

Concepts and reasoning CHAPTER 06



6. CONCEPTS AND REASONING INTRODUCTION

Working with an existing structure, the designer is challenged with questions of whether to adapt certain spaces or to demolish forms according to the design metaphor. It is therefore important to establish grounds or a methodology to guide the alteration process throughout, in order to determine the new additions.

6.1 ALTERATION

According to Fredd Scott (2008:17), alteration seems, to work against the ultimate purpose of architecture, which is meant to create new order and accomplish a state of paradise on earth. Therefore, he mentions that a work of art should ideally attempt to exclude alteration, seeing that alteration has a different agenda (Scott, 2008:17). Adaption is sometimes the outcome of interaction with the building that requires change, bringing the intended unchanged state being regarded as a 'work of art' into question.

However, under changing circumstances, any piece of work has to change to survive and extend its usefulness. Not all buildings are meant to be pure architectural forms; those entities often reach an expiration date. The idea of termination should be reviewed and elements suitable for redevelopment should be identified to find richness in the existing structure. That in itself becomes an extension of art; the dynamics of the set allow for certain qualities to emerge, and this challenges the idea of pure architecture.

6.2 ADAPTIVE RE-USE

Adaptive re-use entails the process of adapting old structures for new purposes, different from what was originally intended. In this particular case the Dairy Mall building was not meant to serve any higher purpose, yet its autonomous character has sustained its existence. The building has, however, entered a phase leading to a final stage of entropy, meaning that the structure is perceived to have reached the end of its usefulness. A third and final phase may have arrived; therefore, the envisioned change is very critical. Since the building's autonomous adaptive quality still serves the community well, it is worthwhile to re-evaluate architecture.



6.3 DESIGN METAPHOR

The proposal presents an architecture that strives to improve everyday ordinary spaces. An architectural concept developed out of the objective conditions of the site and theoretical groundwork. With the idea of striving for the essence of a critical site-orientated activity in mind, the overall architecture is based on the idea that activities such as social gathering and waiting prefigure the heart of the project. The collective idea of waiting and what it entails is the primary **design metaphor**.





6.4 DESIGN STRATEGY

Application of an adaptive layer to the existing envelope directs the focus from abandonment to creating new opportunities that can support the user. The idea is to allow for certain permanent alterations that will change the specific structure and form of the building. Certain parts will be demolished and new structural elements will be added, for example a new roof and structural walls. The original building form and identity will be partially preserved, since only some parts will be removed to accommodate new functions. The circulation routes will be determined, to allow for new structures to be layered onto the building to form the new structural framework. The building framework creates the premise for the new infill layer.

The infill architecture becomes the design focus which comprises of a new wall system that serves to divide retail spaces from the openings within the wall element that are used as seating spaces. The unit can also be adapted to form a market space. A new infill ceiling element will direct visual movement through the spaces. A new infill stair element will be added to the major transition area, forming part of the open social space where treads can become seating elements.

The newly added elements will support the idea of waiting. The building framework will outline the designated spaces of the infill elements and the proposed accommodation of the host building. Secondary infill will create additional new functions to serve the user. The main focus is to include elements that form a secondary system or contained spaces that are adaptable and removable. The new infill forms a major part of the intervention; it serves as a functional unit that is placed loosely inside the original building, thereby limiting the impact on the structure. It can be completely removed to be used elsewhere. The contained spaces are symbolic of the state of waiting, emphasising the isolation of objects in waiting. Their emphasised presence will reflect the interplay of the new and the old.

Waiting as a temporary state can be associated with these elements, seeing that they are synonymous with this temporary phase in which they form the infill architecture of the building. The edges of the building are punctured at critical points, allowing for the new elements to penetrate the existing and merge the interior with the exterior.





The need for improved social spaces for the city dweller justifies the programme.



As the new infill structures are envisioned to include pleasant seating and an outward focus on the urban scene, they will form observation points and intimate spaces for the 'in-between' nature of waiting. The infill elements become fragments between work and home, standing in contrast with it's existing background.

For the proposed new layer of the intervention, the possibility of using infill architecture similar to that of the Parasite project, it introduces great flexibility and the opportunity for creating re-useable units. The parasite attaches to an existing host structure to form a completely new unified expression.

Small structures facilitate an exploration between art and architecture, seeing that they challenge the idea of structures being either sculptural or functional (Richardson, 2009:5). The design intention is a collaboration between art and architecture, where both form part of the overall idea of the existing structure. Over time cities tend to become less adaptive to the needs of the people, and small, flexible compartmental insertions may provide in the needs of the urban user. The use of technologies that do not demand permanent placement gives these elements a dynamic, elegant appeal. Designs like these are deliberately sensitive to their physical footprint, making them ideal city infill objects.

These structures whose primary challenge is to negotiate, or touch only lightly, the very ground beneath their feet (Richardson, 2009:14).

Figure 6.3: Parasite prototype





Figure 6.4: View of the Parasite structure Description: Parasite, Las Palmas, Rotterdam Architect: Korteknie Stuhlmacher Architecten Date: 2001

Reference:http://www.detail.de

The Parasite structure was erected on the roof of a lift shaft on the Las Palmas building, a former industrial building in Rotterdam. The aim was to achieve a sculptural appearance while connecting to an existing form.

The Parasite project represents a prototype for a new form of urban housing, focusing on urban infill to explore the relationship between sustainability and prefabrication. The prefabricated panels, which are both load bearing and insulating, are manufactured from waste wood and can be assembled in only four days.

http://www.detail.de

51 CHAPTER 06



6.5 CONCEPT DEVELOPMENT: PART ONE INTRODUCTION

The design developed through a series of interventions culminating in the final design presented in Chapter 7 and Chapter 8.

6.5.1 MAJOR DESIGN CONSIDERATIONS

The connection between the outer edges and the interior spaces of the building as part of a transition-oriented area, played an important role in the design proses. The introduction of multiple axes crossing through the space became an important design objective to establish transition paths through the spaces. Drawing the energies from the edges of the building into the space became a major force in the design. The approach and circulation routes through the building were used as organisational devices, linking important spaces and zones within the building. Visual continuity was achieved by opening up the existing building and joining it to the new elements.

During the first development stage *the architecture of waiting* was divided into different phases. Each phase represented an important design decision that influenced the overall project, thus establishing the basic framework of the project. Two main principles guided the design. The first consideration was that the building needed to celebrate the act of waiting. The second was to open up the existing structure to improve the permeability of the space thus allowing for greater flow of air and light. It was also important to include facilities that will serve the user during transition. These facilities include waiting areas, retail environments, entertainment spaces, eating facilities and market stalls.







6.5.2 TYPES OF WAITING

	TYPES OF WAITING	DESCRIPTION	NEEDS
	The gazing wait(ee)	Waiting people stare into the distance, absorbed in their own thoughts	Views Quite spaces Protected seating/standing spaces
	The social wait(ee)	People interact and gather in groups	Group seating Courtyards Shading Food court
10	The tedious wait(ee)	Waiters get bored easily and are well aware of the time being spent while waiting	Entertainment Interactive elements Reading material Retail
	The active wait(ee)	People run errands, keep busy or linger around	Food stalls Retail environment Storage Various services
	The solitaRy wait(ee)	Time spent allone. Waiters are singled out or prefer waiting in isolation	Quiet spaces Niches Protected seating

Table 6.1: Types of waiting



6.5.3 AXES

With people at the centre, the building is proposed to enfold an open atrium with many converging routes onto it from different public zones. The perimeter is protected from the outside, allowing for an internal street corridor. Three major axes are inserted to establish transition routes through the building. The aim is to improve the current condition of strong division owing to a service core that runs from east to west along the building's centre diverting into a north-south axis.

_The internal street corridor

The internal street corridor creates a double-volume space, which allows light to enter the building and visual connections to be established. The aim is to re-stitch the separate parts of the building together by joining them through opened public zones. Retail stores are placed along the corridor and fragments are lifted out, emphasising the idea of the gaze. The internal corridor allows for vertical attention. It refers to the atmosphere of the internal space of the Madrid-Barajas Airport, of which the monumentality is emphasised through continuous open horizontal and vertical axes.





















Figure 6.7: Inter

Internal model view of Madrid-Barajas Airport

Description: Madrid-Barajas Airport Location: Madrid-Barajas, Spain Architect: Richard Rogers Partnership Date: 2006

Refence: http://www.richardrogers.co.uk

The Barajas airport is synonymous with the progression of space for departing and arriving passengers. The wavy roof, covering the full height of the mainstream central space, creates a sense of drama. The building's modular design creates a repeating sequence of waves supported on central prefabricated 'trees'.

55 CHAPTER 06



_The second route

The second route introduced within the building form a link with the on-site transport activities on the south side of the building. The route is connects to an exit on the north side that allows the user to advance into the city. The route crosses the internal street corridor to form an important intersection. The route establishes the main entrance on the south side, which is accompanied by several existing openings that will serve as drop-off areas to filter pedestrians into the building.





_The third route

The third axis is an existing open space within the building, which connects a portion on the south side to one on the north side. The open space forms a unique destination point within the building and can become an open market space. The collage on the right envisions a market space scenario where the stalls form a wall system with separating rib elements. This space is created to accommodate people waiting for longer periods of time, encouraging them to browse around through the open market space.

This cross section runs perpendicular to the internal street corridor, allowing it to extend to an outer courtyard area. These new routes represent the activity of transition, which emphasises movement and conversion between the inner and outer spaces of the building. The building is used as a pause space between the city and various departure and destination points. Each route is introduced to improve permeability from the edges of the building, feeding onto an internal core and drawing people into the spaces by activating the internal zones. The atrium space provides the interior with light and vertical monumentality.

Figure 6.10: Photo of the existing open space







6.5.4 ZONES

Three zones were created through the axes developed in the building. The crossings form important active zones, which are accentuated through specific design intentions to reflect a character representative of the experience of waiting.

The first zone (A) forms an entrance on the east side, adjacent to Bosman Street. This entry will be transformed into a terraced area to create spaces for social interaction and gathering. This social zone forms a transition from street level, creating an internal open court-yard leading to a major intersection within the building. From here movement redirects to either continue in a linear manner or turn towards the transition zone.

The transition zone (B) is more expansive, which allows for the users to orientate themselves on arrival and to wait for others. The space is formed near the edge of the building and, as the drop-off area, is dedicated to serve the traveller on arrival.

The third zone (C) acts as a visual link and destination area. This zone flows from the main east-west route diverts onto the north-south axis. This space is mainly adapted for an informal market area. The space again spills out into an open courtyard on the south of the building where the traveller can wait at the pick-up point. This space is created to accommodate people for longer periods of time, with a unique character meant to distract the user from the useless concentration of waiting.

The fourth zone situated on the first floor above the transition zone (B), provides a space for tranquil waiting. Here the user can wait while looking out through bay windows. These can be used as reading areas or quiet waiting spaces. Designed to celebrate the waiter's gaze, the space looks down onto busier zones and connects outside activities to the interior space. The space view towards Freedom Park and Salvokop distracting the waiter from enduring the passage of time.









6.5.5 SCHEDULE OF ACCOMMODATION

6.5.6 CONCEPT BUILDING FRAMEWORK

The changing context requires a flexible but grounded approach that will serve the user.



59 CHAPTER 06



6.5.7 CONCEPTUAL SPATIAL DESIGN

The internal corridor forms an important gateway into the building as a main entry point from the city. A corridor with permeable, such as this one, boundaries allows people to see what is going on as they move through the space. This creates opportunities for contact and interaction, transforming the route into a lively, stimulating journey. The corridor progresses from a public zone towards a more private area. The permeability of the route allows the user to move to other major zones in the building.







6.5.8 INFILL ELEMENTS

Architecture that transforms within a social context relies on a host, preferably including both professional bodies and local participants, to provide for a rich outcome. The host building serves to emphasise the newly layer. Instead of trying to conform to an order, the design aims to use infill elements to complete missing parts and voids of the structure. The new infill elements create an interesting new order where the pleasure lies in the fragments that collide and merge with the existing. The user experiences the presence or absence of pieces of the existing building that have previously been subtracted or ruined. These pause spaces distract and halt the viewer to engage with the particular. The fragmented units form a major part of the design as they capture the essence of waiting.

The lingerers Sabbath eyes lift these particulars momentarily out of their evanescence (Schweizer, 1998:80).

As stated earlier, waiting is sometimes a state that allows a person to drift between the *whole* and *the parts*, drawing attention to the particular. The aim is to include this theory of focused attention in the design by allowing elements to stand out as fragments of visual attention. This supports the idea that parts of the new layers become emphasised where the units attach to the envelope.



Figure 6.21: Conceptual sketch of a contained unit











61 CHAPTER 06



'Fragment' is an architectural term to refer to an incomplete element that has survived from the whole, or something that can be reassembled into a mosaic of new expression (Porter, 2004:82). In this case, the fragments are meant to form separate units that serve as infill, completing the whole and forming a collage.

An infill structure can become a public meeting place or a market unit within the relentless traffic environments. It can become a fragment between work and home, a place for people in transit that merely supports the journey, a quick space of escape and rest in a time of waiting.



Figure 6.25: Ribbed unit





6.5.9 RHYTHM

The design interprets lines as a form of rhythm and as a typology that will be used within the design, compliment the interior spaces. Certain materials are applied to create an effect of rhythms, continuing in lines to emphasise certain elements, or to map direction through the building. The rhythm is applied through 'translation symmetry'. As previously discussed, the translation of elements in one direction is found in solemn rows and the succession of repeated elements (Williams, 1998:3).

Similarity architecture results in a high degree of order within an architectural design and lends unity to a composition (Williams, 1998:3).

Since waiting subconsciously influences one's sense of time, lines and rhythm are introduced as typologies within the design, forming an important unfolding sequence that paces the user through the space. While waiting, one feels tormented by time; time seems to pass slowly and therefore the design attempts to create pauses and accelerations.





Description: Madrid-Barajas Airport Location: Madrid-Barajas, Spain Architect: Richard Rogers Partnership Date: 2006

Reference: http://www.richardrogers.co.uk

The terminal building takes up more than one million square metres and handles more than 35 million passengers annually. The terminal features a clear progression of spaces for departing and arriving travellers. Prefabricated steel elements form waves in repeating sequences. The roof is punctuated by roof lights, which provide carefully controlled natural light throughout the terminal. Internally the roof is clad with bamboo strips, giving it a seamless appearance. A simple palette of materials directs the overall design.

The design follows strong rhythmic patterns, allowing for continuous movement (see translation symmetry). This idea will be translated and implemented in the proposed project as a form of regulated movement to allow for slower progressions and faster routes.

6.6 CONCEPT DEVELOPMENT: PART TWO 6.6.1 PROGRAMME AND SPATIAL ARRANGEMENT



Figure 6.29: Parti diagram of the routes







6.6.2 DEMOLITION

Parts of the building will be demolished and stripped back according to the routes that were identified within the building. The major contribution of the demolition is to allow different parts of the building to connect to each other and to bring light into the interior of the building. The demolished parts are indicated in orange.





6.6.3 CONCEPTUAL DEVELOPMENT OF THE SOUTH-EAST FACADES





Figure 6.37:

6.6.4 CONCEPTUAL REASONING OF THE SOUTH EDGE CONDITION

The south area of the building is a highly charged environment, which seems necessary to be reinterpreted in order to assist the city dweller in travelling. The edge is in need of an insertion that can house people on the move and people waiting. The aim is to accommodate the transitional activities better through the insertion of a new element. Multiple layers of height and depth will help transform this edge into a visual experience that extends beyond the exiting boundary.



Figure 6.35: First floor south edge articulation



Figure 6.36: Ground floor south edge articulation

People wait differently at different times; peak-time travellers often want to stay near the transport zone in order to depart on time. This specific building has a very important edge, previously identified as the transition zone, which is the closest to the taxi drop-off zone. People on this side of the building want to stay close to the edge in order to be ready for departure.

The design attempts to form a symbiotic relationship with this edge by inserting elements that can facilitate this type of waiting. The intervention attempts to help complete and rejuvenate the existing building.

The insertions are an attempt to form an interplay with the edge, extending it from the exterior towards the interior. This zone is an example of how interior architecture can contribute to the completion of space beyond the limits of what is seen as interior space. The insertions attempt to both extend beyond and penetrate the skin of the building to form a unique transition area. Currently this interface of the building is perceived as a strong boundary, which does not serve the meaning of waiting. Waiting as a social activity can be supported by different elements that provide necessary amenities such as shading, seating, covered spaces, social spaces, niches, viewing platforms and playful spaces.

The project merges exterior and interior dimensions, and the perception of a boundary is challenged. By transforming a boundary into a sculptural, active edge, an ordinary everyday space is transformed which brings art into public space. Making this very ordinary everyday space into something that is sculptural brings art into the public space. Enclosed interior urban settings should ideally spill out beyond the edges of buildings and extend onto the sidewalk to create a vibrant public space.





The design represents a transient public space leading to and puncturing an existing building, thereby becoming a spatial catalyst that encourages social activity and improves the fracture between mobile space and urban building limits.







6.6.5 PRELIMINARY DESIGN INTERVENTION

The intervention entails an infill that establishes a link with the existing facade of the building by placing it into a hierarchy of spatial relationships. The interface of the building will form an interplay of juxtaposed, attached, detached and puncturing elements.

A building is most often thought of as something which turns inward -towards it' rooms. People do not often think of a building as something which must also be orientated towards the inside (Alexander, 1977:753).

Christopher Alexander (1977:753) states that the building edge should support life, which can then activate the front. The user can then approach the building from multiple angles, and not only through its entrance (Alexander, 1977:753). Stairs form a unique architectural element that can be used as a socialising instrument. Transition spaces are places of diverse cultures and influenced by habits and routines. Thus, the facade of the building becomes activated, creating a defined edge and allowing for a buffer zone.











The concept introduces lines that imitate the flow of the vehicles entering the site, drawing people into the area by activating the edge. The new extended translucent building front creates an opportunity for staying near the edge. The newly added facility will include seating and viewpoints to make the stay comfortable. The new extended face grows from the existing facade, rendering the insertion a dramatic connection between the old and the new. Contained spaces form part of the inserted walkways to create condensed yet relieved spaces.

The platforms and walkways that project through the surfaces are employed to blur the edges of the space. The new curved layer or skin masks the existing facade and elements such as stairs and walkways extend both vertically and horizontally to create different levels and compositions of space.





Curved new interface Figure 6.42:







Figure 6.44:

71 CHAPTER 06



6.6.6 TECHNOLOGICAL STRATEGY

The intention of technological solutions aim to extend the idea of new elements filling in the empty spaces of the building. Therefore elements are designed to act as loose components that are strategically placed within the building. Elements are defined by repetition and lines to create visible ribs. Solutions with technical detail aim to compliment this idea.





Figure 6.47:

Conceptual contained rib unit









Ribbed ceiling view

Description: Rosso Restaurant

Location: Ramat Yishay, North Israel

Reference: http://www.greatinteriodesign.com

The ceiling design was inspired by the surrounding area and reminds of the local geography. The panels are made up of steel structures covered with painted wood.





Figure 6.52: Concept design impression of a rib ceiling





6.7 CONCEPT SUMMARY

The spaces of the building are divided into three major areas: the entrance meeting courtyard (gathering), the transition zone (transition), and the market zone (active), all joined by an open atrium corridor. Through subtle variations and differences in density, the sequences add to the rhythms of the building and provide various, environmental experiences. Newly inserted elements that provide new facilities assume visual intervals, which celebrate the new infill and differentiate between new and existing. The building becomes a rearranged urban space that offers a high degree of comfort to its users by being sympathetic to the person who waits. By allowing the existing culture to filter through, the building forms an instrument for the rituals of the site. The space emerges from an internal courtyard, which encourages flow through different internal spaces. A continuous film of improvements fills the spaces with modifications and inventions. The building is a social condenser that provides spaces of public interaction in a secure and protected environment for exposed individuals within the city.