3. precedent studies
3. precedents

3.1 introduction

The precedent study aims to look at different examples of adaptations to existing buildings and focuses on:

- the architect’s approach to working with an existing building
- the threshold
- the effect on the urban context
building onto

building over

building into + next to

Caixa Forum, Madrid, Spain

Santa Caterina Market, Barcelona, Spain

Turbine Square, Johannesburg, South Africa
3.2 Caixa Forum, Madrid, Spain (2008)

Herzog & de Meuron Architects
in collaboration with Patric Blanc

Fig 3.2 (a), (b) Existing power station building before adaptation.

Fig 3.3 (a), (b) Interior of new adapted building.

Fig 3.4 Parti diagram showing existing building, new addition and threshold.
3.2.1_problem / intention

The Gran Via is one of the busiest vehicle and pedestrian spines in Madrid, lined with Museums and public spaces on the one side, but lacking public buildings on the other. An old derelict power station building was identified to be converted into a showcase for contemporary art and a generator for intellectual energy for the surrounding area, to reinforce the spirit of the place and to retain the character of what was there before (Webb, 2008: 46).

3.2.2_description

Smaller scale and bold structure reinforces the urbanity of the city’s cultural boulevard on one side and network of narrow streets on the other.

A massive, richly textured block that hovers over a gently sloping plaza – and as a raw-edged frame for innovative new work. To achieve an equilibrium of mass and lightness, the solid building mass is contrasted with a public gathering place underneath it, by removing the granite base of the landmark 1901 building (Webb, 2008: 46).

It sets off the handsomely restored brickwork of the old building and the new crown of pierced dappled patterns in rusted cast iron wrapped around the restaurant and administrative offices on the upper level, recalling Spain’s Moorish past and provides a dramatic alternative to the cool even lighting of the galleries (Webb, 2008: 54).

3.2.3_critique

Additions to the existing building are severe, yet the designers went to great lengths to retain the skin of the existing building. Industrial quality and vast open spaces associated with industrial buildings, as well as the marriage between the existing and the new is not evident in the interior. The existing building is merely part of the façade of the new building which was informed by the scale of the surrounding buildings.

The plaza in front of the building creates a dramatic threshold between the busy street, to the covered plaza, to the interior of the building. The architects managed to respect the historic building, by literally adding a contemporary layer to the existing urban fabric and re-using a building which was previously unused.

The plaza offers a public space which was lacking on the one side of the busy Gran Via motorway, resulting in a new energy and interest in the surrounding area for new developments and businesses. The new building is certainly a new commodity on the Gran Via museum strip and the architects’ intention to revitalise an old part of Madrid has been achieved.

3.2.4_design influence

The architects’ approach was to completely change the existing building in order to house the new programme without being sympathetic and sentimental, but still respecting the existing surrounding character. An opportunity was missed to experience where the new and existing meet in the interior.
3.3 Santa Caterina Market, Barcelona, Spain (2005)

Enric Miralles Architects

Fig 3.7 Fruit and Vegetables on display at Santa Caterina Market.

Fig 3.8 Roof of Santa Caterina Market and surrounding context.

Fig 3.9 New roof over existing building.

Fig 3.10 Parti diagram showing existing building with new addition.
3.3.1_problem / intention

Markets are an essential part of Barcelona life and they are an important neighbourhood focus for both economic and social exchange and their presence helps to cultivate a strong sense of place and community (Slessor, 2006, p. 52). The Santa Caterina Market has been occupying the same site since the nineteenth century, but was starting to suffer commercially and civically in the 1990’s. Though close to the city centre, it serves a relatively poor area, surrounded by dense, dingy apartment blocks. Covered by a decaying pitched roof, the market’s mess and stench had become a local eyesore and some thought it should be demolished (Slessor, 2006: 46).

The architects (who incidentally stayed in the area) knew that demolishing the market would be a loss to the area, and convinced politicians and city planners that the market could be the opportunity for a piece of urban regeneration, by including new housing blocks and improving routes through the dense urban fabric, whilst retaining the market (Slessor, 2006: 46).

3.3.2_description

The architect’s scheme keeps the market’s low arched walls on three sides, containing and defining the site. Its roof is a fifth elevation that drapes and swells over the market hall like a coloured blanket or camouflage net, visible from the surrounding apartment blocks. Extending the Catalan tradition of mosaic ornament, and a reference to the mosaics in the work of Gaudi, it is clad in hexagonal ceramic tiles that make up a pixellated abstract pattern of colours usually found in a fruit and vegetable market (Slessor, 2006: 46).

Below ground, to minimise mess and disruption, is the business end of the market. Lorries deliver fresh produce to a busy loading bay, from where it is moved to the main market hall by a system of goods lifts and porters (Slessor, 2006: 46).

3.3.3_critique

The new design addition has a strong reference to the city and to markets in general. It is built over the existing building and dominates the surroundings, in such a way that the existing building itself becomes subdued.

This addition to the original market building – with the help of other interventions and renovations in the area – had a very positive effect on the land values in the area. However, it lacks the informal welcoming character of other Barcelona markets. The Santa Caterina Market now sells products (including clothes and jewellery) to a higher income group. The area that was once a relatively poor area in Barcelona’s Gothic District has seen a rapid increase in land values and new ‘designer’ shops and bars.

3.3.4_design influence

This intervention has another approach; by keeping most of the original building facade and building a new sculptural roof over it, giving the surrounding neighbours a more pleasant view. There is however, a lack of reference to the existing building in the new design.

Fig 3.11 Figure Ground Study of building with public space in front.
3.4 Turbine Square, Johannesburg, South Africa (2007)

TPSP Architects

Fig 3.12 Turbine Square, Johannesburg, South Africa

Fig 3.13 Existing building before adaptation

Fig 3.14 Aerial photo of building with surroundings

Fig 3.15 Fig. (a),(b) Interior of adapted building

Fig 3.16 Sketch showing Turbine Square in relation to Mary Fitzgerald Square, Newtown, Johan-
3.4.1_problem / intention

Much of Johannesburg's physical growth during the early decades of the 20th century depended on mining activity, which in turn was linked to the production and consumption of electricity. Improved mechanisation needed to amalgamate gold extracted from deep levels, required a bigger source of power. This prompted the creation of the Power Station in Newtown (Gaule, 2004: 47).

The Newtown site, owned by mining houses and occupied by squatters in the 1990's, threatened the ongoing viability of the area. The electricity buildings were considered a significant landmark in the area (Gaule, 2004: 48). The mix of industrial and commercial buildings in Newtown has long interested architects and the existing built fabric offered exciting opportunities. In the 1990's the gold division of Anglo American separated from parent company and AngloGold Ashanti was founded. The new company was in search of a new premises and together with the architects, TPSP Architects, the site of the Turbine Hall in Newtown was identified as their new proposed offices (Nuttall, 2009: 41).

The concern of the architects was to connect the complex with the city and to achieve transparency and continuity of space within the urban context (Nuttall, 2009: 42).

3.4.2_description

The Boiler House forms the new entrance to the complex through which to enter the Turbine Hall, which was converted into office space and meeting rooms, as well as the new wing that offers three floors of office accommodation above three floors of basement parking. The structure has become the aesthetic: floor slab beams, columns are articulated. Original steel diagonal braces are mimicked by new diagonal concrete braces in the new wing (Nuttall, 2009: 44).

3.4.3_critique

This building's link, through history, to the mining and manufacturing of gold is astounding. The architects took a rather sensitive approach in the design of the extension to the existing building, by using the same proportions, structural gridlines, expressed structure and materials in the new extension. Adaptations to the existing buildings are few, retaining the industrial character and spatial qualities of the existing buildings.

The building and the areas around it are cut off from the context by fences. The architect's intention was to achieve a continuity in the Newtown urban fabric, but public access to the building is limited.

3.4.4_design influence

This project differs from the previous examples, as the architect's approach was to mimick the existing rather than contrast it. The new extension is submissive to the existing building and doesn't detract any attention away from it.

The Newtown district in Johannesburg has an exciting charm due to the regeneration and revitalisation of an area with many historic layers. It is rather enthralling to discover this part of Johannesburg, however the fact that the Turbine Square is fenced off from the immediate context is disappointing and a missed opportunity.
3.5_conclusion

3.5.1_design approach

There are different approaches to working with an existing building which ranges from reproduction/mimicking to contrasting.

Adaptive re-use projects that mimic the existing are often strong but subtle, hard to capture in photographs, and best appreciated in person.

Adaptive re-use projects where the intervention contrasts with the existing usually has a much bolder statement of the significance of what was there before and what the new building should be.

In recent years, fashion photography depended on this contrast to convey the beauty of the models and the clothes they wear. The decision that the new intervention should contrast with the existing buildings would be a suitable approach.

3.5.2_threshold

The discussed buildings are all close to busy streets and rely on a public space in front of the buildings to announce the entrance of the new buildings. The threshold allows for a gradual transition between the busy public street to the more quiet private spaces inside the building.

3.5.3_effect on urban context

In all the above-mentioned scenarios, the project was part of a bigger urban framework to uplift a district in a city and there has been a positive effect on the surrounding environment. Land values increased, small quiet streets are now bustling with activity.

When an area or building is re-used or revitalised and it possesses different layers of history and meaning, a rich subconscious quality develops with the users of that building or space. There’s an excitement to discovering old hidden gems in a city and redressing them so they can have a purpose in a contemporary urban environment, which usually brings a new energy to the surrounding area.