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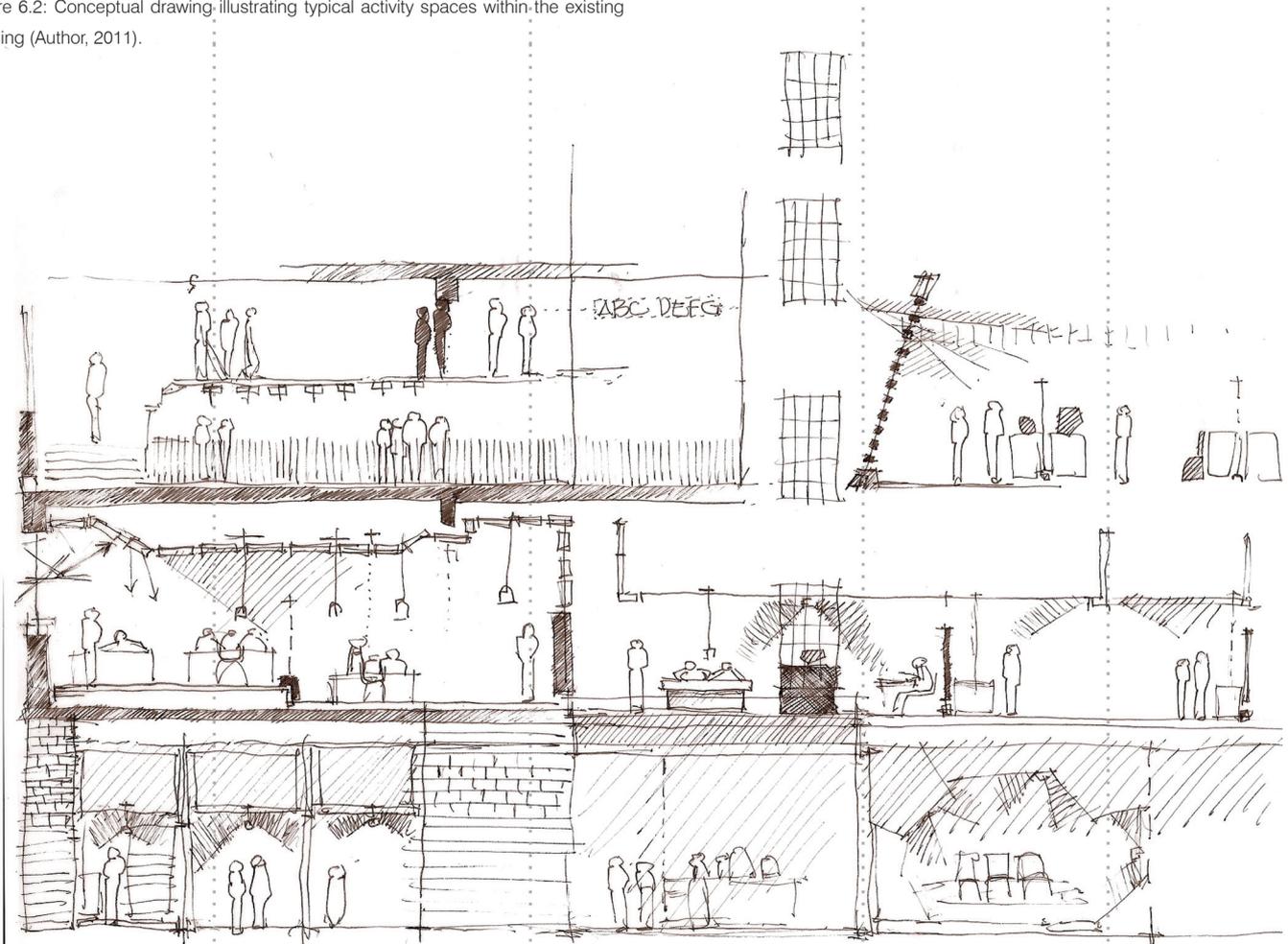
CONCEPT AND DESIGN DEVELOPMENT

6.1 TECTONIC APPROACH AND INVESTIGATIONS

Figure 6.1: Conceptual drawing illustrating structural and theoretical approach to existing building (Author, 2011).



Figure 6.2: Conceptual drawing illustrating typical activity spaces within the existing building (Author, 2011).





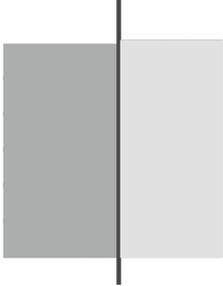
... a degree of partial demolition frequently played a critical part in development strategies, generating additional options for adaptive reuse.

(Kincaid, 2002: 55)

Deductions from case study: Gerard Street Telephone Exchange

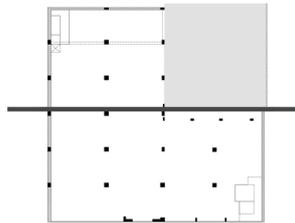


GROUND FLOOR



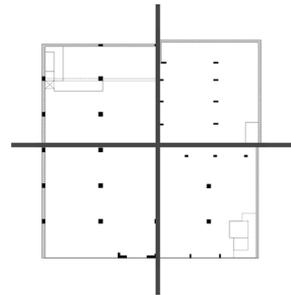
Division of north and south according to column spacing

FIRST FLOOR



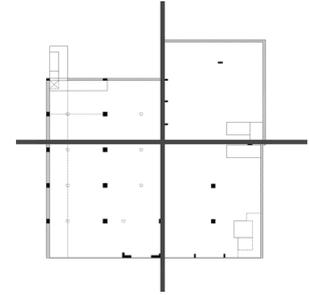
Identified sunken quarter on 1st floor

SECOND FLOOR

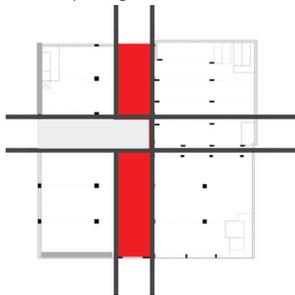


New grid formed: division in terms of programme

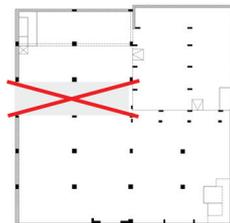
THIRD FLOOR



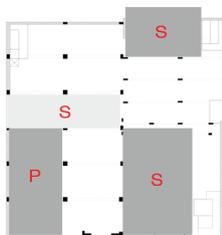
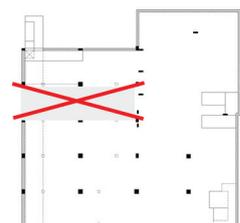
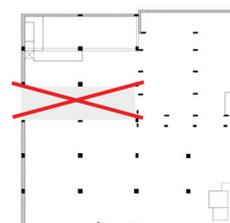
Possible programmatic quadrants identified



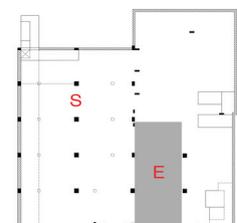
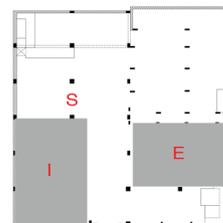
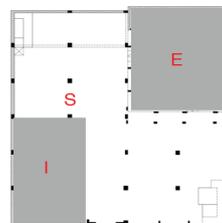
Proportions retained (west = north)



Structural intervention location



Zoning in terms of programme:



6.1.2 INTERVENTION APPROACH

It was decided to approach the structural intervention in a way that corresponds with the building envelope, in terms of orientation, heritage and functional appropriateness.

The existing main facade posed opportunity in terms of utilizing the neglected northern facade in order to allow for a structural intervention. Poor natural lighting in the building resulted in the introduction of an atrium, an insertion from the northern facade, that opens up the building in the same way the western street-facing facade is articulated with the vertical “fin”, positioned meticulously at the same location, retaining the same proportions on the northern facade.

The atrium is placed here, based on the existing column grid, as well as being an aesthetic decision, allowing the northern facade to become identifiable as a prominent one.

The main circulation is based in and around the atrium core, as well as the appropriate activities within the building: education, innovation, showcasing and propagation elements and areas, that will allow the concept of craft to be strengthened.

The east-west and north-south division plays an important role in the articulation of these spaces, which will allow the user of the crafts centre to be oriented as he/ she moves up and through the building. This will be done by means of branding and careful detailing of the new circulation core.

The approach to intervention is executed in terms of Fred Scott’s guidelines on altering an existing building:

1. The first step is stripping back, where the author gained an understanding of the host building (Scott, 2008: 108). The orientation and nature of the building in terms of interior and exterior, allowed for the implementation of an atrium to be established.
2. The second stage involved the process of identifying problems in the building (light, ventilation) as well as responding to them. This entails “making good” (Scott, 2008: 108).
3. Third, enabling the intervention, by allowing structural or other elements that would have prevented the building from functioning optimally, to be removed (Scott, 2008: 108).
4. Finally, the actual new work commences, in this case, the guidelines and procedures will make way for a crafts centre that allows for ample light penetration and new circulation.

E = EDUCATE

I = INNOVATE

S = SHOWCASE

P = PROPAGATE

Figure 6.3 (left): Approach to structural intervention (Author, 2011).

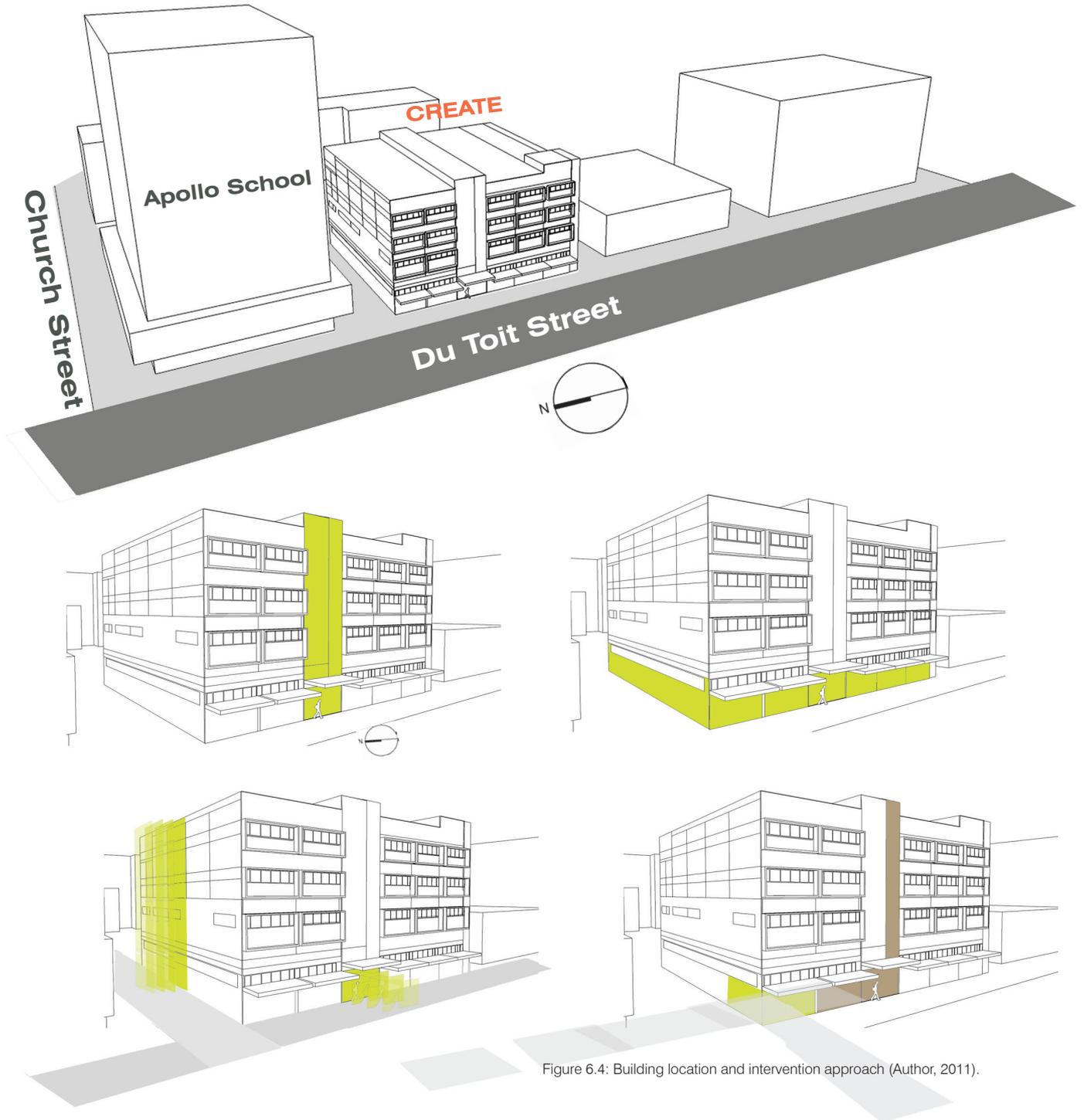


Figure 6.4: Building location and intervention approach (Author, 2011).



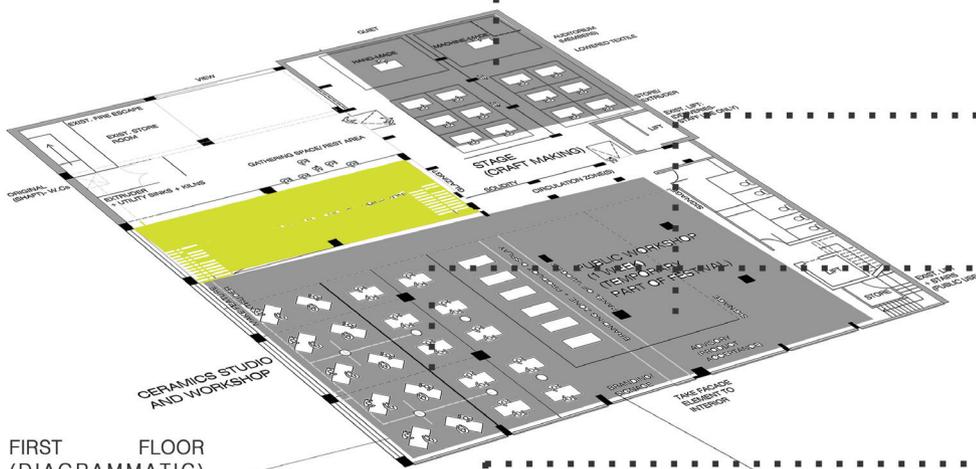
The diagrams on the left (see Figure 6.4) illustrate the spatial approach to the building, relative to its context. Du Toit Street runs past the western facade and draws in pedestrians from Church Street. Within the previous framework (see Figure 2.3), the block has become a pedestrian-friendly space, aligned with trees and most areas between buildings paved.

The most effective areas of the building are those that front Du Toit Street (west), the northern facade (opposite the Apollo School's circulation core) and the eastern facade (fronting the pedestrian-only paved areas).

It is decided to open up the building from the east and west in order to facilitate movement from the quieter pedestrianised zones and the busy streetscape. The most effective corner to introduce this threshold space is the north-west corner, retaining the upper levels but structurally manipulating ground floor level, as the ground floor has no visual impact on the pedestrian in terms of the modern aesthetics, unlike the other levels.



SKETCH PLAN DEVELOPMENT



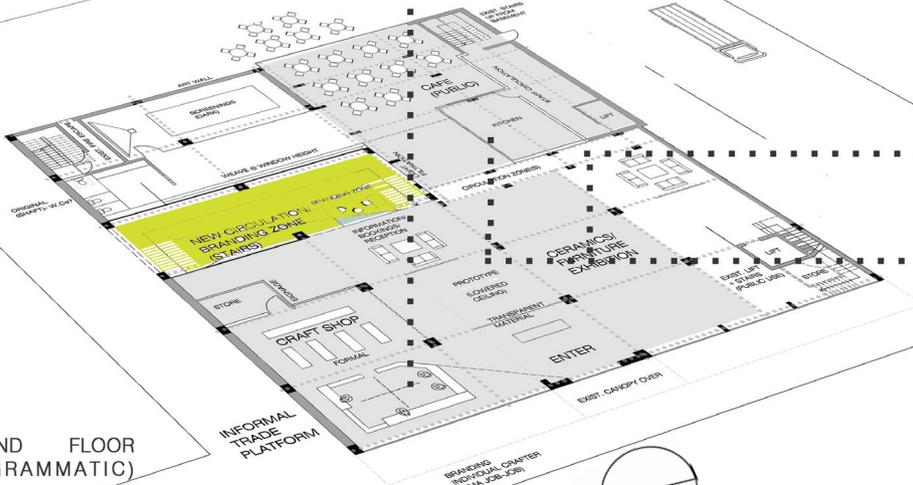
FIRST FLOOR
(DIAGRAMMATIC)

AUDITORIUM FOR CRAFT MAKING
SEMINARS
(MEMBERS)

PUBLIC WORKSHOP
(PART OF EVENT/
FESTIVAL)

CERAMIC WORKSHOPS
(PERMANENT)

TENANT
MANAGEMENT



GROUND FLOOR
(DIAGRAMMATIC)

INFORMAL CRAFT
PLATFORM
(INDIVIDUAL PRODUCER IS
BRANDED FOR START-UP
BUSINESS)

CRAFT/DESIGN
EXHIBITIONS
(FLEXIBLE)

PUBLIC ELEMENT- CAFE AND
SCREENING
FACILITIES
(NEW PRODUCT LAUNCH, AREA
CAN BE
SEPARATED FROM
DU TOIT STREET
ENTRANCE FOR
FUNCTIONS)



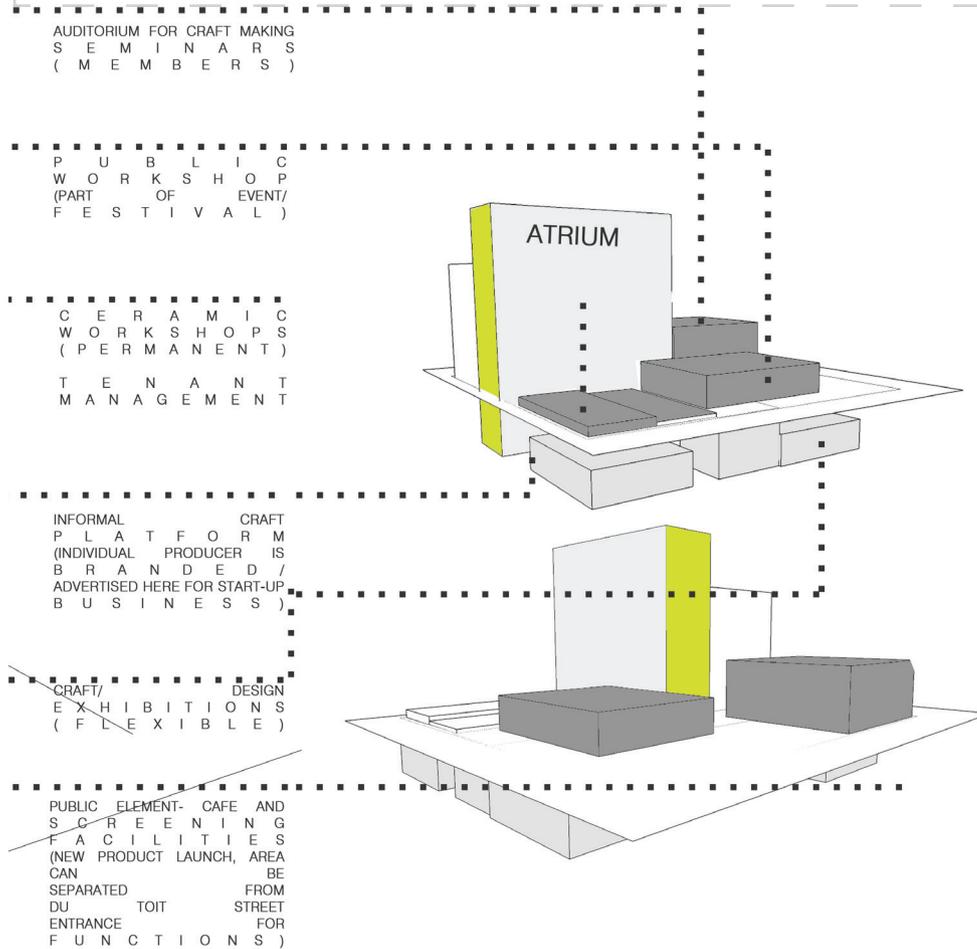


Figure 6.5 (opposite and above): Conceptual exploration of atrium concept and programme (Author, 2011).



6.2 CLIENT REQUIREMENTS

6.2.1 GROUND FLOOR REQUIREMENTS

This summary aims at framework principles of assembling, integrating, opening up, inviting and increasing the volume of people currently active in the area, in order to optimise the site use.

A thoroughfare is introduced acting as an interactive walkway, addressing pedestrian- and vehicular movement on the eastern and western edges of the building respectively.

Visitors and members of the facility are able to enter from the pedestrian-oriented east or the vehicular-dominated west. These two entry points act as nodes that introduce people to the thoroughfare. Furthermore, the thoroughfare is flanked by areas conducive to the concept and circulation, but the atrium area is the feature element that leads individuals up into the more private spaces. This atrium is exemplary of the concept of craft.

1. **Retail** component_ craft as a way of life
2. **Exhibition** component_ showcase craft
3. **Information** component_ digital craft library (computer stations)
4. **Public leisure** component_ restaurant and patisserie for on-the-move visitors
5. **Public** secondary component_ ablution facilities for users

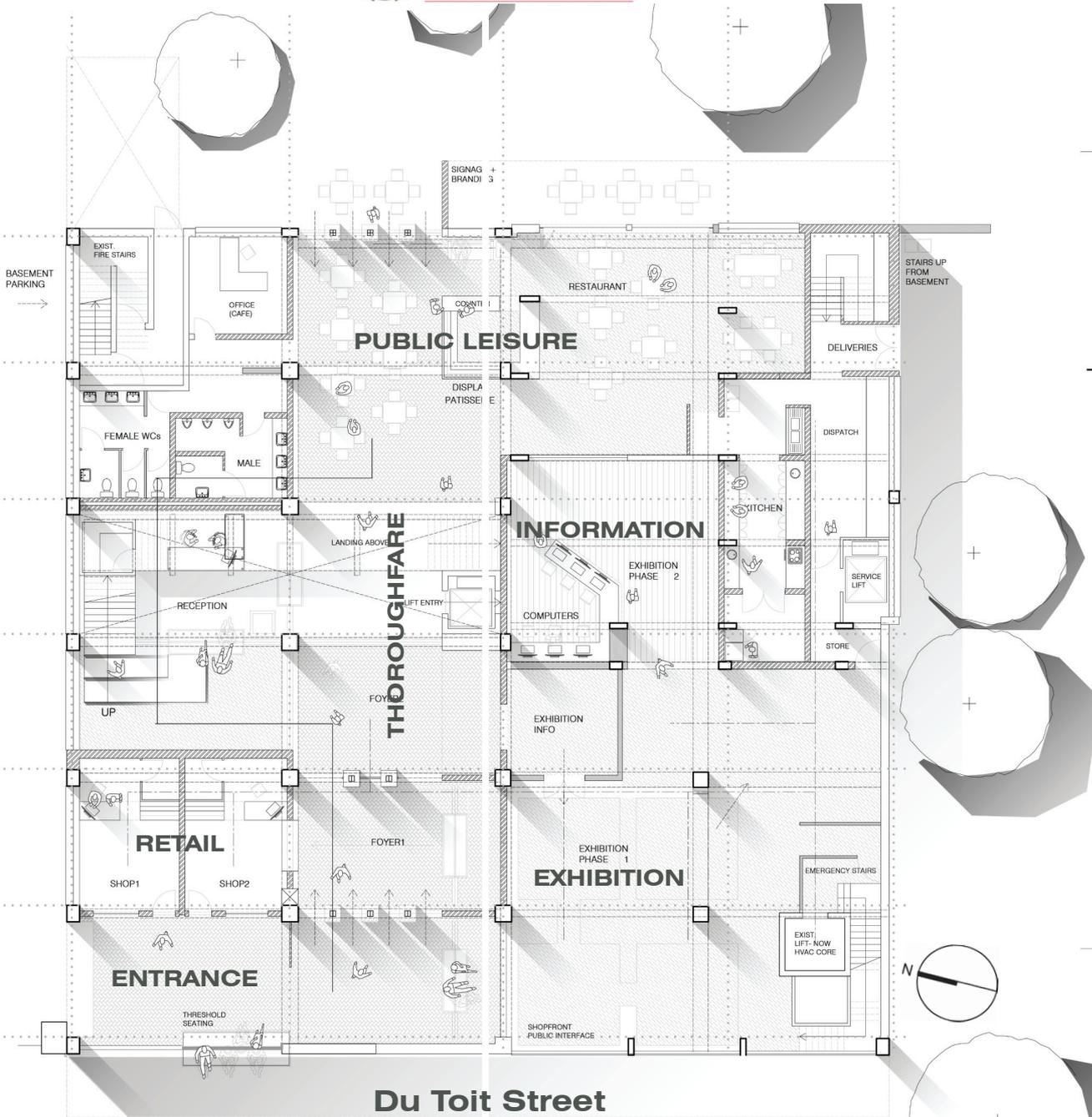


Figure 6.6: Ground Floor conceptual layout (Author, 2011).



GROL ND

FLOOR

PLAN
1:100



6.2.2 FIRST FLOOR REQUIREMENTS

Aims at public and employee interaction and collaboration.

The introduction of the atrium, serves as the new circulation element in the building, allowing light to enter into deeper areas of the building. Furthermore, it serves as a branding element, where the identity of the design/ craft group is displayed by means of signage and materiality. The tenants could hire out this floor as an independent business, where the use of exhibition space, flexible workshops and design/ crafter studios are given. The public leisure facilities on ground floor level will be used by these employees.

Furthermore, members enlisted in the public lectures/ craft making classes will be able to view production processes and take part in them, together with the designers and craftsmen.

The design approach here is craft innovation.

1. **Exhibition** component_ atrium as a means to showcase craft (staircase design and exhibition nooks)
2. **Workshop** component_ where innovation takes place- the new tenant is provided with a wet core, storage, work surfaces and a back-of-house/ raw material delivery area for its designers and crafters
3. **Information** component_ process-driven area for public to view that which is taking place in the workshops
4. **Public** component_ members enrolled in craft/ design classes

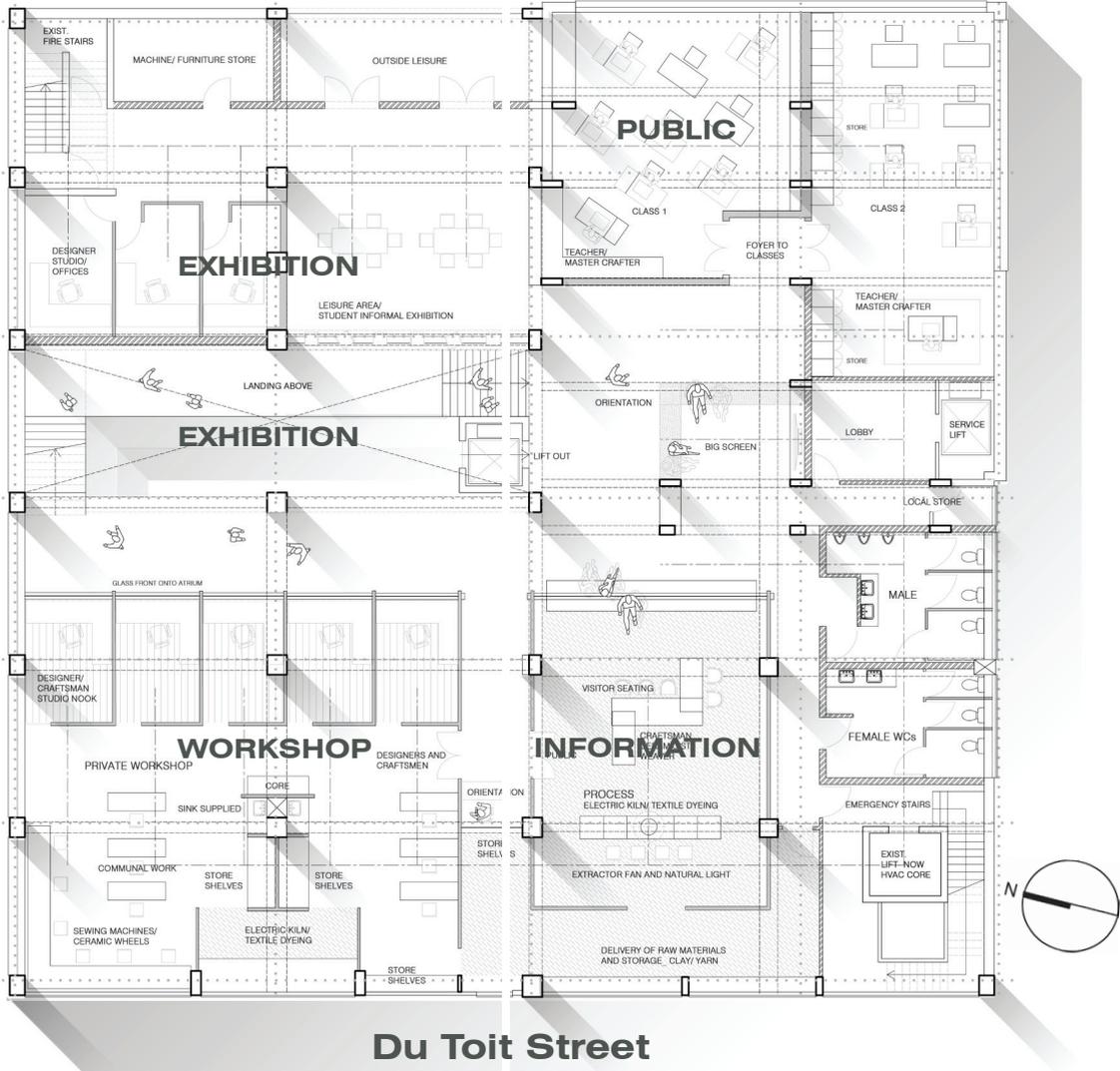


Figure 6.7: First Floor conceptual layout (Author, 2011).



FIRS

FLOOR

PLAN
1:100



6.2.3 2nd AND 3rd FLOOR REQUIREMENTS

Aims at encouraging member education and provides facilities for tenant management.

The top two floors are independent mostly in terms of public involvement. The public can move through these spaces freely, but only members are allowed to use the facilities, which includes a craft/ design library..

The design approach here is craft education.

1. **Education** components_ craft/ design library + auditorium for lectures upon invitation (D.A.C and private institutions)
2. **Workshop** component_ where innovation takes place- the new tenant is provided with a wet core, storage, work surfaces and a back-of-house/ raw material delivery area for its designers and crafters
3. **Leisure** component_ cafeteria provided for tenant use
4. **Exhibition** component_ multi-functional space where the tenants can hold private exhibitions, allowing the cafeteria on the floor below to be utilized in conjunction with such an event
5. **Formal** component_ administration offices and offices for new lecturers in craft and design
6. **Public** secondary component_ ablution facilities

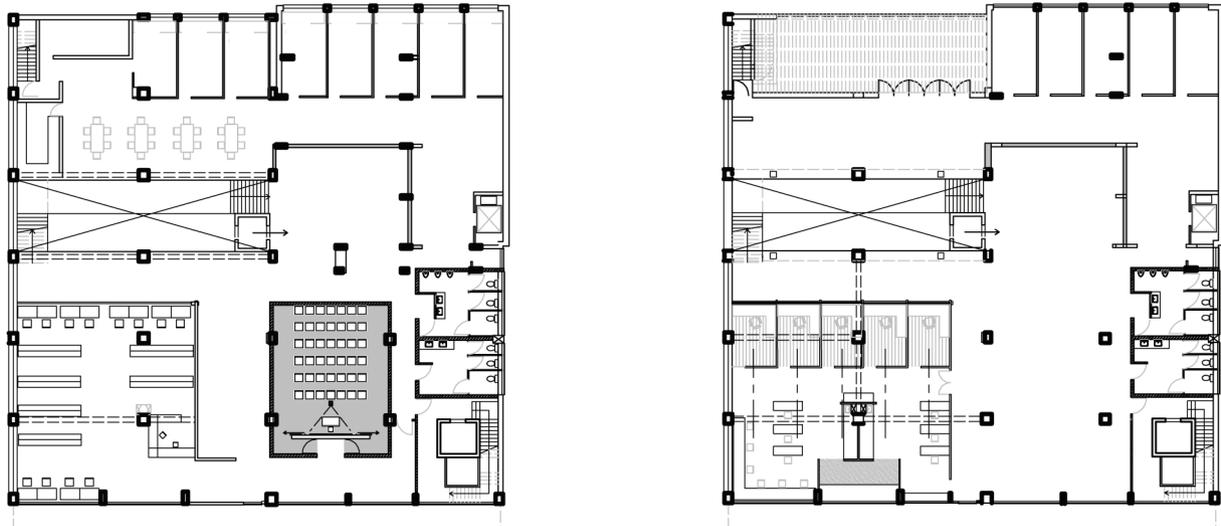


Figure 6.8: Second and Third Floor conceptual layout (Author, 2011).



6.3 CONCEPTUAL APPROACH TO BUILT FABRIC AND TECTONICS

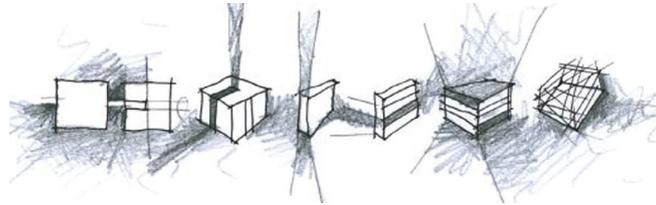


Figure 6.9: Concept diagram illustrating intervention approach (Author, 2011).

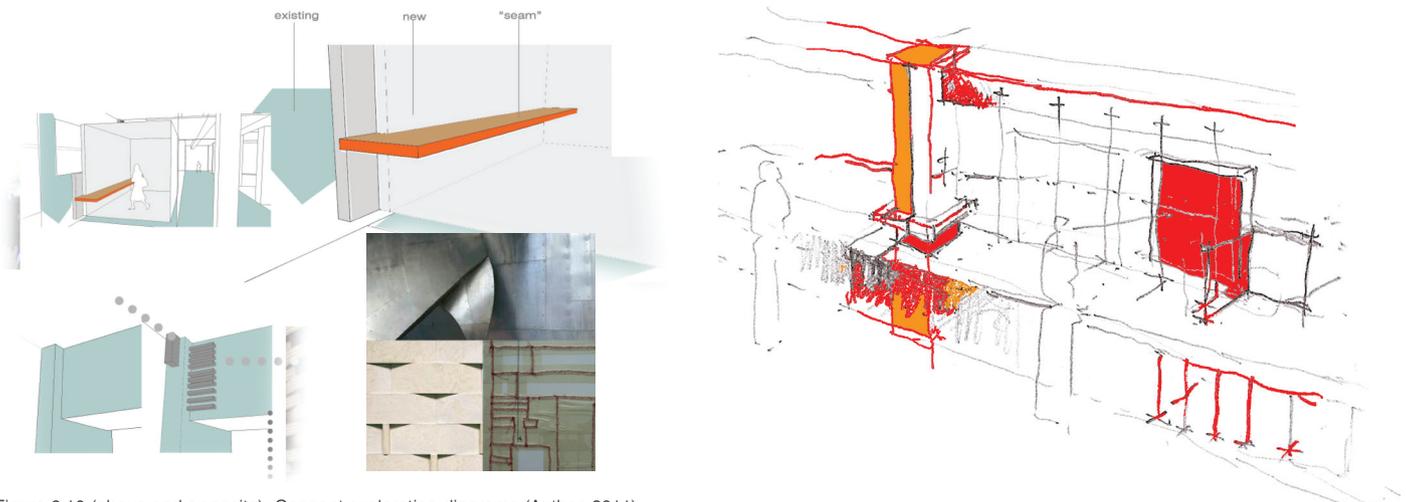
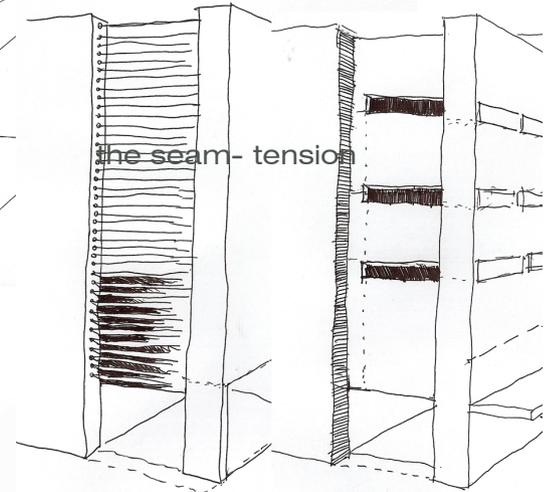
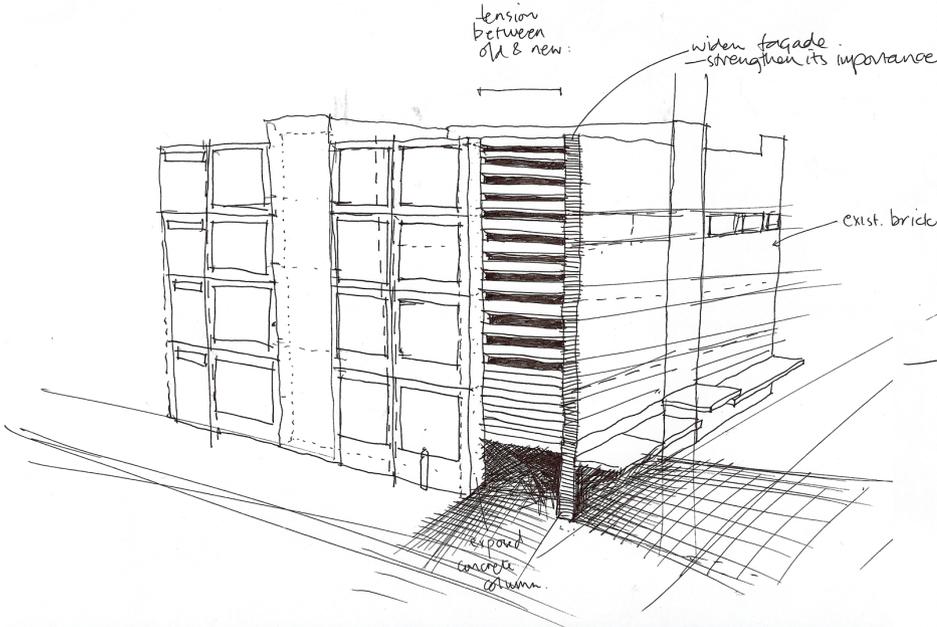
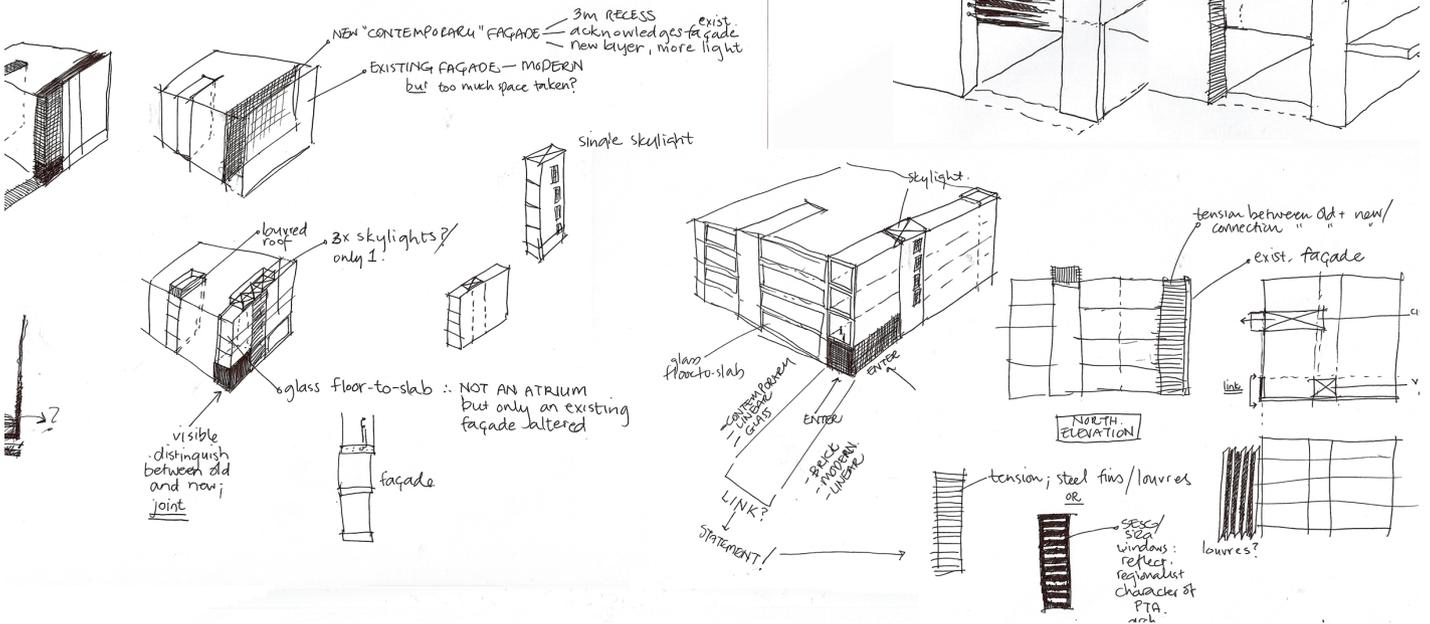


Figure 6.10 (above and opposite): Concept exploration diagrams (Author, 2011).

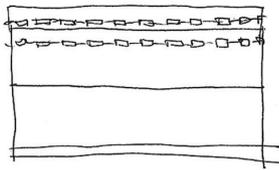


taking out and putting back





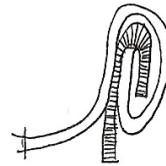
taped seam: t-shirts



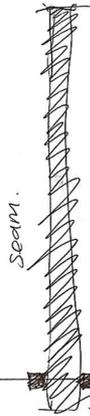
knitted / stretch fabrics



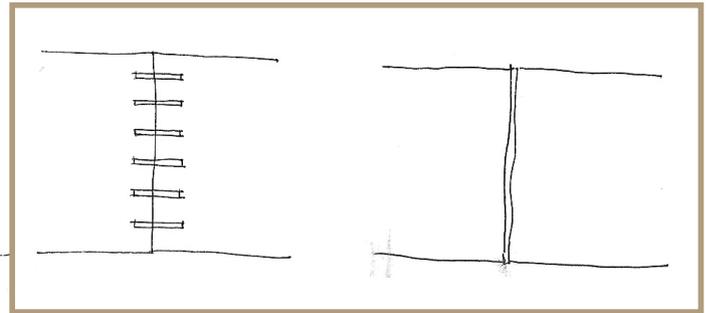
exposed seam



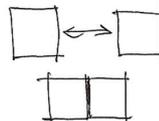
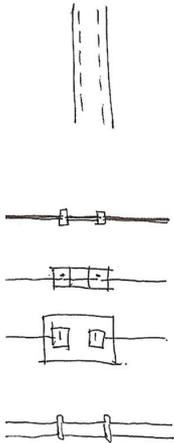
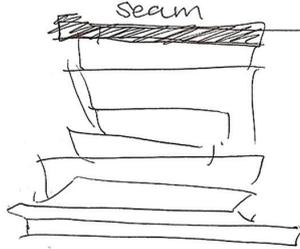
standing double seam



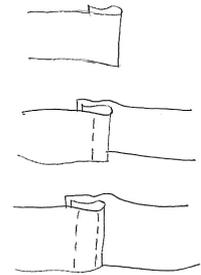
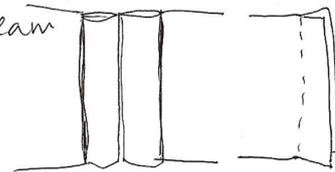
seam



seam



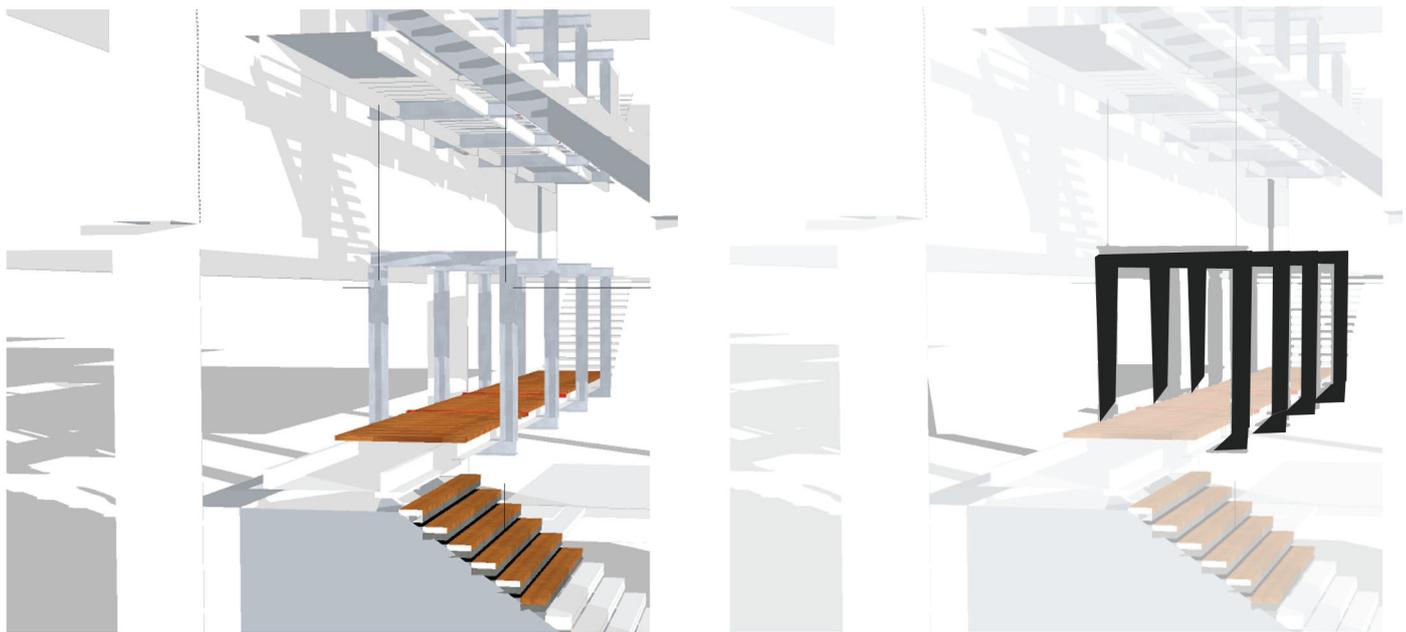
"hand" seam



"to join with a seam ...
a line where 2 pieces of fabric are sewn together
in a garment / other article"

Figure 6.11: Exploration of the seam in clothes-making and architecture (Author, 2011).

Figure 6.12: 3D images exploring concept (Author, 2011).



The new circulation core introduced into the building is representative of the idea of adding and subtracting, as well as being a representation of the tectonic standing the author wishes to take. The conceptual idea of the seam as design generator is visible in the way the atrium connects the ground floor to the upper floors; the way the bridge is articulated within this new space; and how the construction elements and materiality of the circulation element is showcased.

The author looked at different elements concerning the seam and arrived at the strategy of using it as the means where two elements come together, irrespective of their materiality.

The bridge appears to be sliding effortlessly into the hanging frames, suspended by means of cables. This alludes to the idea of making as well as to the physical manifestation of craft in the sense of connections and materiality. The cables suggest a lightweight structure, in contrast with the heavy nature of the bridge's composition of steel and timber. Furthermore, a transition is noted within the structure when the user moves across the bridge: the steel frames enveloping the walkway, supposes enclosure at intervals, allowing the user to feel secure when moving. The juxtaposition of light and heavy suggests tension in the seams of the building, where deeper, darker areas dissolve in this lit volume.



6.4 DESIGN STRATEGIES

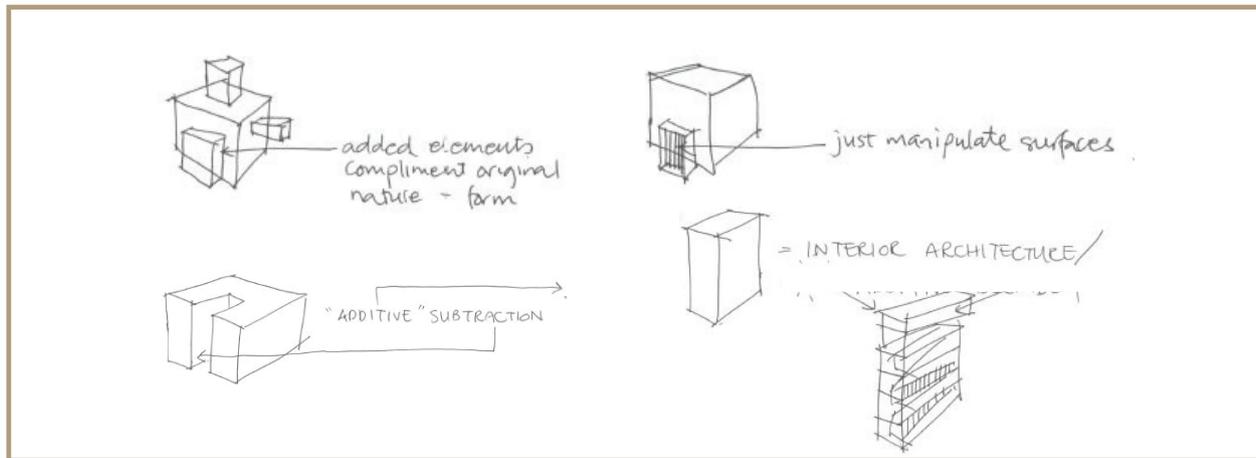


Figure 6.13: Design exploration of concept: subtracting, adding and the seam (Author, 2011).

Various design strategies were considered in the planning and aesthetic decisions in approaching the intervention. Francis D.K. Ching (2007) refers to several strategies relating to form and space, looking at how columns are treated in particular (Ching, 2007: 122). Deductions made were that column placements can determine spatial hierarchies, surface articulation of walls when near a column, and when a column is embedded in a wall. He also deduced that volumetric experiences can be manipulated by column arrangements, when they are freestanding or part of another structural element (Ching, 2007: 127). The author embedded most columns in walls as the grid allowed for it spatially; and in terms of

tectonics, the author wanted to emphasise surfaces and in doing so, enhance planes by means of structural elements as well as surface treatments like cladding.

The conceptual approach of taking a slice out of the building and introducing a new space into the building (subtracting and adding), works in conjunction with the treatment of columns as elements slicing into the walls, only being partly exposed. The author used Ching's illustrations of column placement within a building as a guideline in approaching the grid structure and subsequent "filling in" of the programmatic entities (see Figure 6.14).

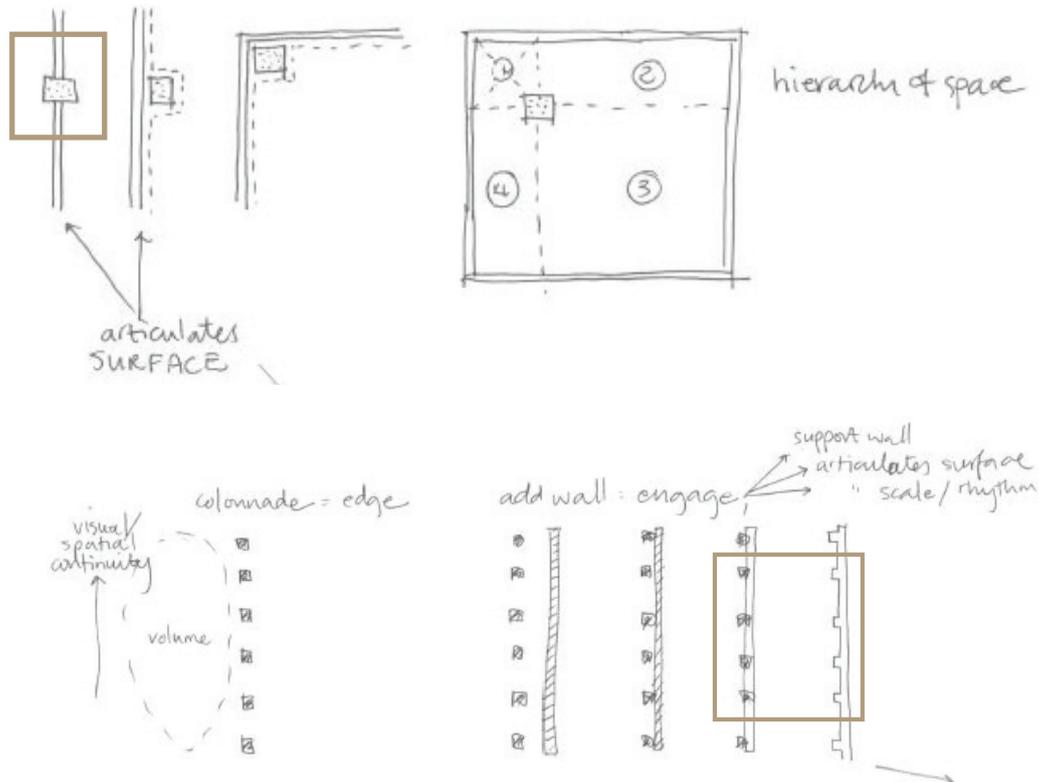


Figure 6.14: Ching's diagrammatic investigations into columns in space, redrawn by author (Ching, 2007: 122-127).