow the maximum freedom of the plan. The column spacing divides the program of the building in three zones:

- reading area (where books are designed to be housed/offices)
- a larger area, that allows for more programmatic freedom
- a circulation zone.

The ground floor can adapt and grow within the bounds of the layout of these columns.

Specific areas are designed as "openings" in the floor structure (see fig 6.5). These areas now contain light boxes or staircases and wooden infill floors. Because the design of the structure of the floor allows for these openings, the building could change later, and these openings could be filled with a heavier floor.

fig 6.4 Layout of structural columns

fig 6.5 Indication of allowance of openings in floor structure

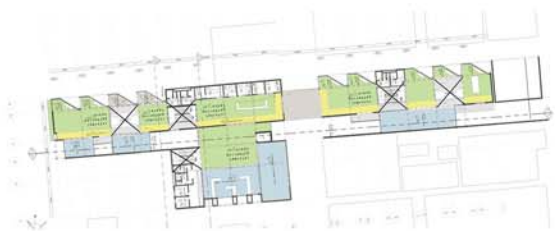


fig 6.5

## 6. Technical report

### 6.1 Structural system

The main structural system (see fig 6.1) of the building consists of:

- 330 x 330 reinforced concrete columns
- reinforced concrete floor slabs that are 170mm thick
- 510 x 330 reinforced concrete beams that run in between the concrete columns.
- 170 mm thick ring beams which carries the roof structure (see fig 6.2).

A lighter steel structural sub-system (see fig 6.3) is carried by the main concrete structural system.

This system consists of:

- 100 x 200 hollow section steel columns
- galvanized clipdek roof sheets
- 125 x 75 x 3.5 top steel top hats
- 160 x 80 hollow steel sections.

fig 6.1 Main structure of building  
fig 6.2 indication of concrete beams  
fig 6.3 Section a-a

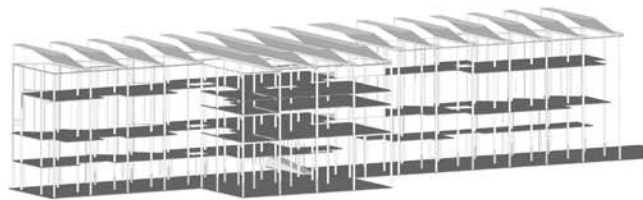


fig 6.1

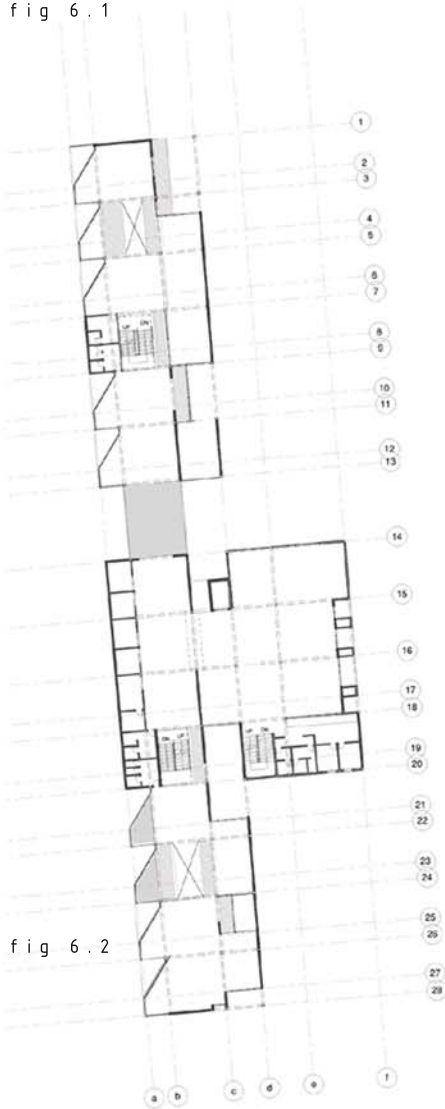


fig 6.2

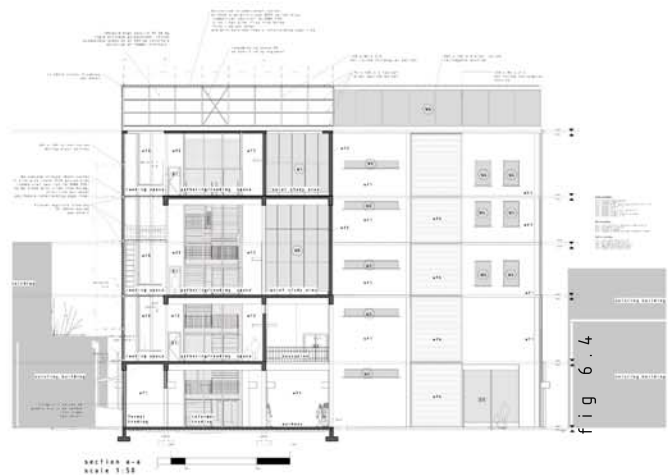


fig 6.4

## 6 . T e c h n i c a l R e p o r t



## 5.7 Building that influences

Initiating the design of this building was difficult, due to the complexity of the study area. Very careful assumptions had to be made because of the sensitivity of the social structures of the site. At a time in the design of the project, it was even considered only erect columns and water points on the site, and that the building would be developed by the users over time, and in a way build itself.

This idea was discarded for fear of failing to complete the project.

Yet in a way, the idea of an initial infrastructure and something being built around it still continues in the project – the building is to act as a pillar to the community. The infrastructure of the building should give the community the opportunity to build themselves. The aim of the building is also to build a sense of community in the group of schools and institutions that surround it as well as for the people that come from the taxi rank. A sense of community should be built, as this building creates a place where all the abovementioned people could meet and network. In getting to know one another, boundaries are broken down, and networks are formed.

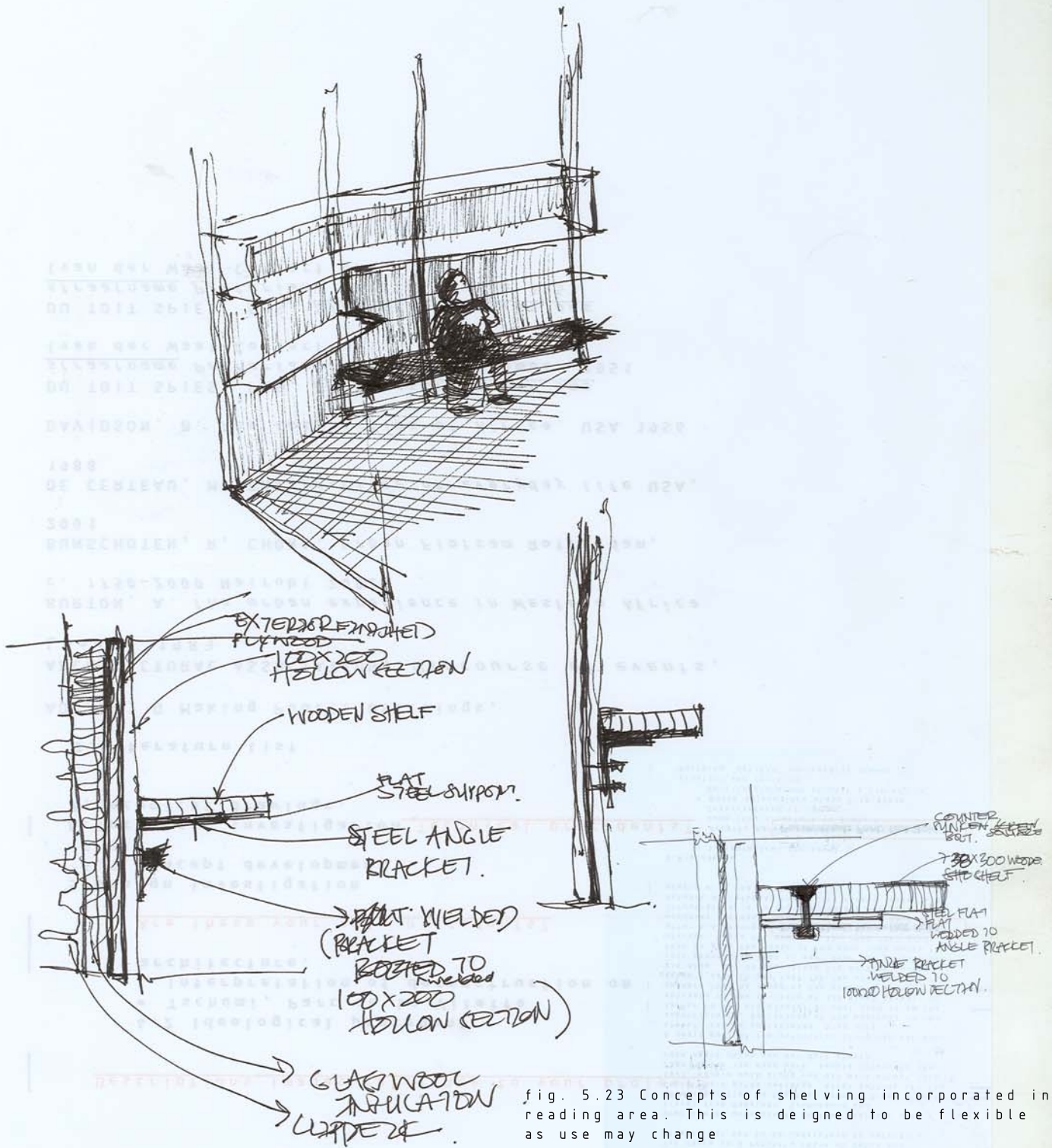


fig. 5.23 Concepts of shelving incorporated into reading area. This is designed to be flexible as use may change