

design development



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According to the Burra Charter places of cultural significance enrich people's lives, often providing a deep and inspirational sense of connection to community and landscape, to the past and to lived experiences. They are historical records that are important as tangible expressions of our identity and experience. Places of cultural significance reflect the diversity of our communities, telling us about who we are and the past that has formed us and our landscape. They are irreplaceable and precious (ICOMOS, 1988).

Memories of urban spaces are marked by historical buildings and by celebrating their permanence we allow the past and present to coexist (Porter, 2004:117). Gathering of information about the past and the future of a site, can lead to the subtle amalgamation of

old and new architecture. The aim is to add value to an existing building or space while preserving and accentuating an old building and the memory of it (fig.131). Demolished structures are remembered by preserving their footprints in different form (fig.118). Juxtaposing buildings or materials might lead to evocation of emotion and memory. The proposed intervention is in contrast with the existing fabric (fig.134)

John Ruskin (1865) states that architecture can never be renovated, as this is to try to bring a corpse back to life. A piece of art or architecture is created in the spirit of a workman and can never be recalled. Another spirit may be added of another time, by another workman, but as for direct copying: this is plagiarism and obviously impossible. By "fixing" the old, one

destroys old life, the mystery of what it had been and of what it had lost – the "sweetness in the gentle lines which rain and sun had wrought" (Ruskin, 1865:162).

Conservation or preservation is a better word to use in this regard, to add value and simultaneously keeping the story of the building intact. We have no right to destroy as we please: these buildings of the past are for the generations who are to follow us (Sawyer, 2000). Heritage is a very precious thing that adds to human's life form (ICOMOS, 1988). By conserving heritage architecture, architects might be able to create habitable, qualitative spaces for people: spaces where mankind can feel alive.

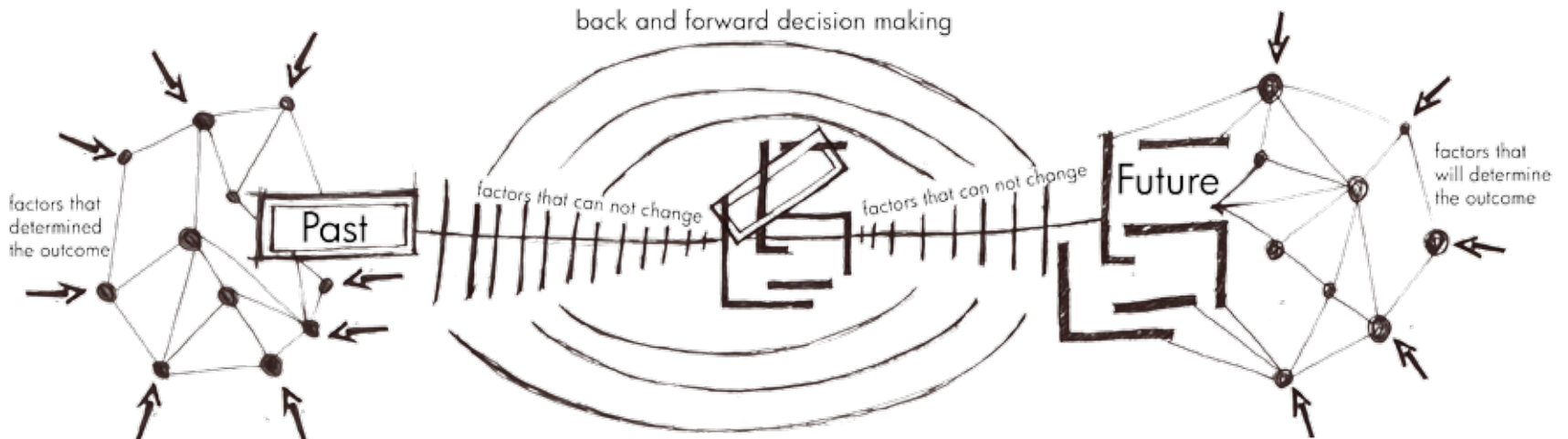


fig. 100_ Diagram illustrating the amalgamation of old and new architecture and as well as the back and forward process ultimately create a new architecture that emphasizes the old.

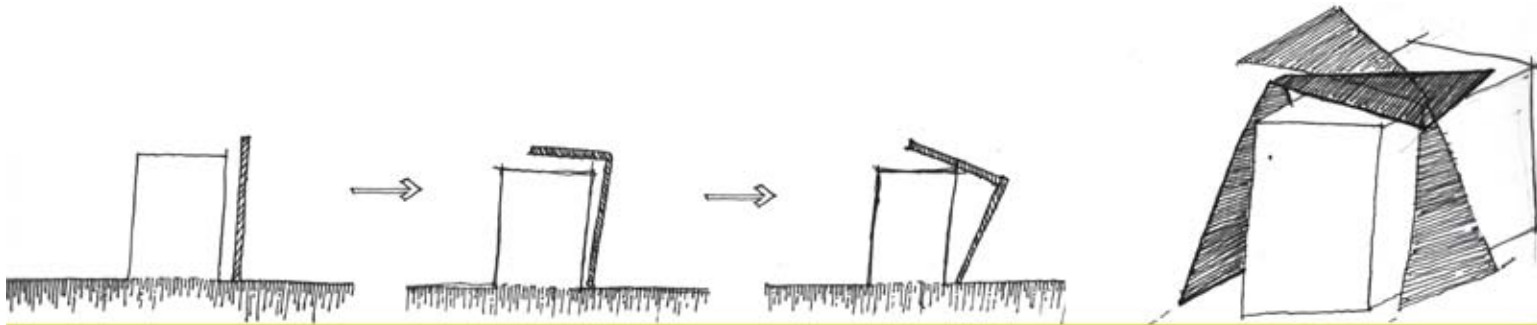


fig. 101_ The diagrams demonstrate tension between elements when they are juxta-posed

Juxtaposing according to Porter (2004:105) is the placing of elements, side by side, in order to invite interaction and the activation of a comparison of relationships (fig.134). It is the positioning of two or more contrasting shapes, surfaces, forms, or spaces, it heightens interest especially when the character of each element is maintained (fig.139). It induces emotional suspense through shock and surprise. Where the old and the new meet, it should be as if this alone was a sacred thought, they should merely kiss.

Kiss in architectural term is when one element comes deliberately close to another –without ever quite touching – so that the poignancy of the moment is not lost on the observer or user. It refers to a peck, a precisely placed air-kiss,

which shows mutual respect through restraint immediately before the point of contact. It holds both parties in perfect tension and ties into the juxtaposition of architecture, this happens in a moment in time in space (fig.132) (Porter, 2004:108).

The tension created between two elements materials, spaces or even old and new by juxtaposing, can be done through detailing. Detail is the art of architecture, it is what makes a building unique in form. It is as Marco Frascari states: “Details are the generator of the construction process - and therefore of meaning, the tectonic detail is thus the site of innovation and invention” (Frascari, 1996). When the ‘contact’, which is mentioned above, becomes the poignancy of the moment it tells

a tale of what once was and that what will be. Physically this poignancy forms a joint. These joints or details, form the network that holds the collective memory together in perfect harmony. By exposing detail, one reveals the soul of a building and people can see and experience the architecture for what it truly is.

The human memory is both heightened and endangered in the ever changing urban landscape. Etched into their hardened fabrics of brick and stone, records of human interaction mark cities as sites of endurance, as well as change. Porter (2004) describes a ‘place of memory’ as a image and spatial relationship that act quickly on the mind.

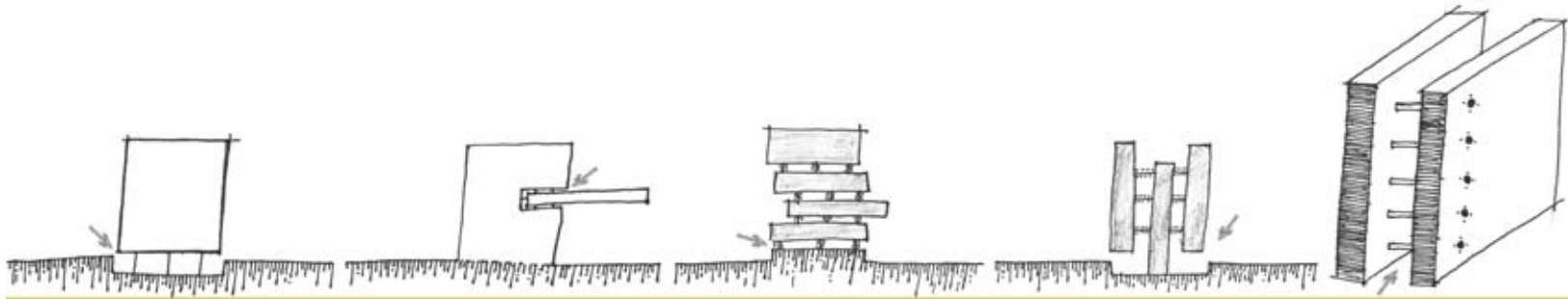


fig. 102_ Kiss Diagrams_ the diagrams demonstrate possible tensions that can be created between two elements and how this idea can be expressed in a detail as well.

“All awareness of the past is founded in memory, remembering the past being crucial for our sense of identity. As the manifestation of architecture can itself provide a kind of knowledge through which the past remains accessible, this accounts for the significant of memory in design. For example, memories of times past can be woven into the fabric of buildings through materials and architectural and historical references.”

(Porter, 2004:117)

Todd Macfie (Macfie, 2008) writes on a architectural blog site (Megaphone magazine) how he found himself at a construction site in Vancouver. On this particular day he was confronted by a hole in the ground and he describes how his memory fails. “I find it impossible to remember what building stood here before a developer had it removed. No shape, no texture or tone comes to mind. Only this: there was a building here, a building that I was quite familiar with. And now it is gone and my memory of it has also vanished.” He compares this event to war: In war, architecture is targeted to disrupt life and to remove structure that have, over time, gained meaning in a community. The war begins on a cultural front, displacing people’s history, their memory.

Intervention with other buildings can occur in a respectful harmonious manner by using the history, the fabric, the ground and the environment to generate clues and leave something behind for the generations to come (fig.141 and 142).



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The aim of the design is to adapt a heritage industrial structure and create a building that houses a production process. This “industrial” building should be able to make a connection with residential and commercial buildings.

Movement paths through and around the old and new building must guide people past the manufacturing process. Public spaces will be situated in such a way that all people on site will use it for necessary and optional activity. Social activity might then spontaneously derive from the necessary (people going to work) and the optional activity (shopping for furniture) (Gehl, 2006, p.10).

The design should steer away from mono-functional industrial building design and make

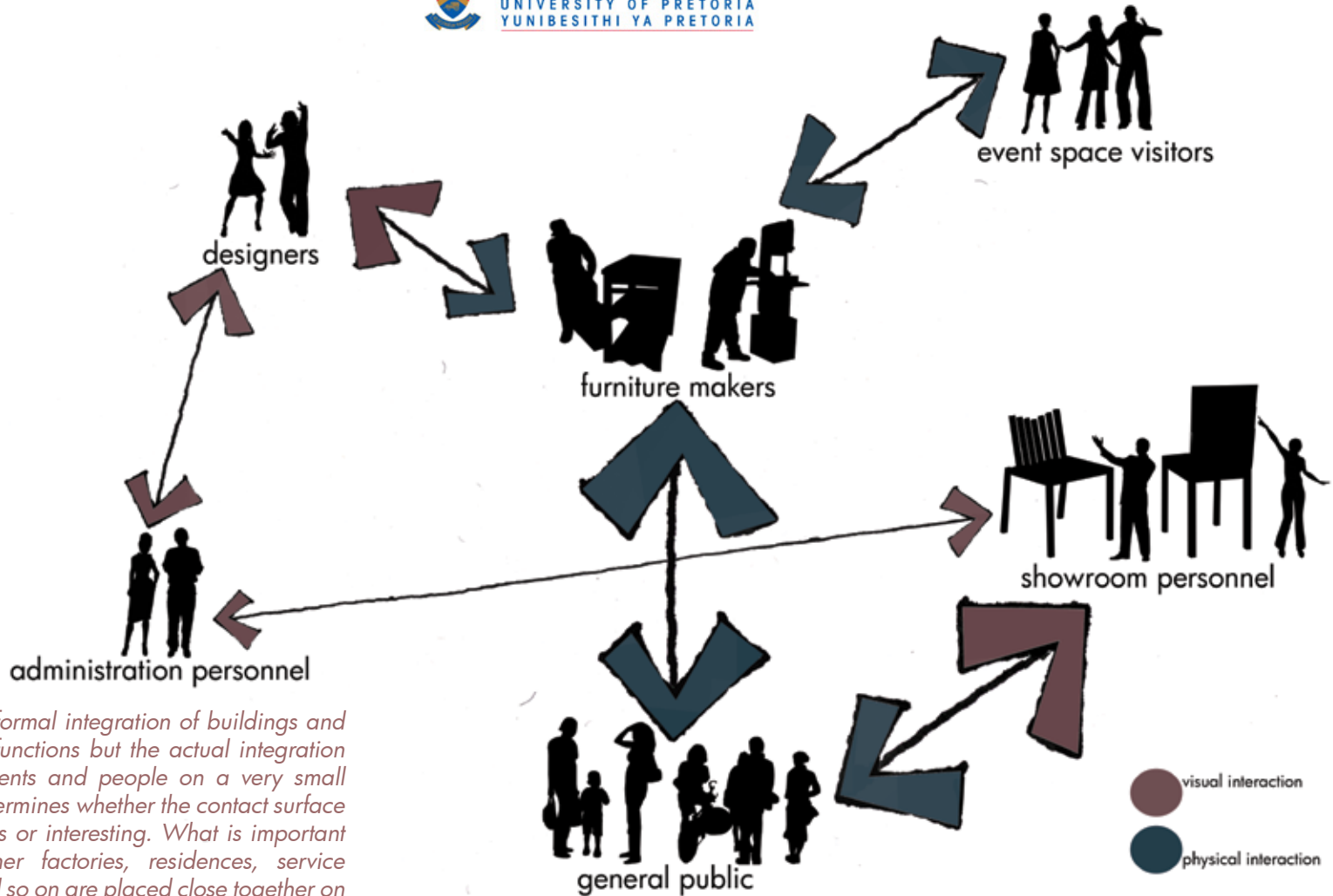
use of other activities like showrooms, training spaces or dining activities to incorporate the production process into daily live. The most important objective of the program is to connect with the public while the normal production process persists.

The private-public spaces in the building will be designed in a non hierarchal manner. Obviously there is certain hierarchy in the production process, but private-public spaces like rest rooms, tea rooms or canteens will facilitate all personal in the building. This way people can form a community in the building. There is interaction between designers, blue collar workers, administration personnel and, in some cases, the public as well. This can help with 24 hour surveillance in and around the

building, because interaction in private-public spaces force passive connections to form between people who do not necessarily know each other. Thus just by hearing and seeing the same people over and over again generates low intensity connections. When a stranger walks into the space, personnel will realise and raise questions.

The challenge is thus to re-create an innovative interactive design without disturbing the pragmatic functions of the program. Industrial buildings are like organisms, with different network systems, that are usually adaptable for future change. The design should be influenced by the specific programme it is designed for, but should also have the ability to change for future industries.

7.3. Social intend_



"It is not the formal integration of buildings and primary city functions but the actual integration of various events and people on a very small scale that determines whether the contact surface is monotonous or interesting. What is important is not whether factories, residences, service functions, and so on are placed close together on the architects drawing, but whether the people that work and live in the different buildings use the same public space and meet in connection with daily activities."

(Gehl, 2006:101)

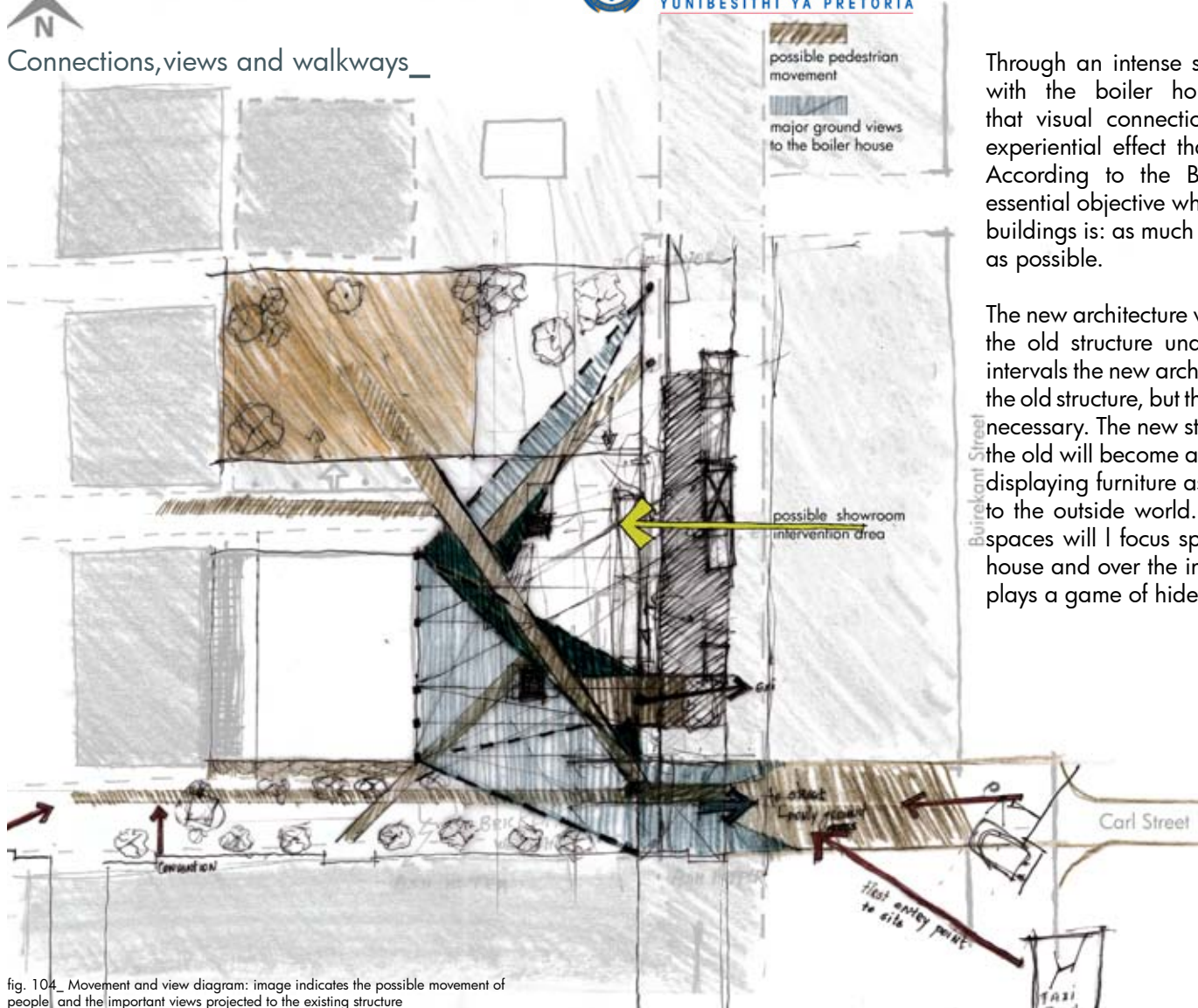
fig. 103_ Diagram illustrating different levels of interaction between users



Connections, views and walkways_



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Through an intense study, on how to interact with the boiler house, it was concluded that visual connections can have a greater experiential effect than physical connections. According to the Burra Charters the most essential objective when working with heritage buildings is: as much as necessary and as little as possible.

The new architecture will therefore connect with the old structure under the ground, at some intervals the new architecture will move through the old structure, but this will happen only where necessary. The new structure that connects with the old will become a transparent viewing box, displaying furniture as well as the boiler house to the outside world. The showroom's interior spaces will focus specific views to the boiler house and over the industrial site, the building plays a game of hide and reveal with the user.

fig. 104_ Movement and view diagram: image indicates the possible movement of people and the important views projected to the existing structure

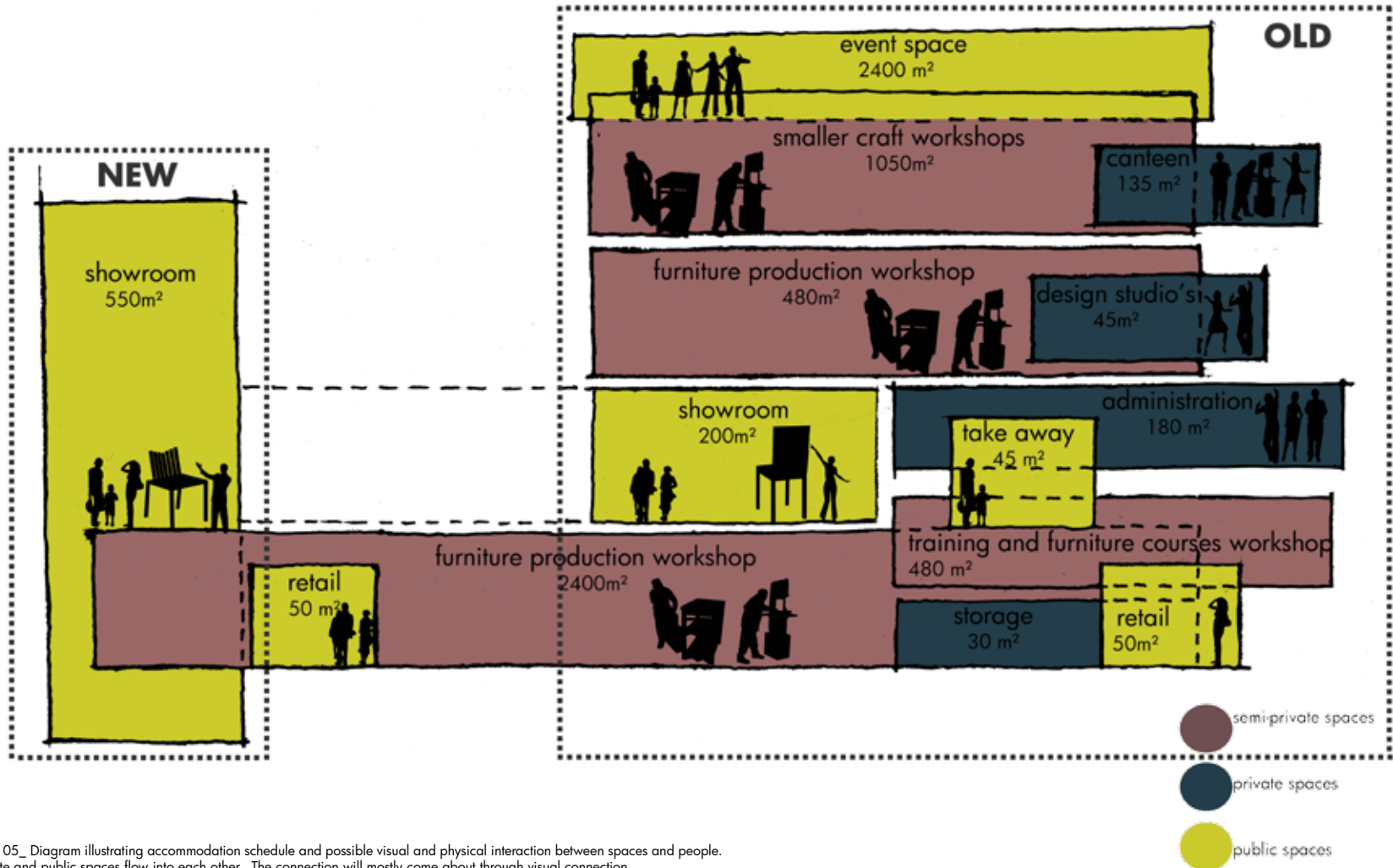


fig. 105_ Diagram illustrating accommodation schedule and possible visual and physical interaction between spaces and people. Private and public spaces flow into each other. The connection will mostly come about through visual connection.



7.4. Mass development_z

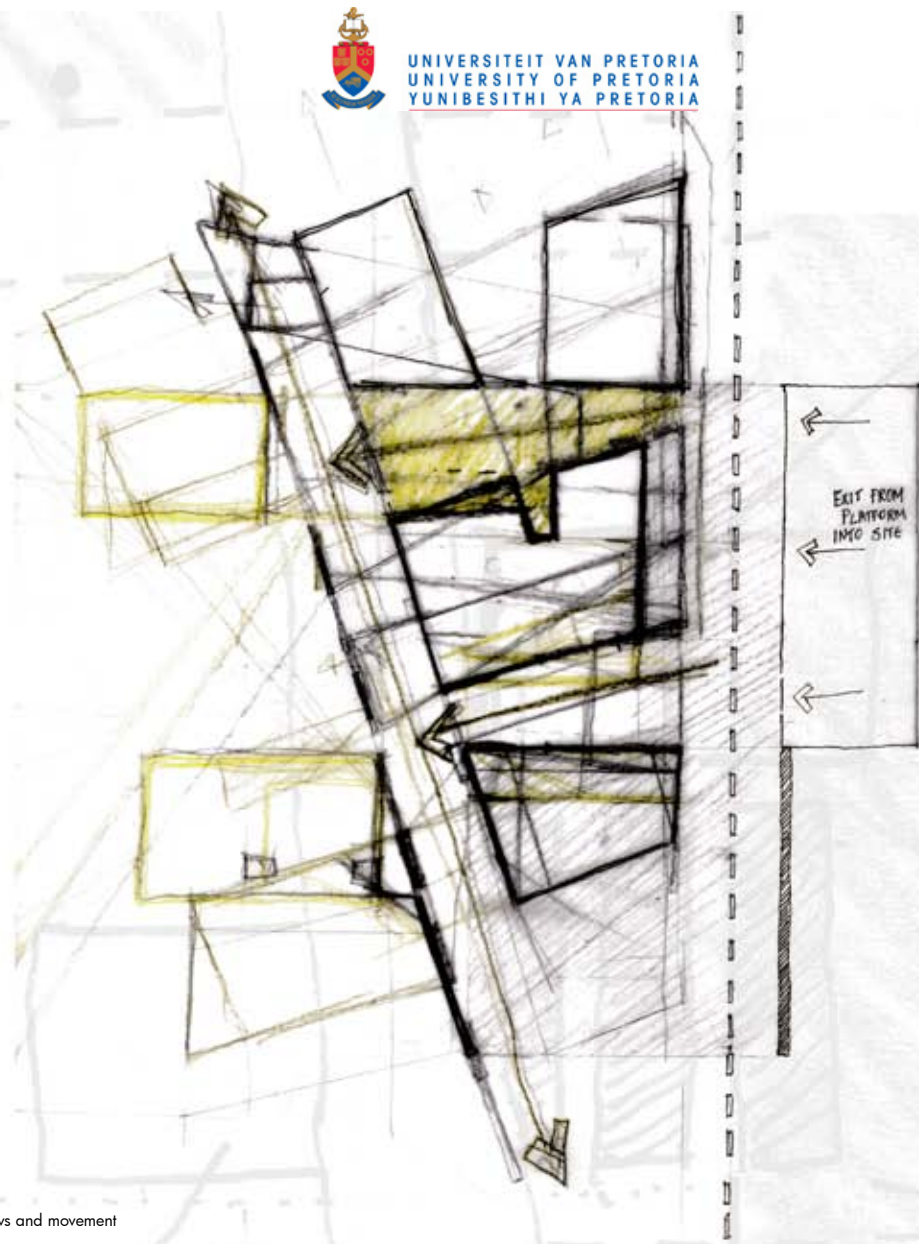


fig. 106_ Mass development: determined by views and movement

The architectural form was determined by movement patterns, specific views that need to be focused on and most importantly the existing building. The area needed for the show room is 550m², the current conceptual idea is more than 1500 m², the form still needs to be refined to create a more compact viewing box. The building should also become more transparent to reveal the boiler house and the furniture to the people on the train station platform. The concept starts to hide and reveal, but an in debt study needs to be done to show how views should be projected from the platform.

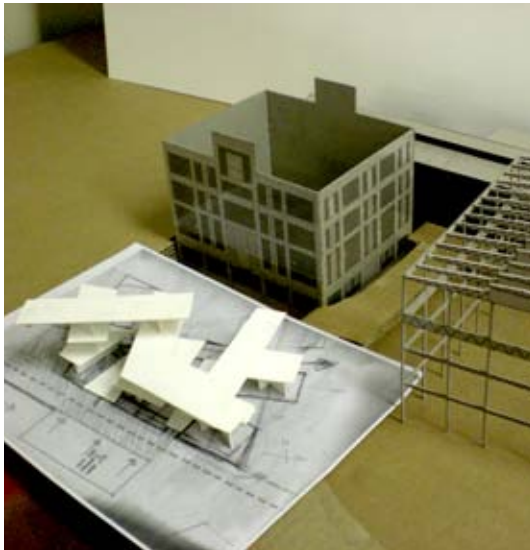


fig. 107_ Conceptual mass model: possible intervention between old and new

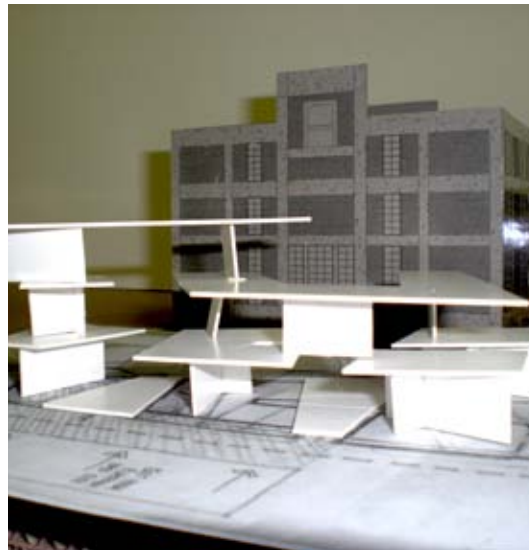


fig. 108_ The scale of the new structure needs to respond to the existing

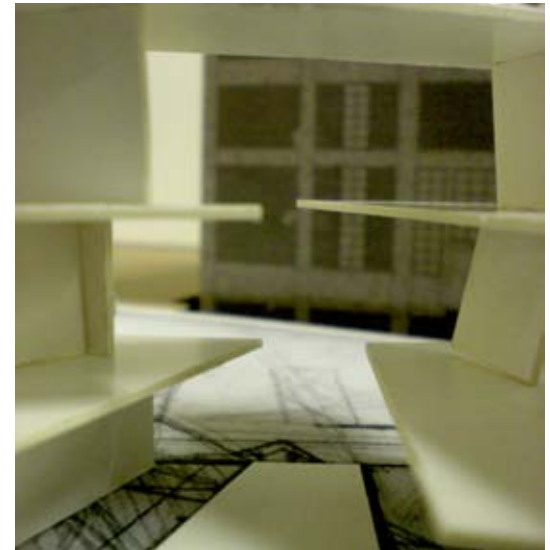


fig. 109_ The architecture start to focus views to the existing building



fig. 110_ Walkways connect to the existing structure, the void in the existing structure conveys the character of what it once was: industrial cathedral

The next study revealed a more solid building form, glass walls to the public square start to show how responsive industrial environments can be created. There is a visual link between worker and passerby. Elements that pop up on ground floor level guides people in certain directions, these elements are also skylights and sunken courtyards that bring natural light to the workshop space below.

As there are already a bunch of existing elements in the landscape, the building form needs to be reworked and simplified. The area between the new and old should be less cluttered and the new structure should add to

the existing majestic atmosphere of the site. Keeping in mind the protrusion of views and movement patterns a new atmospherically tension needs to be created between old and new, evidently creating a showroom that emphasises the industrial heritage.



fig. 111_ The space between the old and the new structure reveals possible objects in the landscape, these objects protrude light to the basement level, people can also view the production process through these openings



fig. 112_ All Eastern levels need to visually interact to the public: on ground and platform level. Note how the architecture focuses views over the rest of the site

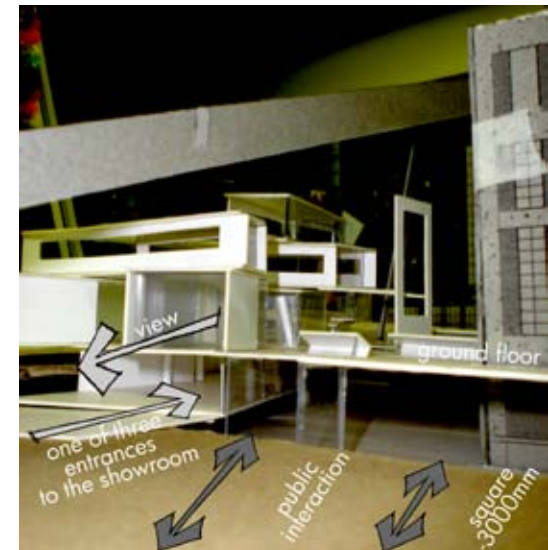


fig. 113_ The production process on basement level visually interacts with the square to the North

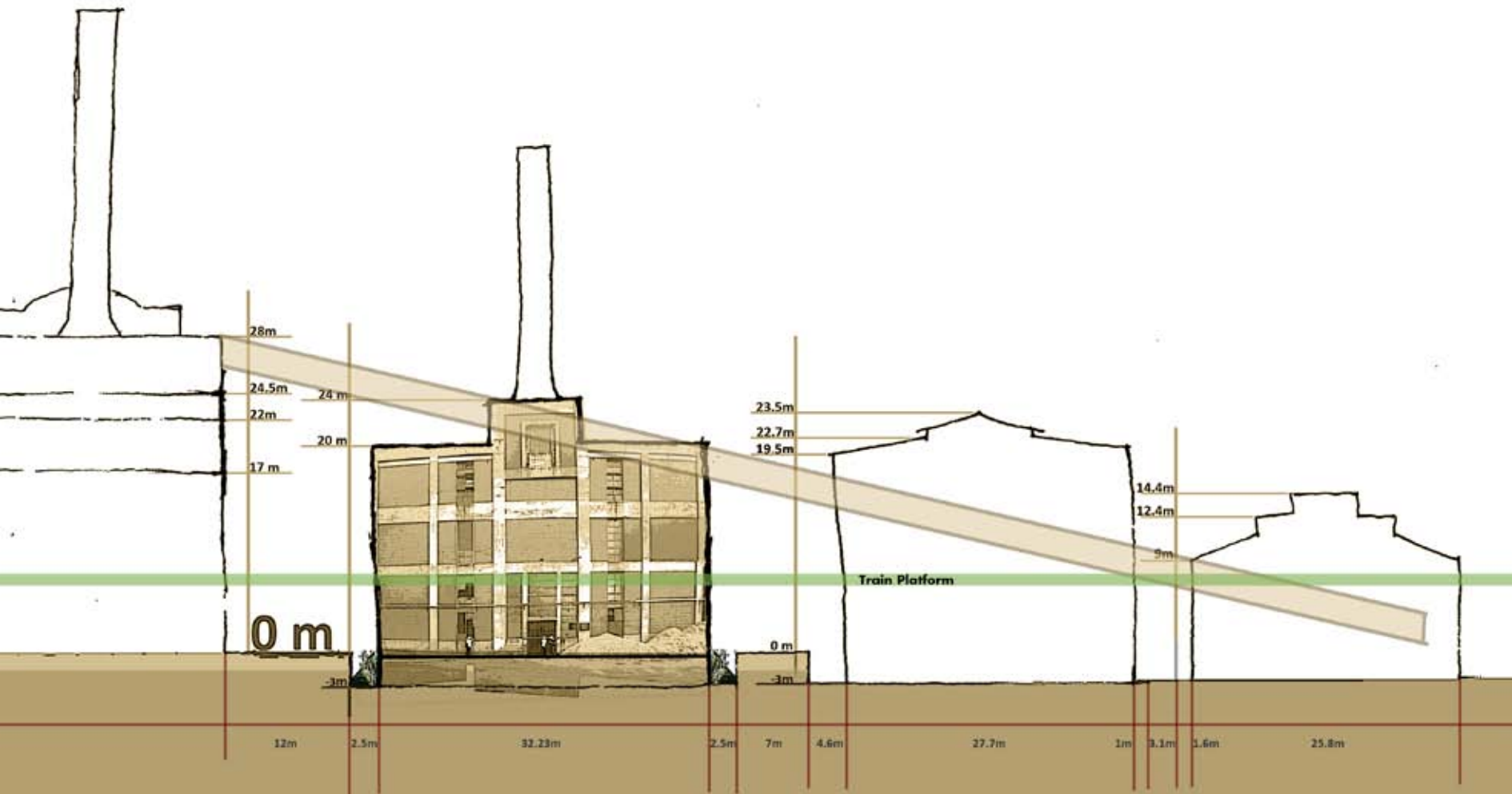


fig. 114_ The 1940 Boiler house in proximity to surrounding buildings, the image also illustrates the placement of the train station platform

7.5. Revisiting the design_



The projection model which indicates various views from the platform gives a better understanding of what the showroom building should be. The building must almost be 'invisible', a thinner, simpler building

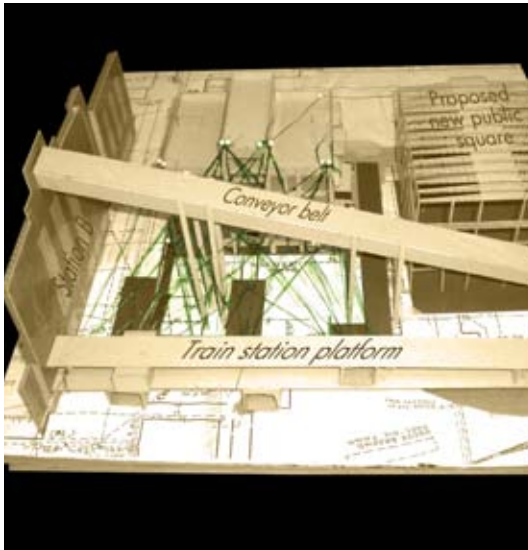


fig. 115_ Views projected from the platform to the boiler house

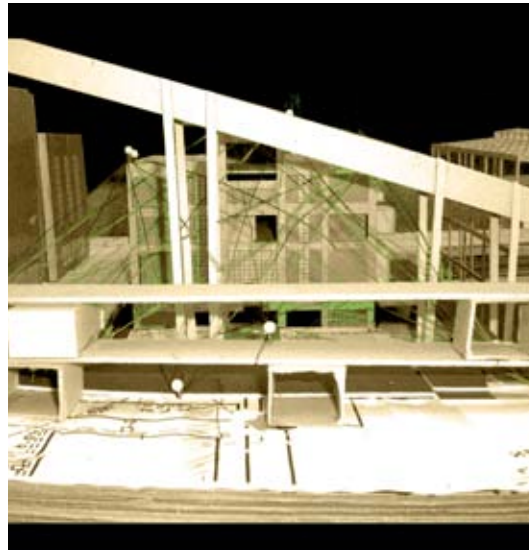


fig. 116_ The proposed showroom, between the platform and the boiler house, calls for a transparent structure to create a definite visual connection between the two

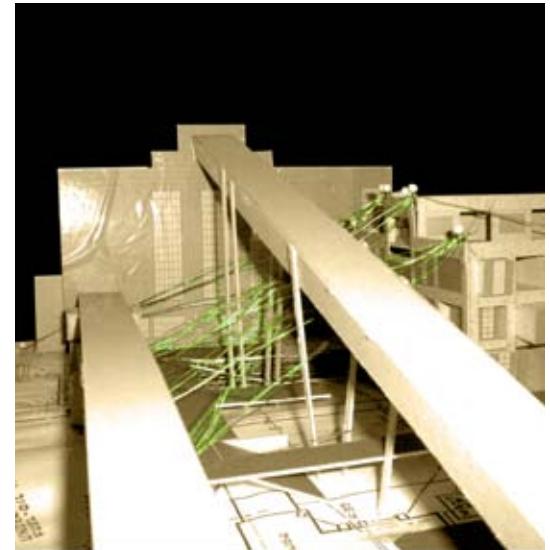
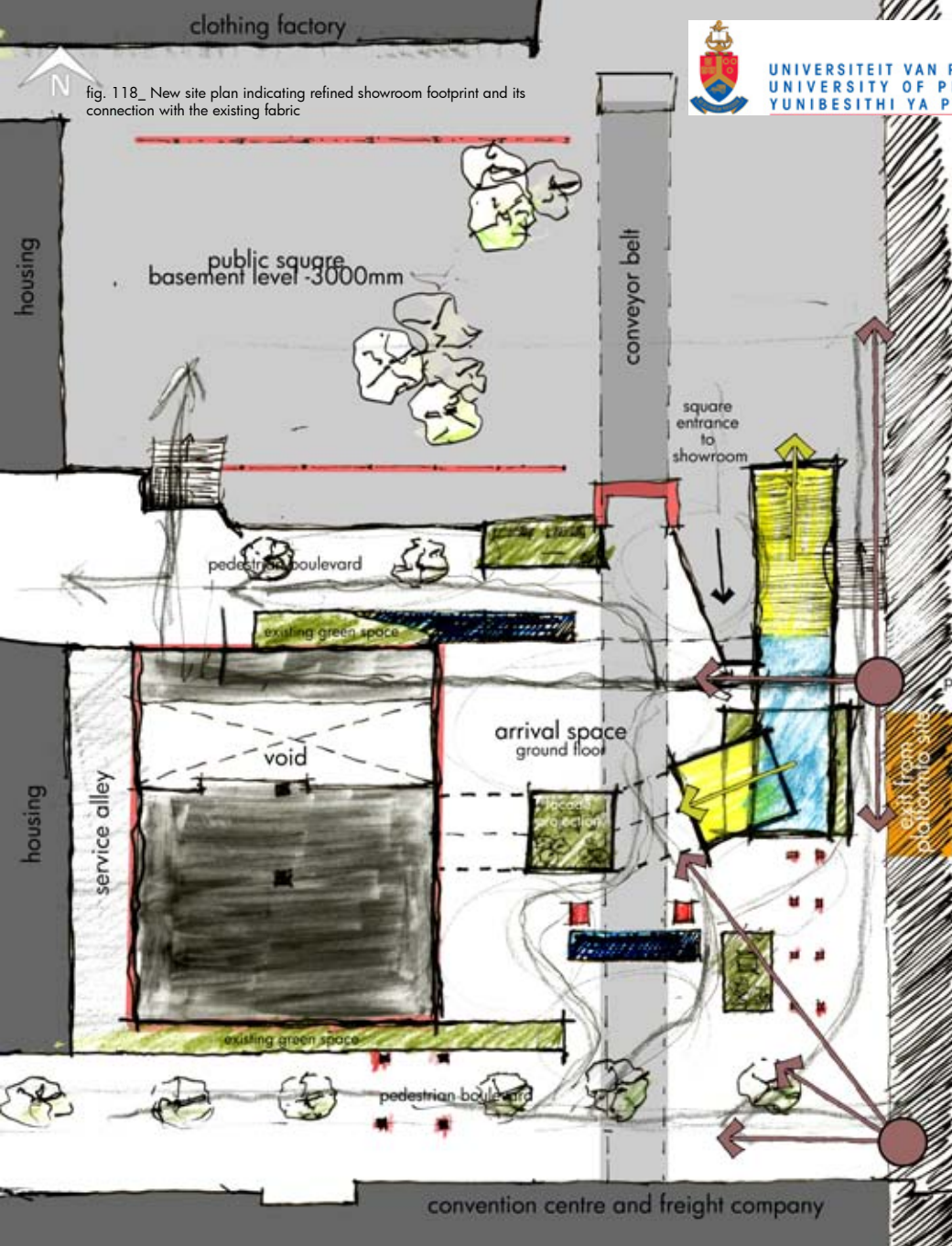


fig. 117_ The conveyor belt does not obstruct views from the platform

clothing factory

fig. 118_ New site plan indicating refined showroom footprint and its connection with the existing fabric



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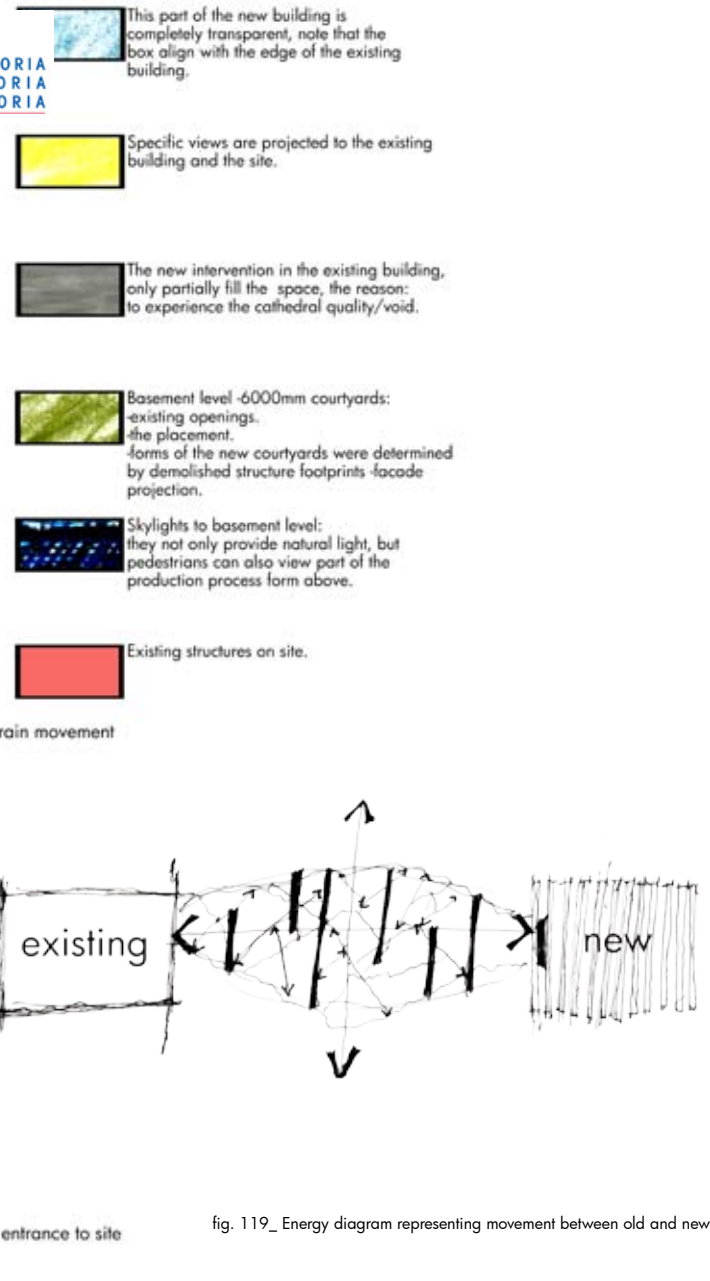


fig. 119_ Energy diagram representing movement between old and new

7.6. Final proposal_



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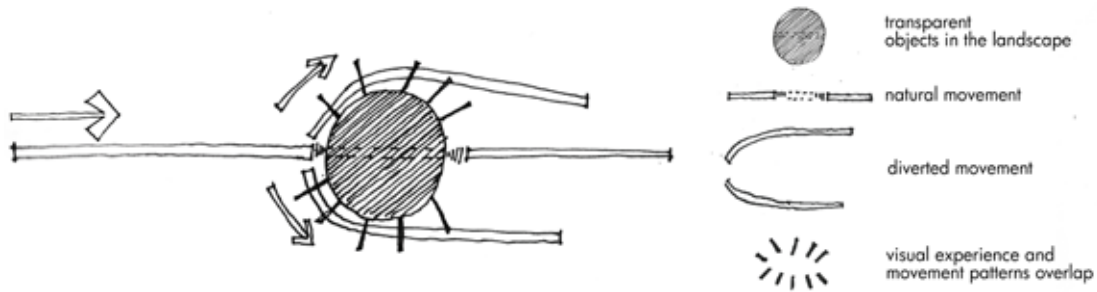


fig. 120_ Diagram illustrating movement around objects in the landscape

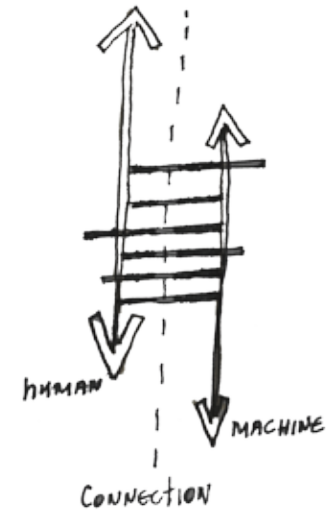


fig. 121_ The design will focus on the connection between man and machine

7.7. The connection_

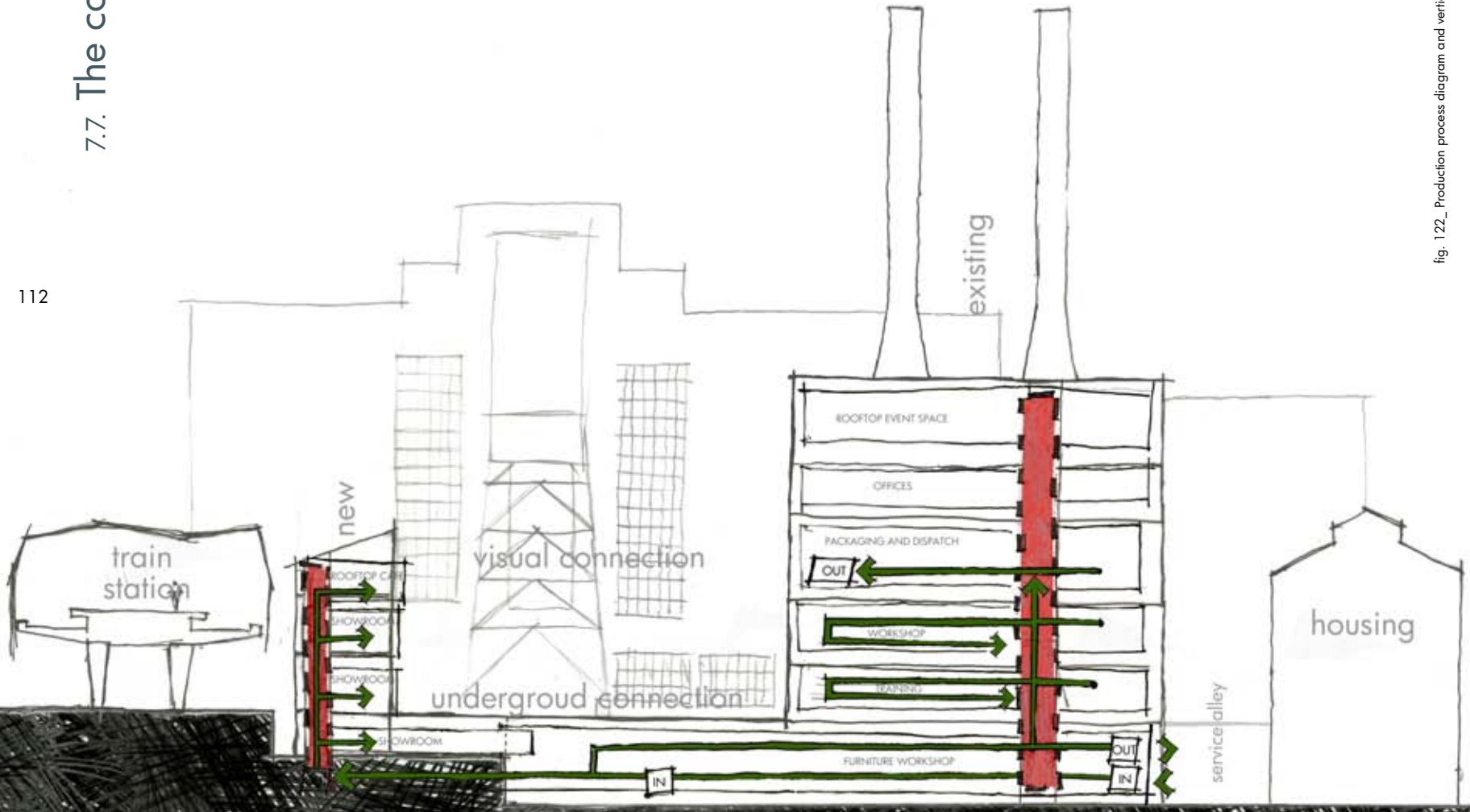


fig. 122_ Production process diagram and vertical circulation of the products

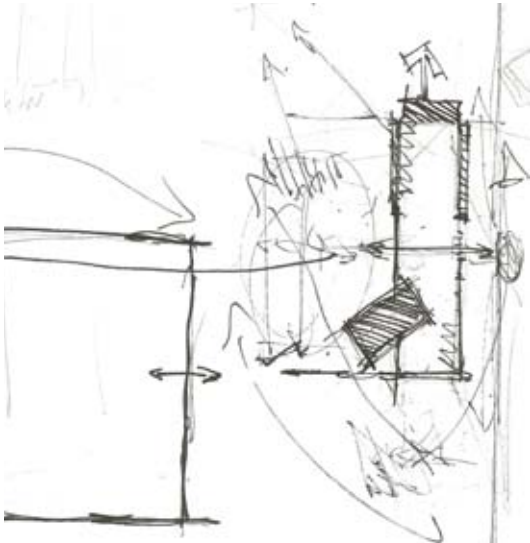


fig. 123_ Sketch of the refined showroom form, highlights most prominent views

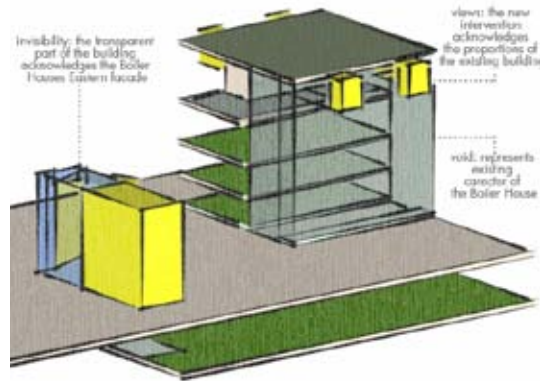


fig. 124_ Green represents the new production levels and yellow masses represent new viewing boxes

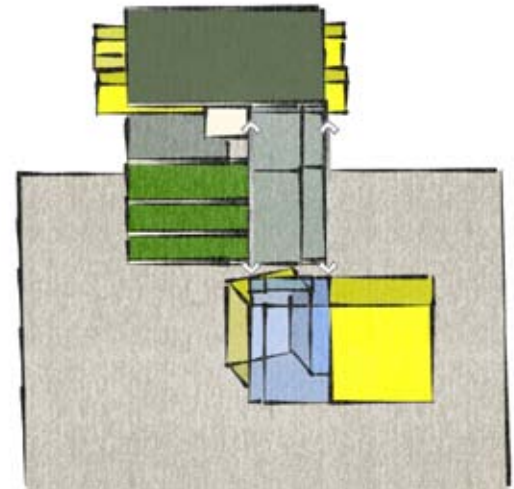


fig. 125_ Note how the transparent element recognizes the Boiler House's Eastern facade

7.8. The Boiler House_



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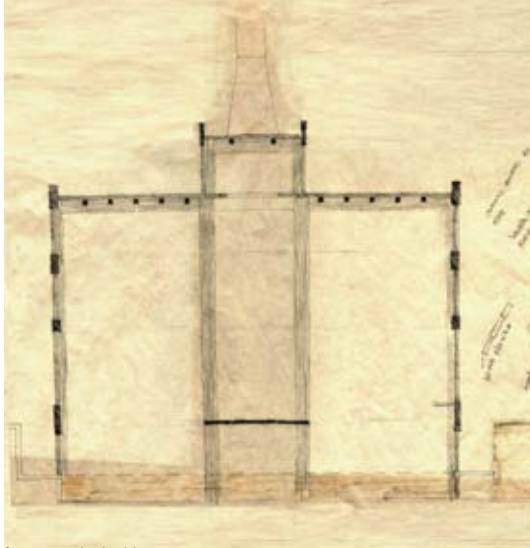


fig. 126_ The buildings existing structure

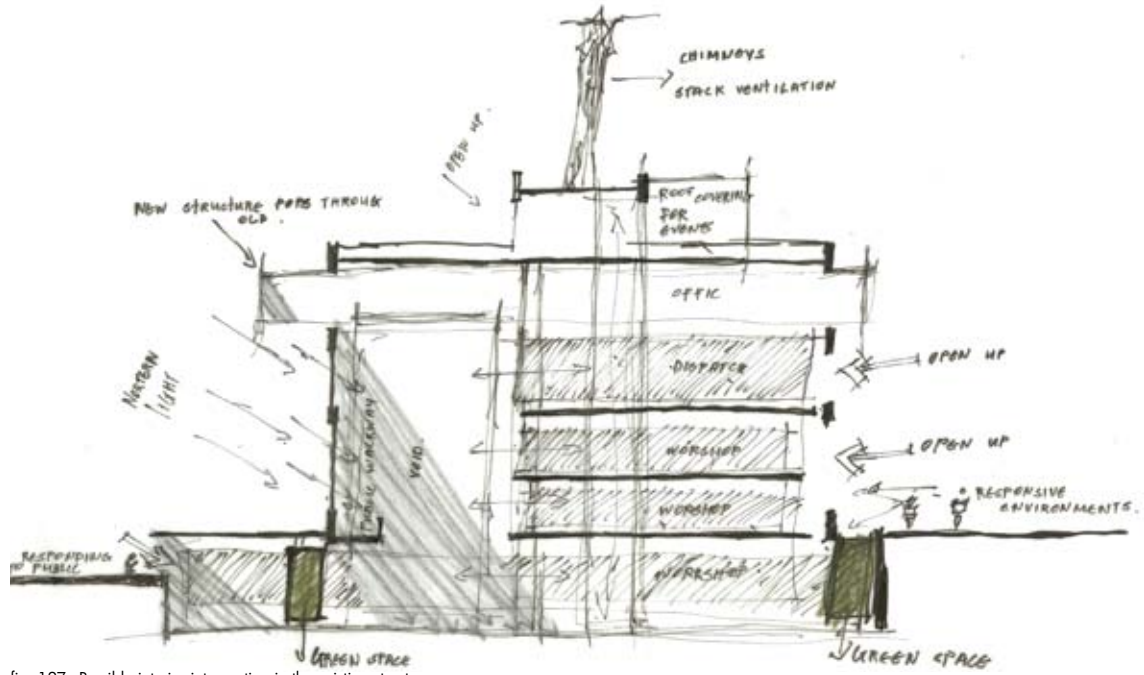


fig. 127_ Possible interior intervention in the existing structure

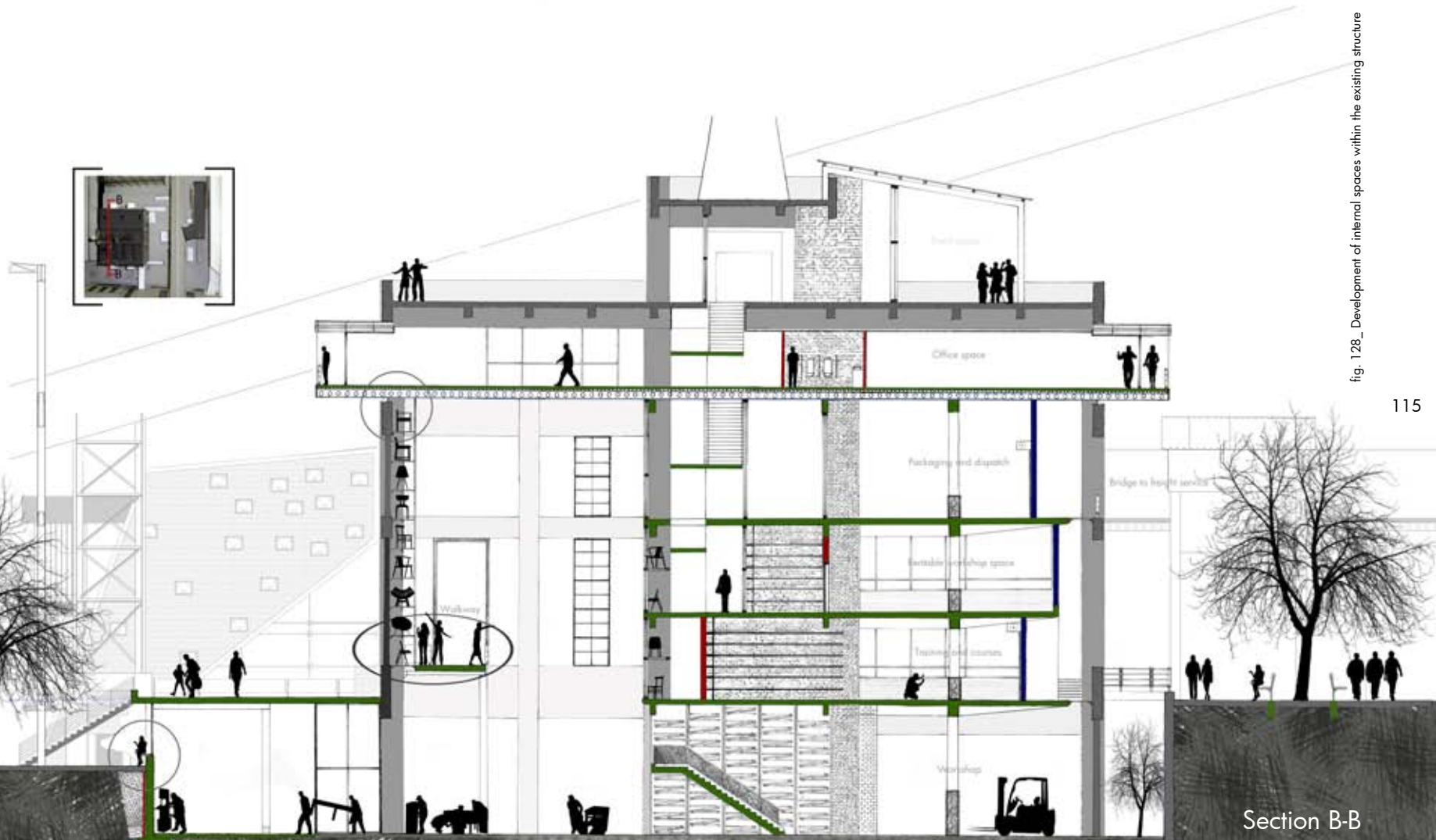


fig. 128_ Development of internal spaces within the existing structure

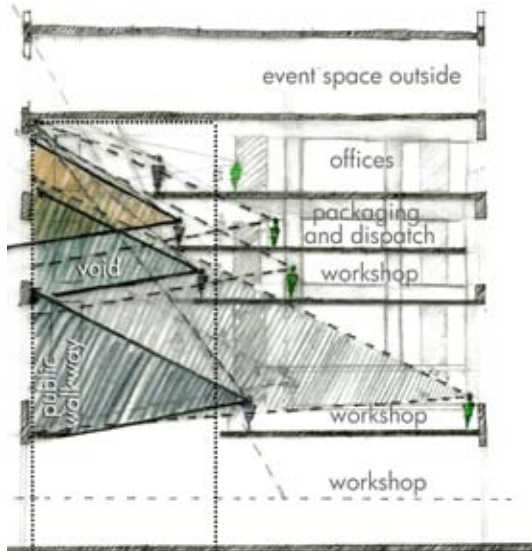


fig. 129_ Concept sketch: development of internal spaces



fig. 130_ Perspective view as seen from the public walkway inside the existing structure, the walkway also exhibits furniture to the people that walk past



fig. 131_ The majestic character of the existing structure is preserved to a degree, the light still streams into the Northern facade as it did before

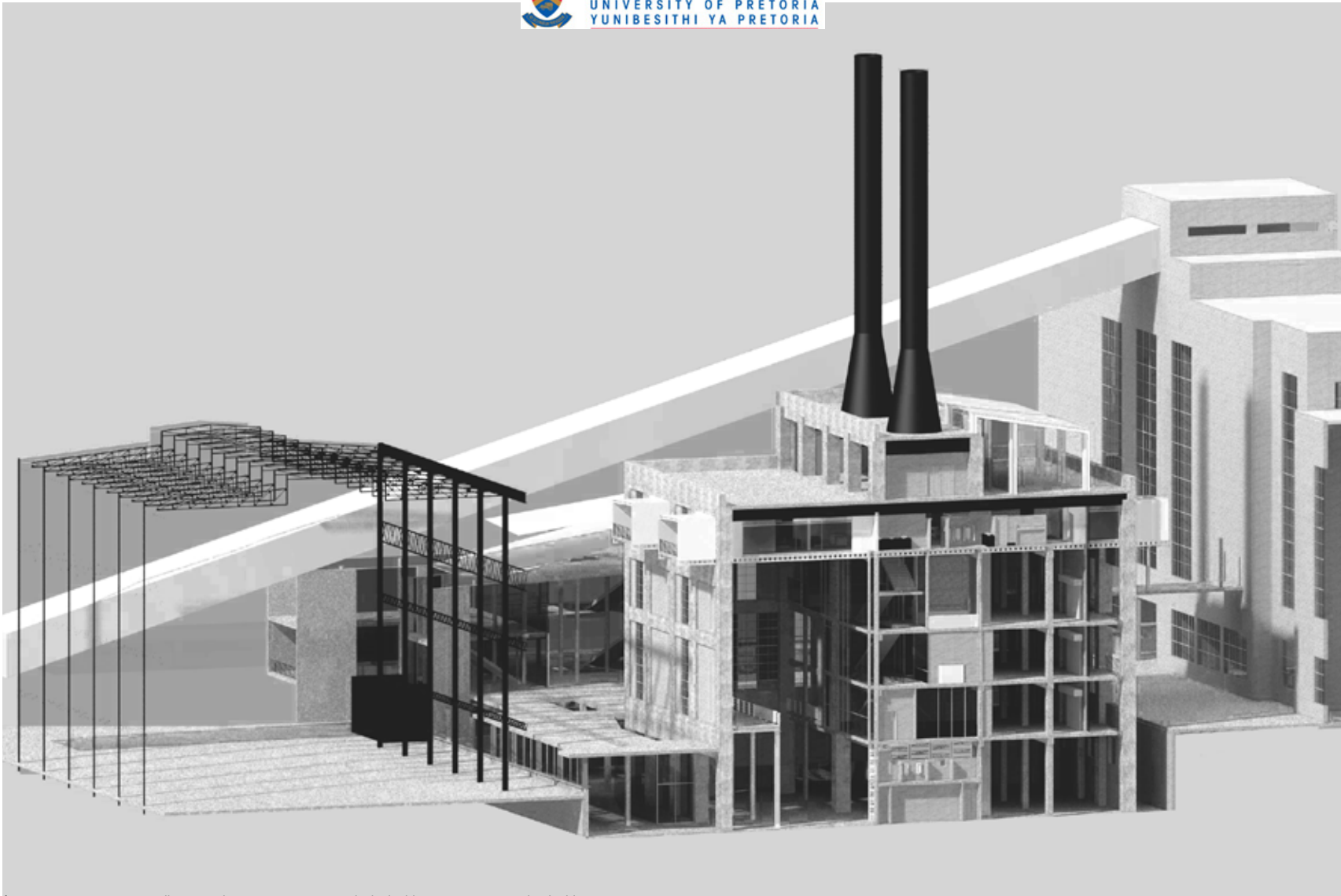


fig. 132_ Perspective section illustrating the new intervention inside the building in proximity to other buildings

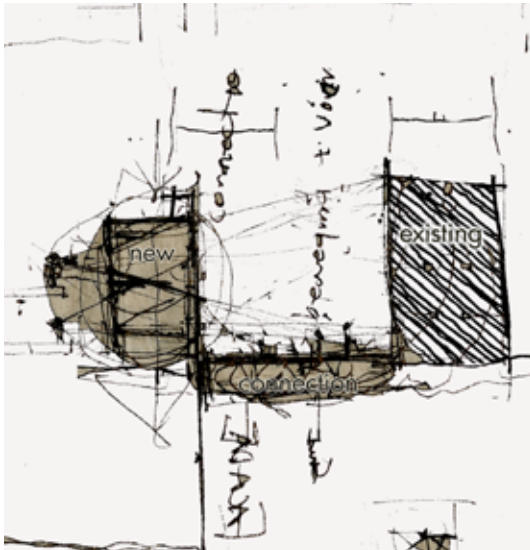


fig. 133_ Conceptual diagram illustrating the underground connection between old and new architecture



fig. 134_ Perspective view as form the square area

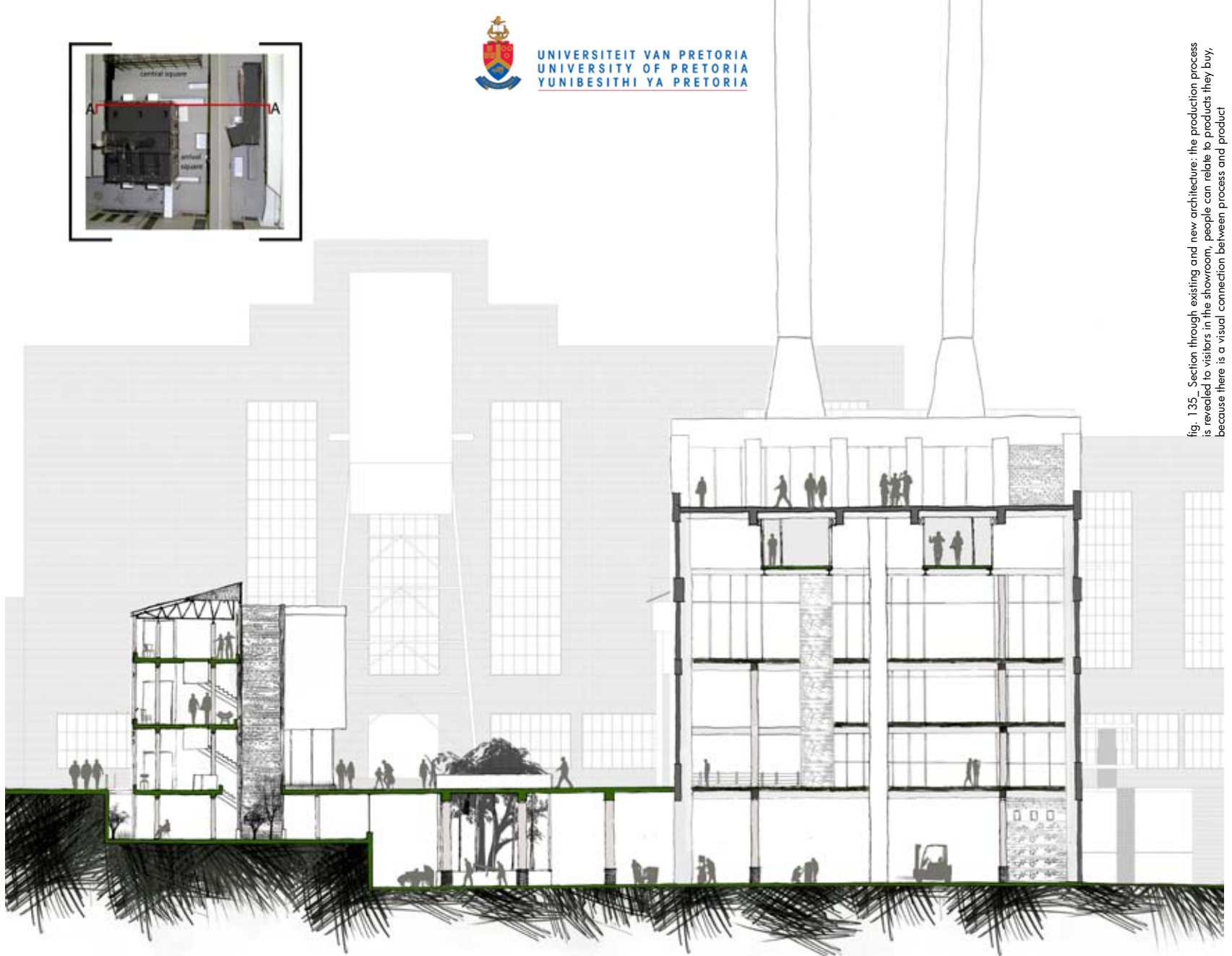


fig. 135_ Section, through existing and new architecture: the production process is revealed to visitors in the showroom, people can relate to products they buy, because there is a visual connection between process and product

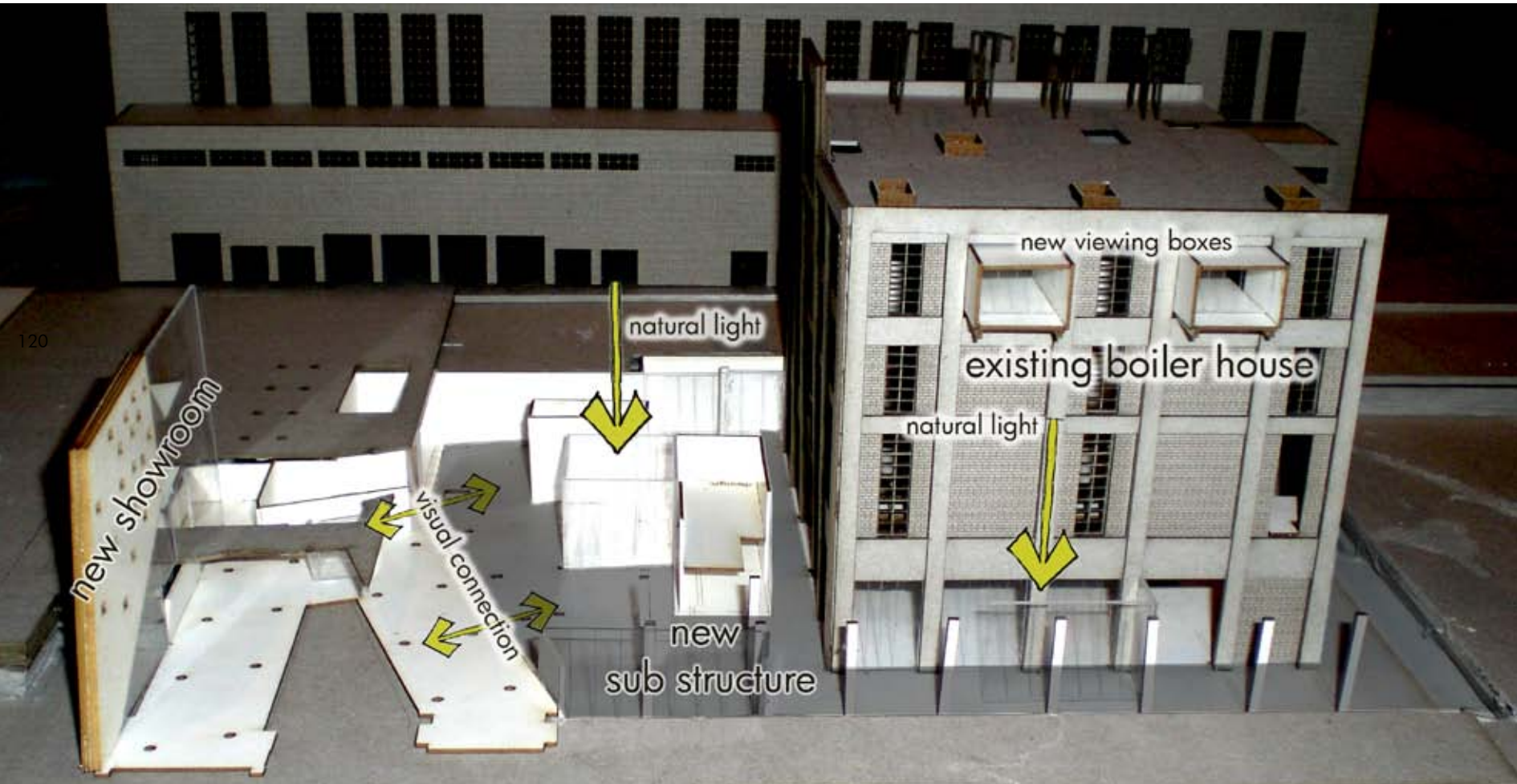


fig. 136_ Image illustrating the underground connection between the old boiler house and the new showroom



fig. 137_ The visual connection between the old and new architecture

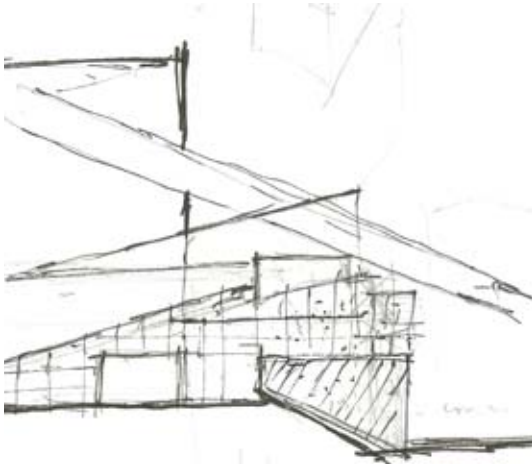


fig. 138_ Conceptual exploration

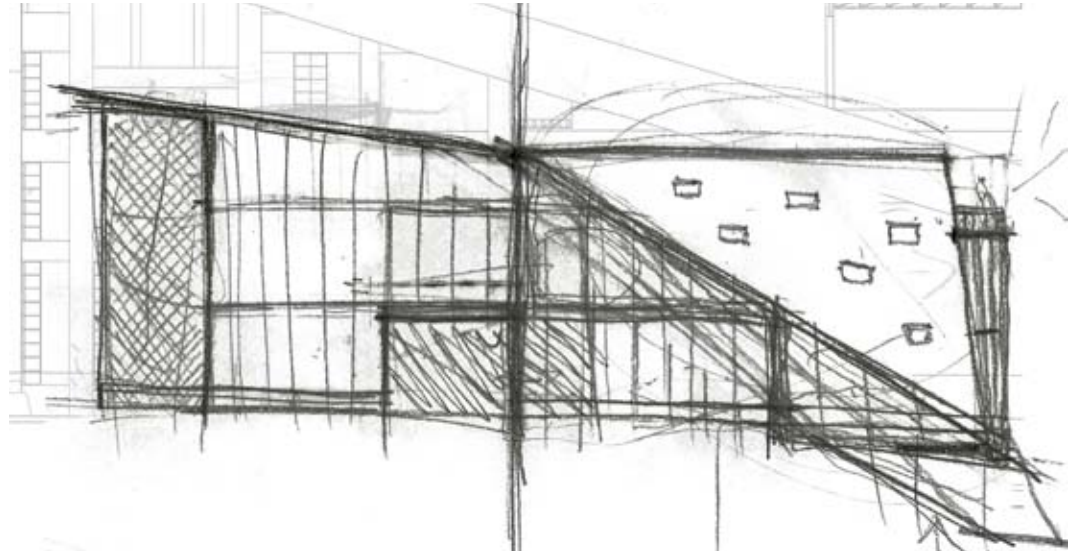


fig. 139_ Exploration sketch illustrating the showrooms Eastern facade exploration

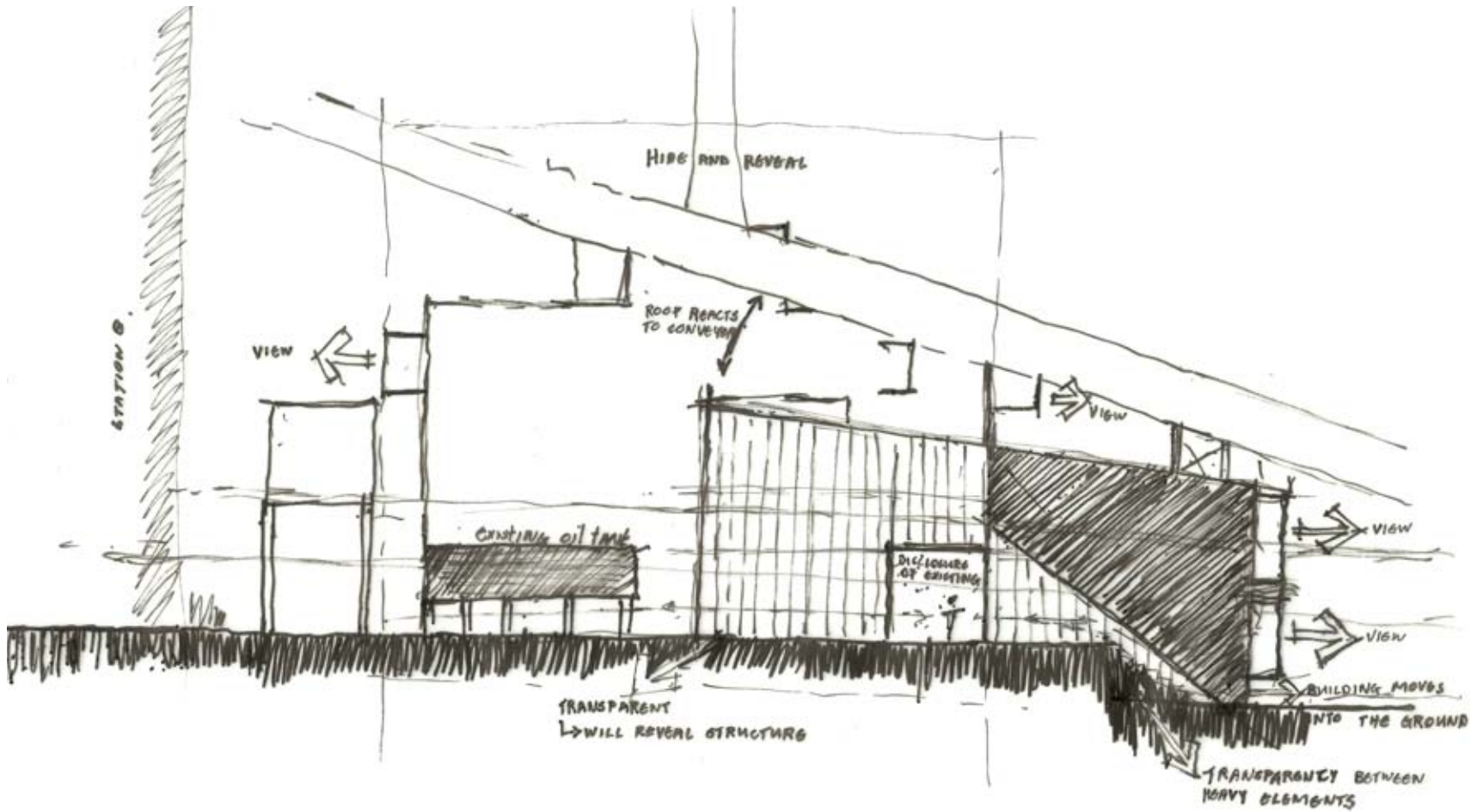
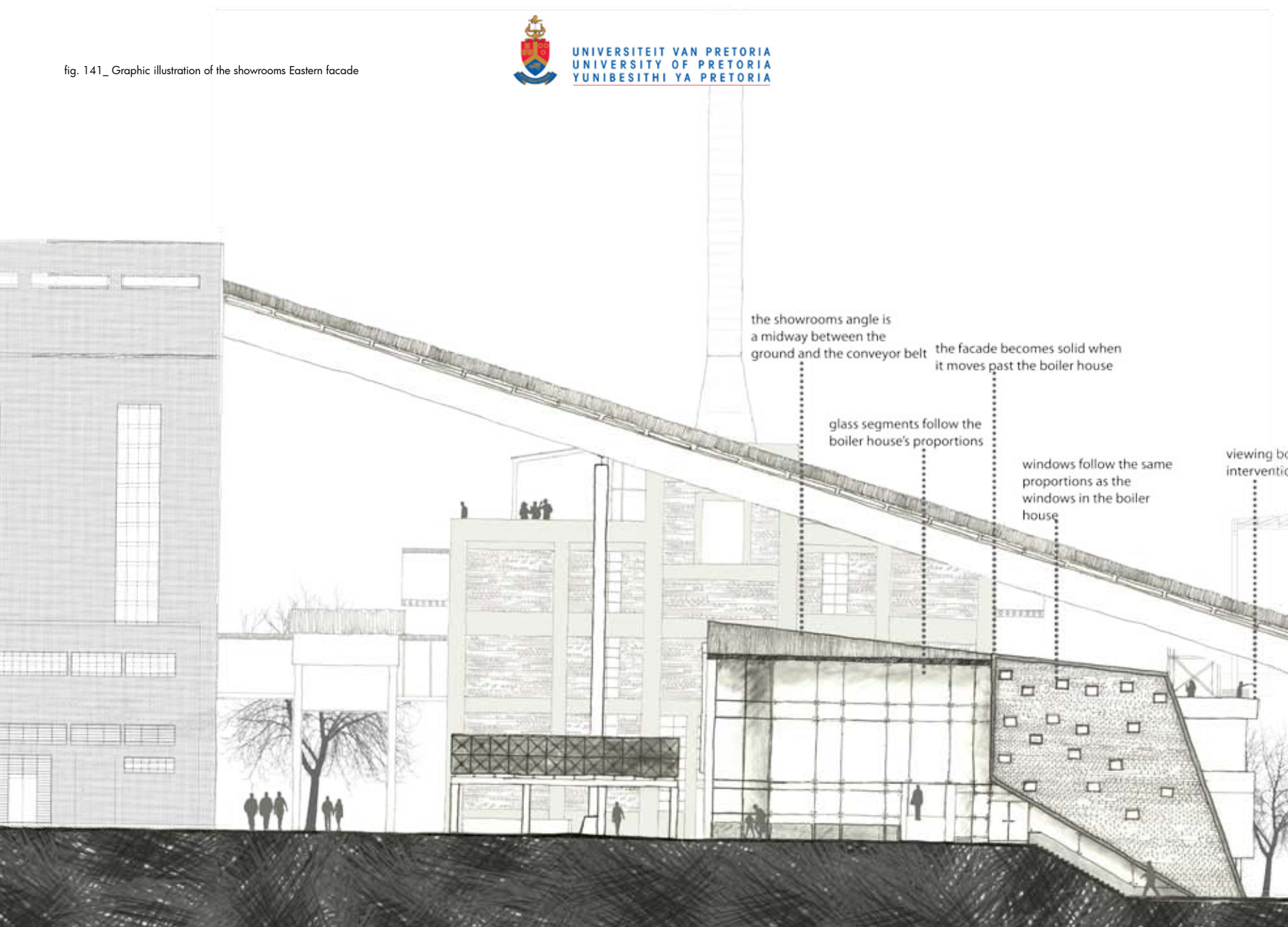


fig. 140_ Stipulating reasons for the facade development

fig. 141_ Graphic illustration of the showrooms Eastern facade



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the showrooms angle is a midway between the ground and the conveyor belt

the facade becomes solid when it moves past the boiler house

glass segments follow the boiler house's proportions

windows follow the same proportions as the windows in the boiler house

viewing bo
interventio



boxes relate to the
on inside the boiler house

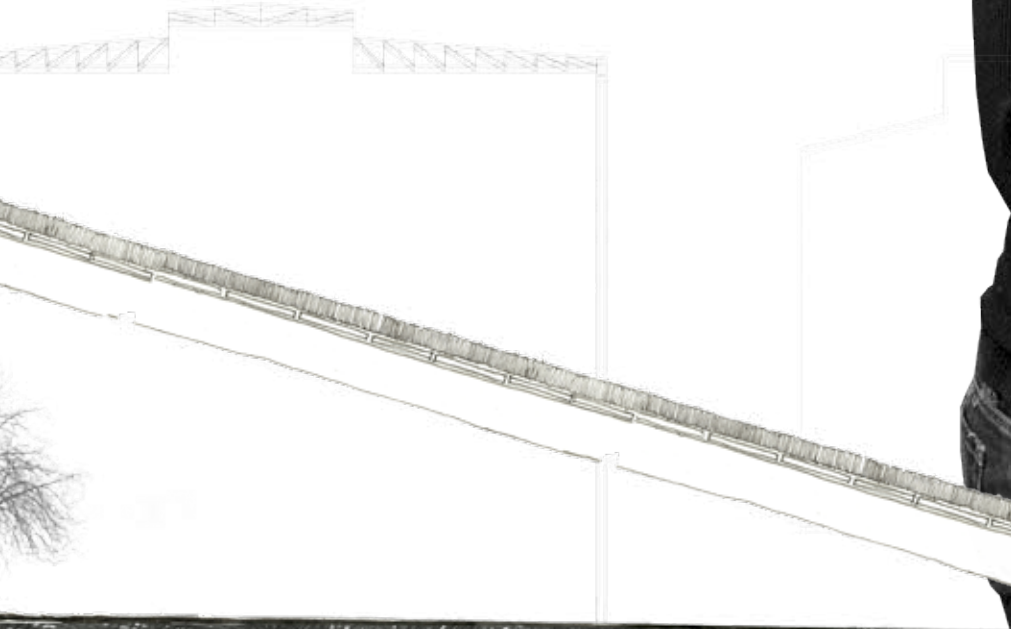


fig. 142_ Furniture making is a skill that can be practised by both sexes



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fig. 143_ The connection between the train platform and the showroom



7.12. Views_



fig. 144_ The viewing box line up with the existing entrance of the Boiler House, it also directs the viewer to specifically notes and experience the historical building

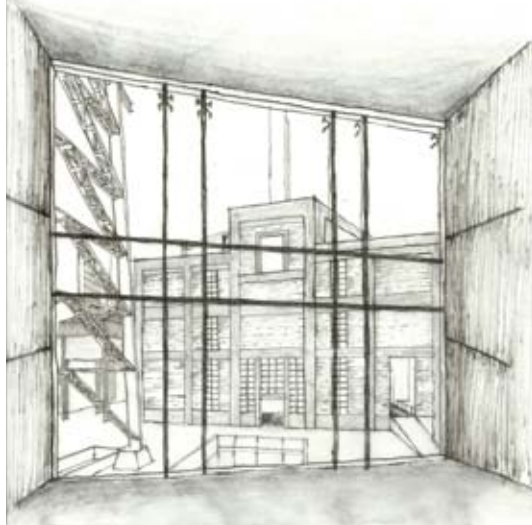


fig. 145_ Views as seen form the furniture showroom

