# Chapter 4

# Precedents

### 4.1. Introduction

This chapter evaluates projects that are similar to the thesis proposal. The projects were chosen for their functional, typological, theoretical or thematic similarities. Each project is described shortly, after which it is evaluated in terms of its influence on both the Site Development and the MINI Space Gallery.

### 4.2. Fiat Works (Lingotto), Turin

Originally by Giacomo Matté Trucco, 1916-1926, altered by the Renzo Piano Building Workshop, 1983, 2002 (figs.4.1-4.3)

This factory for the Fiat automobile manufacturing company, a marvel in its time, was adapted to suit contemporary needs after the factory closed (Encyclopedia of 20th Century Architecture,

Figure 4.1

Figure 4.3

2004:458-459). It is significant for this study, because it originally had the automobile as the subject, but has been adapted to suit an entirely different use.

The building, which is now seen as a monument for art (Buchanan 1997:62), became outdated in the 1970's, after which the Renzo Piano Building Workshop won the competition for its revival (*ibid.*:63). It is a long-running project (*ibid.*), the most recent addition being the most relevant for this investigation.

A small museum was added in 2002, comprising of a structure that seems to float above the roof of the existing building (di Paderno and Stephens 2003:130, fig.4.2). The new spaces continue to the floors beneath this structure (*ibid.*), allowing the museum to become part of, but also separate from the old building (fig.4.5). The massing is composed

Figure 4.2

Fig.4.1 - Fiat factory after the first renovations.
Fig.4.2 - The original Fiat factory.
Fig.4.3 - The museum, the latest addition to the factory.
Fig.4.4 - Sketch showing the massing of the museum, in section.
Fig.4.5 - Simplified section of the museum.

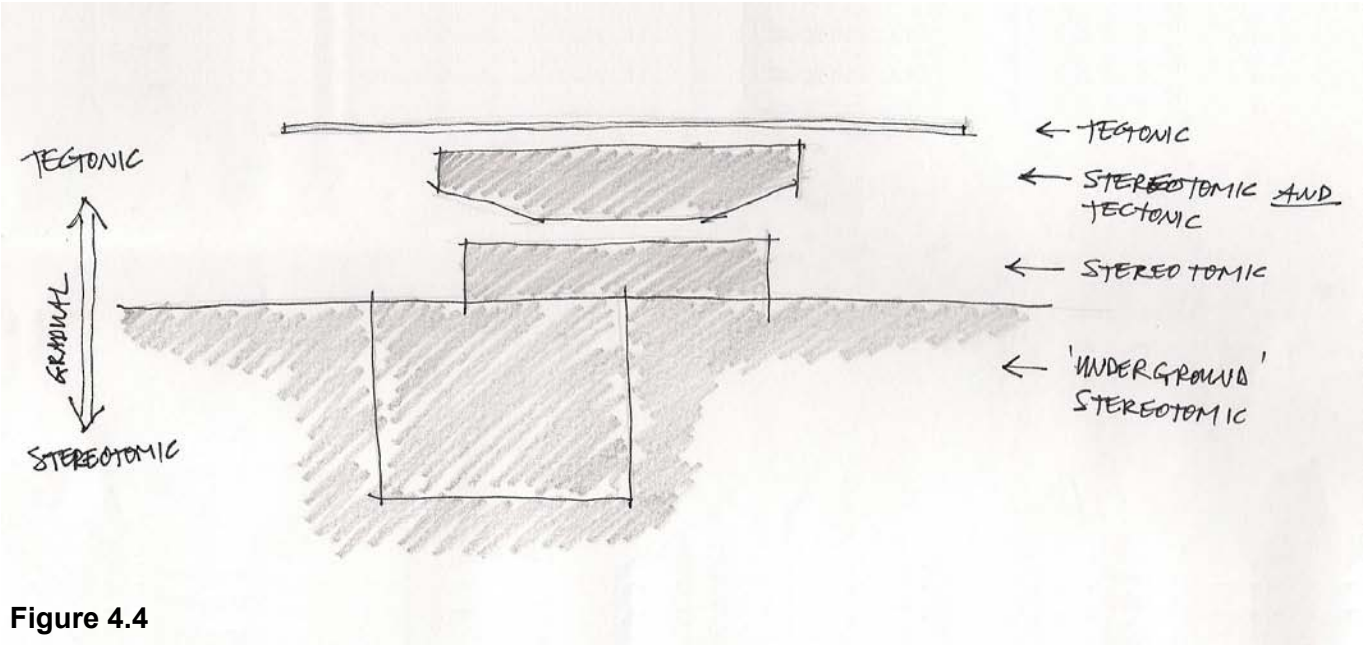


Figure 4.4

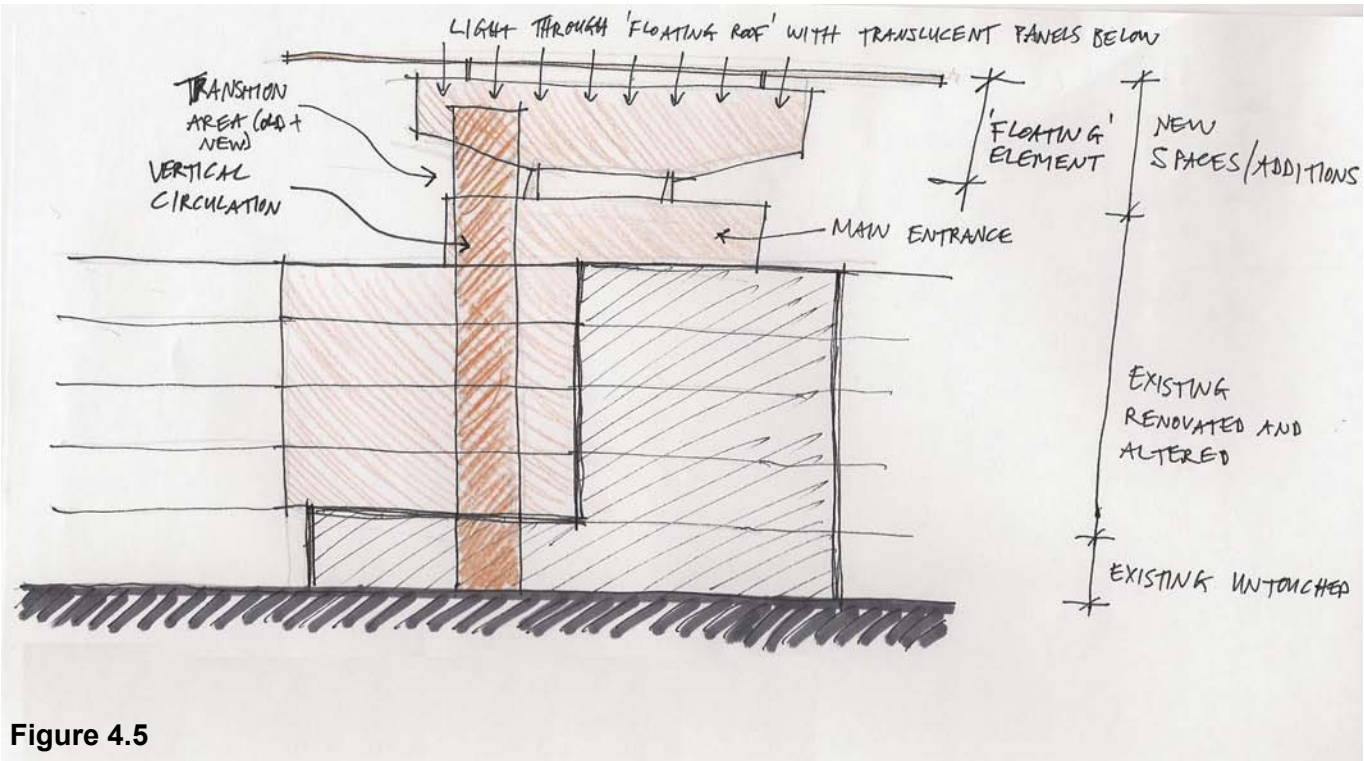


Figure 4.5

Fig.4.6 - Interior view of the museum.

Fig.4.7 - Exterior view of the rooftop remodelling.
Fig.4.8 - Diagram showing the rooftop remodelling's new elements with the old, in elevation.
Fig.4.9 - Interior view of the rooftop remodelling.

Fig.4.10 - Perspective rendering of the car museum.

Figure 4.6

in such a way that as one moves upward within the exhibition spaces, the building becomes lighter, progressing from the underground stereotomic, renovated areas, to the tectonic, floating, louvered roof (fig. 4.4).

This precedent serves to show how a new structure and function can be introduced into an existing building. It appears that people can move effortlessly between the old and the new intervention. This is enhanced by the staircase with open risers and glass balustrades (*ibid.*:132, fig.4.6), marking the difference between the old and the new, and enhanced by the transition space in the vertical circulation shaft (fig.4.5). The calmness achieved in the exhibition spaces of the older part (*ibid.*) is incorporated in the design of the proposed MINI Space Gallery.

Figure 4.7

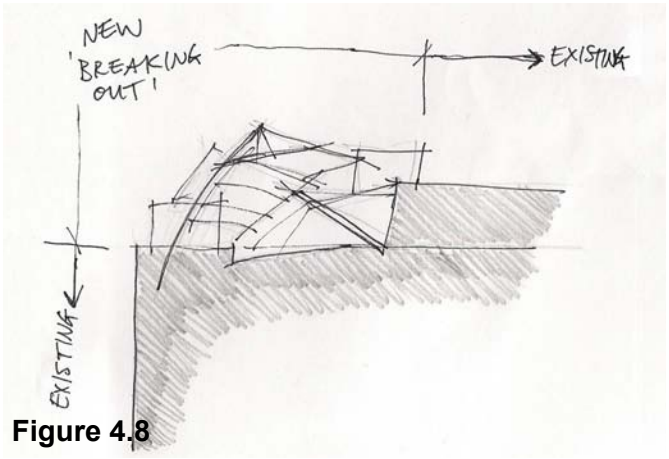

Figure 4.8

**4.3. Rooftop remodelling, Vienna**

By Coop Himmelb(l)au, 1983/1987-1988 (figs.4.7-4.9)

The roof of an apartment building was broken up to create office space beneath (Broadbent 1991:21-22). This project is yet another example of adaptive re-use and is seen as a relevant illustration of deconstructivist architecture (Johnson and Wigley 1988:17, 80).

Johnson and Wigley (1988:17, 80) describe this work as a distorted form breaking out of the existing structure. These dynamic forms are clearly visible in the building (figs.4.7, 4.9) and, when looking from within, are not merely decorations, but are elements with an influence on the space.

Similar forms are incorporated in the design approach of the MINI Space Gallery, as was the same 'breaking out' of elements (fig.4.8). Although the Rooftop Remodelling is formalistically complex, a simpler aesthetic is to be implemented in the Site Development and the MINI Space Gallery. This precedent also shows how an addition and renovation of an existing building can merge with the old, by means of contrasting and dynamic forms.

**4.4. Car museum, Nanjing**

By 3GATTI, Francesco Gatti (chief architect), to be completed in 2010 (fig.4.10 and 4.11)

This project was the winner of a competition for the design of an automobile museum (www.worldarchitecturenews.com). The architect uses folded planes to create a structure in which automobiles are displayed (*ibid.*). These forms were inspired by the art of origami and a piece of paper


Figure 4.9


Figure 4.10

Fig.4.11 - Interior perspective rendering of the car museum.
Fig.4.12 - Second level plan of the car museum, with column grid lines 7, 9, 14 and C darkened.
Fig.4.13 - Diagram of the car museum's structural layout, with columns, beams and floors.
Fig.4.14 - Diagram of the car museum's functional layers.


Figure 4.11

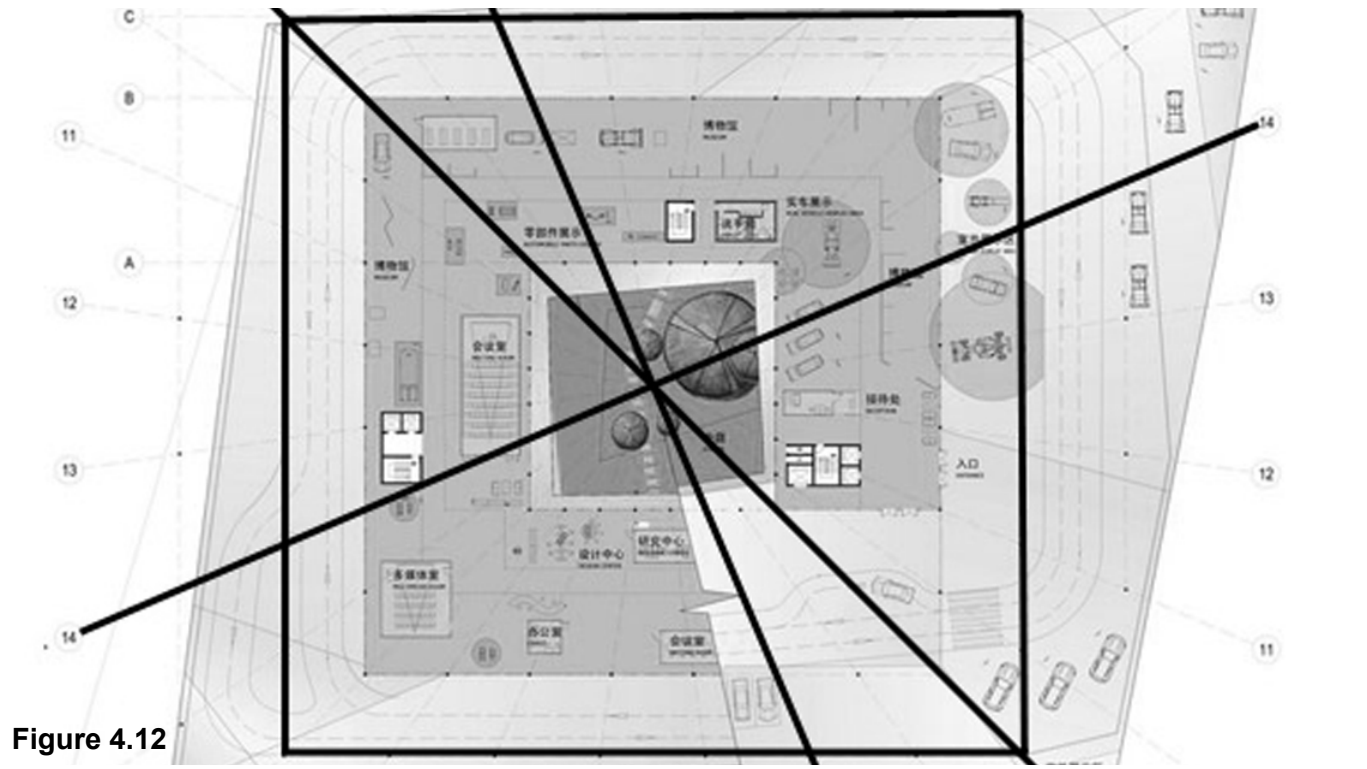


Figure 4.12

Fig.4.15 - Perspective rendering of the exhibition space.

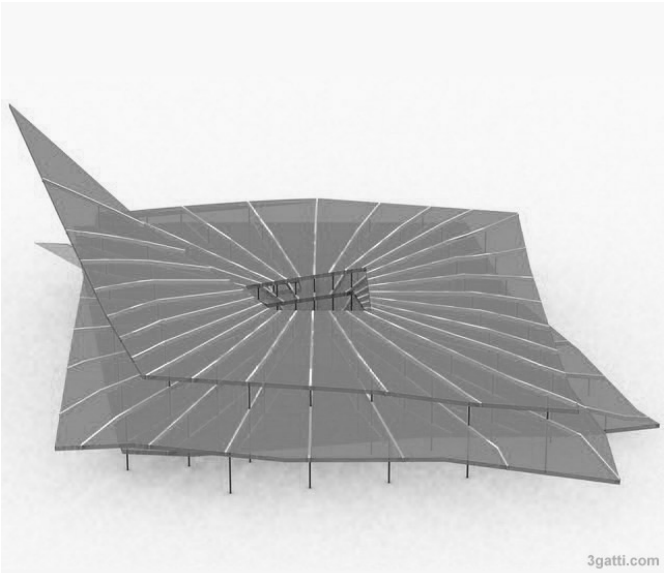


Figure 4.13

was cut and folded to generate the building's form (*ibid.*) It was chosen as a precedent for this study, because of its innovative ways of exhibiting objects.

The building consists of many layers. Functionally, movement is catered for by pedestrian and ramps, vertical circulation shafts and a glass volume (fig.4.12). Structurally, its columns, beams and floors form an additional layer (fig.4.13). The act of moving through the building is primary, with cars and pedestrians both using the slanted floors to access the whole building (*ibid.*). On plan, it becomes evident that new ideas were implemented instead of the normal grid layout to order the columns, the one set of lines converge at the centre of the building, with the second set forming squares (fig.4.14).

The principle of layering was applied in the Site Development plan and the MINI Space Gallery

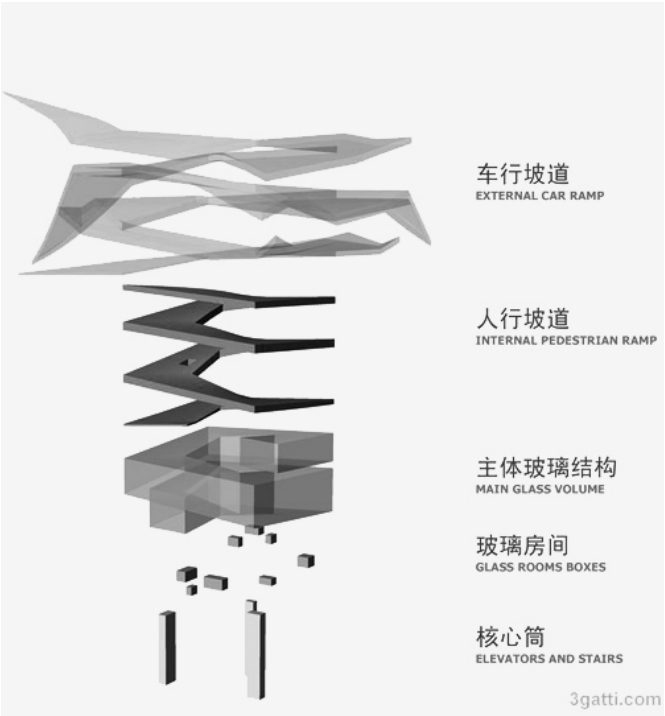


Figure 4.14

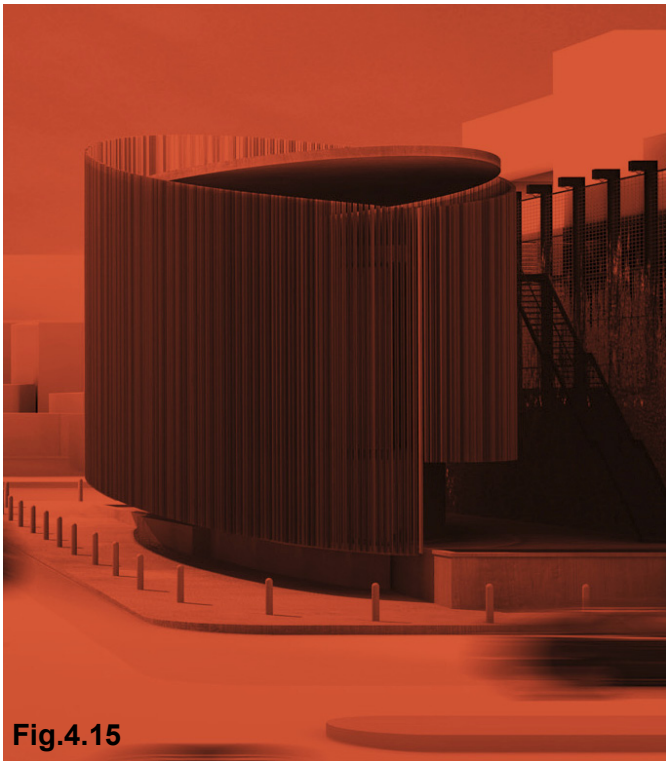

Fig.4.15

design, being translated as layers of form or beauty, function or programme and tectonics or structure. Similar dynamic volumes and planes were also incorporated.

**4.5. Multi-purpose exhibition space, Rosebank**

By studioMAS, under construction (fig.4.15-4.19)

An extension to an existing gallery, the new addition provides multifunctional spaces in which art can be exhibited as well as a space for social events (www.studiomas.co.za). The significance of this building is that its programme is the same as the proposed MINI Space Gallery.

The elliptical plan (fig.4.16) was chosen because it relates to a handmade process similar to the process of creating art (studioMAS). Detail elements, like the façade's aluminium strips, are inspired by the immediate and cultural context: reeds found on site, as well as cladding on Zulu Kraals (*ibid.*).

The simplicity achieved in this project is important for the dissertation. Figs.4.17 and 4.18 show the simple functional layouts. The principle of flexibility in the exhibition spaces, accomplished by vertical panels that can be rotated at will, but also lowered when not needed (*ibid.*; fig.4.19), is also integrated with the dissertation project.

**4.6. Scuderie Aldobrandini, Rome**

By Massimiliano Fuksas (fig.4.20 and 4.21)

This museum, gallery and conference centre was constructed within an existing building. It serves as a precedent primarily for the Mini Space Gallery.

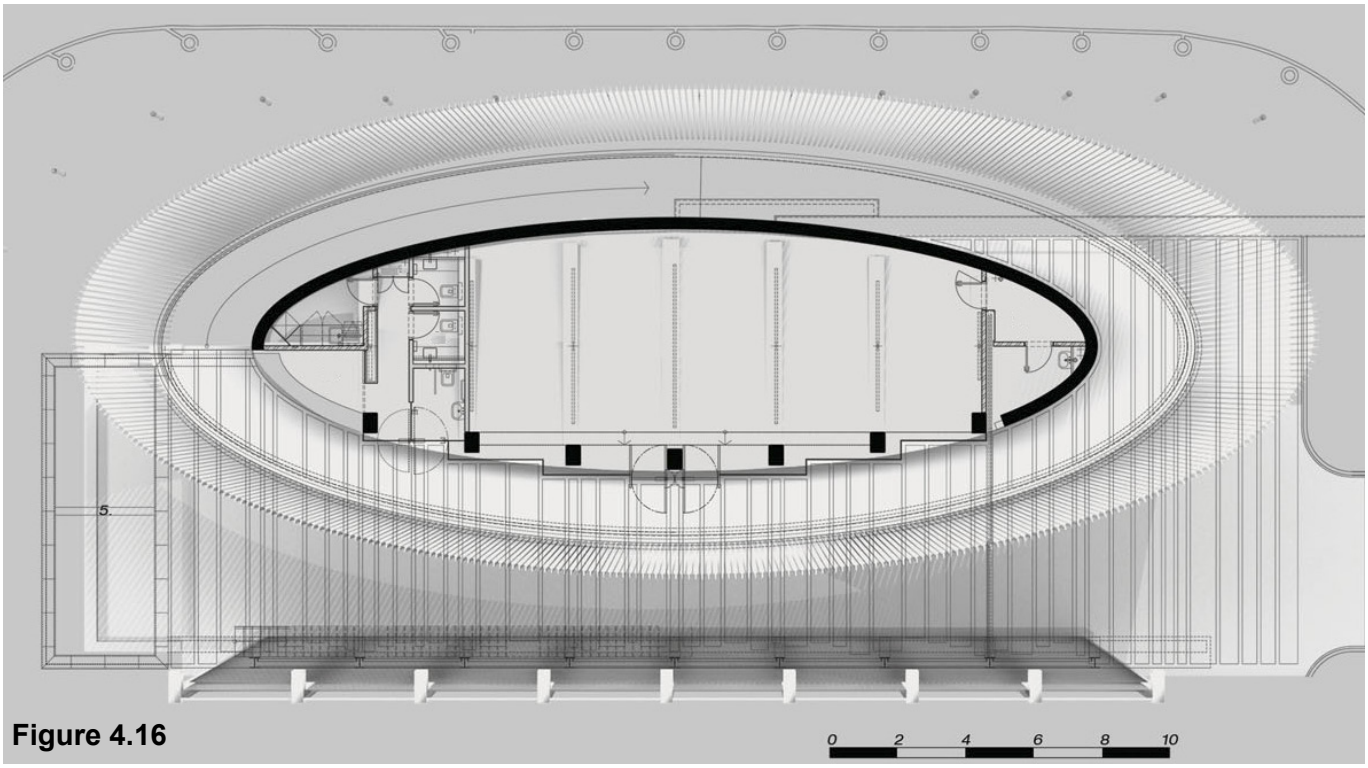


**Figure 4.16**

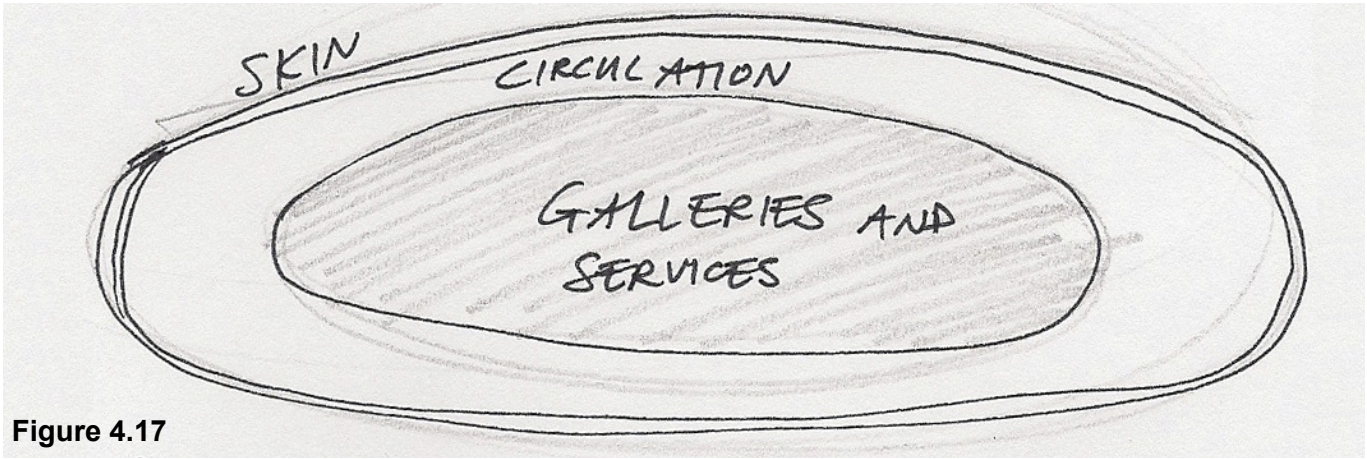


**Figure 4.17**

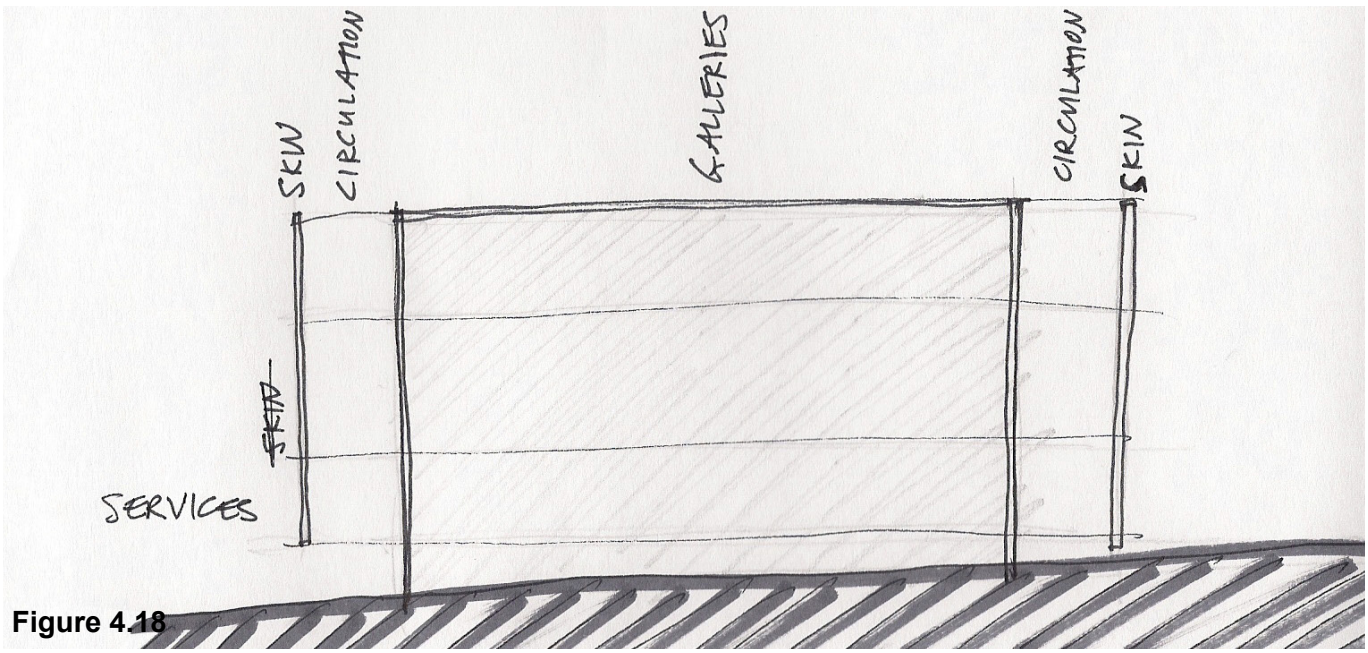


**Figure 4.18**

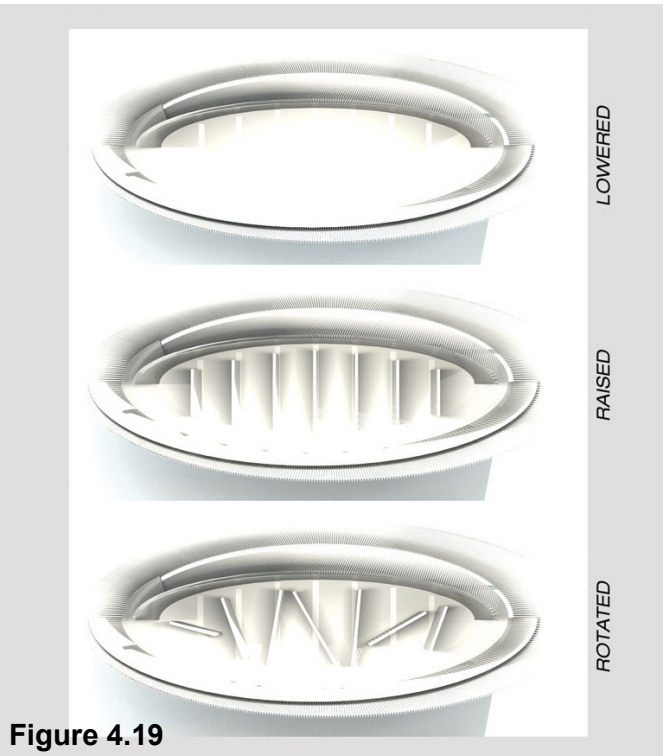


**Figure 4.19**

The different programmes were accommodated in a building where the architect stripped the interior to expose the old structure (Bennett 2003:146). A service core was inserted in the middle of the building as well as a second floor (fig.4.21) to create a dialogue between the existing elements and the additions (*ibid.*:146, 148).

Accapezzato (*ibid.*:148) stated that they "wanted to be clear about what was new and what was old", a very important quality applied to the dissertation project. The use of steel for the new structural components were also incorporated, as well as "a unified sense of space" and ease of circulation (*ibid.*).

**4.7. Storefront for Art and Architecture, New York**

By Vito Acconci and Steven Holl, 1993 (fig.4.22 and 4.23)

"Storefront for Art and Architecture is a nonprofit organization committed to the advancement of innovative positions in architecture, art and design" (www.storefrontnews.org). The façade redone by Vito Acconci and Steven Holl, consists of rotating panels that obscure the boundary between the outside and the inside (*ibid.*). This precedent is valuable to the study, because of its small-scale solutions and similar programme as the proposed MINI Space Gallery.

The space is dynamic, being about 30 meters long and from 1 to 6 meters wide (*ibid.*, fig.4.22). It is located on the ground floor level of an existing building (*ibid.*), thus the lightweight panels connect with everyone walking past (fig.4.23). Further aspects are shown in fig.4.22.

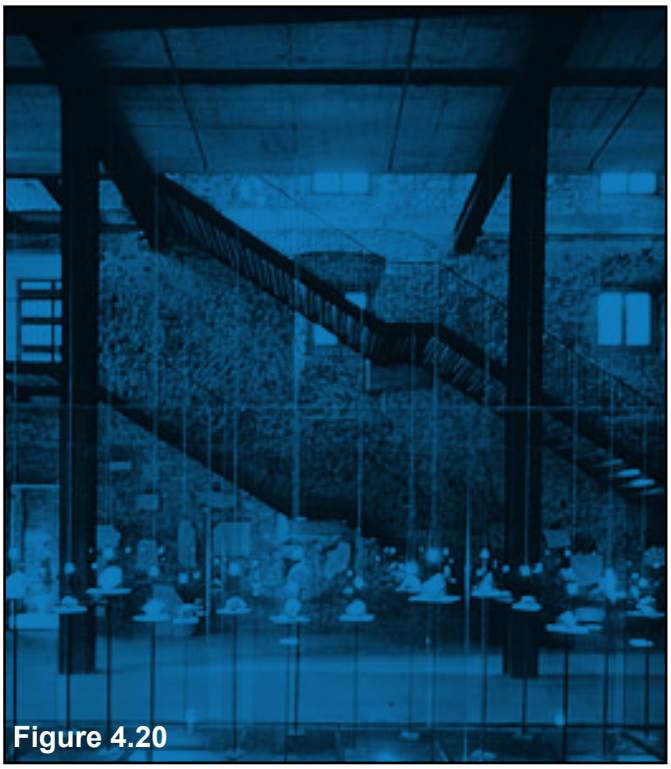

Figure 4.20

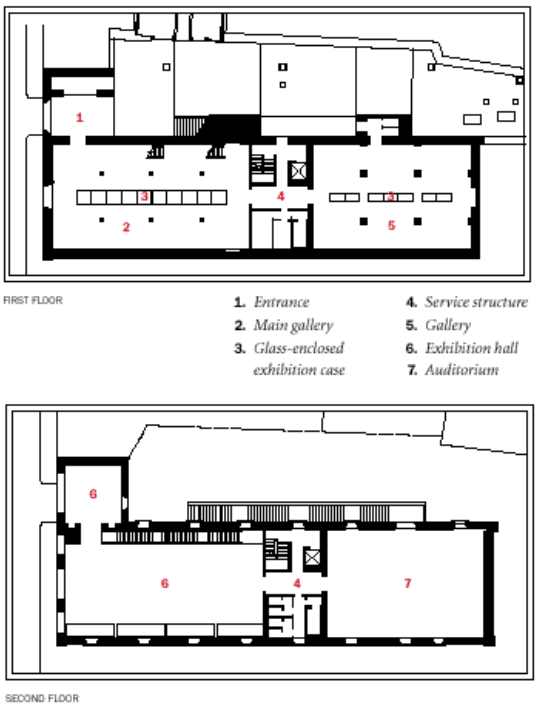


Figure 4.21

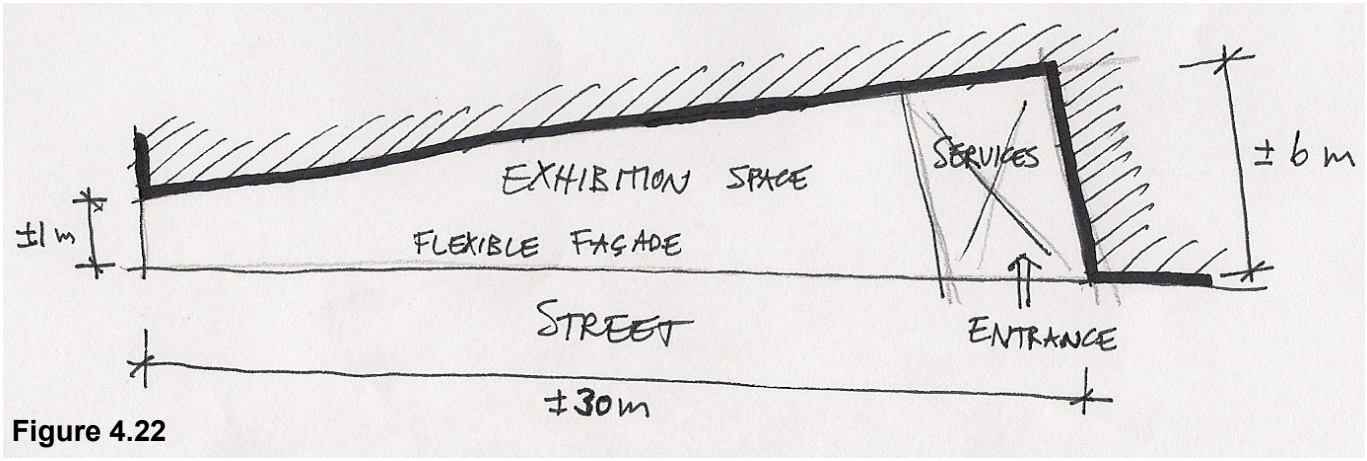


**Figure 4.22**

The simplicity of the whole design is important to the dissertation, as well as the small yet dynamic form of the exhibition space.

### 4.8. Conclusion

- The space should flow unhindered from the old to the new, yet this transition should still be experienced.
- All new elements must contrast with the existing ones.
- The proposed gallery is required to 'break out' of the existing structure, enhancing its presence on the street.
- The new spaces should be composed of different layers, with components juxtaposed, intersected and influencing each other.
- Despite the dynamic forms, the MINI Space Gallery needs to be simple, almost minimal, with tranquil spaces aiding in the slow observation of the exhibited objects.

**Figure 4.23**