4.1 INTRODUCTION

Chapter 4 explores the design approach to the proposed intervention. The design approach can be seen as a strategy that combines contextual issues and opportunities with theoretical concepts into a viable design outline for the project. After being confronted with the issues of the corporate working environment, the researcher realised that the usual set of design skills were not adequate. Initially, the design focus was placed singularly on being nostalgic about the heritage value of this building and aiming to develop a design resolution that would give recognition to the embedded cultural significance. Thereafter, it became clear that in order to develop a more realistic reuse strategy, it was necessary to consider a variation of role players. These factors include real estate considerations, economic viability and the consideration of design decisions from the investor's perspective. The design solution required the design of a network or system as a viable strategy to reuse the Meat Board building.

This chapter explores the concept of inhabitation as theoretical background to the design. Case studies were conducted to aid the development of the design language. The design informants are formalized and the chapter ends with the formal heritage approach, interventionist approach and the zoning plans that preceded the detail design.

4.2 INHABITATION AND THE INTERIOR

As mentioned in the introduction, Abercrombie (1990:5) compares entering an interior to the intimate experience of becoming human in the womb. The womb is fundamentally the first association we have of residential space. No matter the character or scale of the space we may enter in this world, Abercrombie states that we tend to associate an interior space subconsciously with this first sense of belonging. By understanding the habits, rituals and comfort zone of our personal room, we are able to engage with an interior space (Abercrombie 1990:5).

The word inhabitation is defined as living, dwelling in or occupying a place or environment. The root of inhabitation is a habitat that is defined as the natural home or environment of an animal, plant or other organism. In interior design terms, inhabitation can then be translated as occupying space in a comfortable and familiar fashion. Firstly, space is a physical environment where people live, work, eat and play. Space also transcends the physical into another realm of symbolism. Space has the opportunity to cater for more than the demand of a physical shelter, but consists of the possible influence to improve people's wellbeing (Perolini 2011:164). Interior design as discipline has a unique role to play in the built environment concerning issues of occupation, inhabitation and identity (König 2015:5).

The concept of inhabitation is difficult to understand and to apply because it is not quantifiable. As designer, one cannot say that one is designing for maximum inhabitation. The question should rather be: what meaning or symbolism do I want to portray with the placement of objects in the interior? Concerning this dissertation, the following question in the workplace context is asked: how can the arrangement of elements and the spatial design of an interior convey a domestic sense of belonging in contrast to a clinical, impersonal working environment?

4.2.1 INTERIOR COMPONENTS AND INHABITATION

Interior design influences the way people inhabit a space. As Nasar and Augustin (2007) explains in the case of a familiar restaurant that the design language leads the user to make assumptions about price, service and food quality. Interior designers should realize the magnitude of their design decisions and as Perolini (2011:164) states, learn to predict user perception to design to intentionally convey an anticipated meaning.

Public space can often be impersonal and overwhelming to inhabitants due to unfamiliarity. In the context of public space, König (2015b) emphasizes the importance of placing objects in an intimate proximity in order to suggest inhabitation. In his thesis, König explains three proximal assemblies that convey meaning in the interior. Firstly, an ensemble is a synthetic arrangement of found objects on a small scale that contributes to the act of inhabitation, but is not inhabitable by itself, for example a set of cutlery on a dining table. A constellation is defined as a synthetic arrangement of found objects that guide and allow certain behaviour such as a formal table and chairs as dining space. Thirdly, a symbolic motif is defined as a holistic building scheme that has the potential nature. (König 2015a:172-175). The use of proximal assemblies in the interior facilitates the user in claiming personal space and rearranging objects to personal preference (König 2015b), thus creating a sense of belonging in a large public space. When users take ownership of a space by the rearranging of objects to personal taste and needs, the act of inhabitation is indicated (König 2015a). As König (2015b) states, the interior designer can facilitate the act of inhabitation by creating territories in the interior that allow occupation and by leaving room for user customization to indicate occupation.

‘Every architect who loves his work must have had his enthusiasm dampened by a prophetic vision of the hideous furniture with which his clients may fill his rooms, and looks all the more incongruous as the rooms themselves are architecturally beautiful.’ (Scott 1995:127)

The quotation above summarizes my normative position on the relationship between architecture and interior design: I see it as a total work of art. I believe that loose objects placed in an interior should be carefully selected and must be intentionally placed within a specific space. Elements in the interior convey meaning within itself and the placement of items in a specific space conveys another layer of meaning, especially in a heritage context. I therefore believe that the composition of elements in an interior is an intrinsic part of the spatial design and experience and cannot be considered in isolation.

4.2.2 DOMESTICATING MODERN MOVEMENT SPACE

For the purposes of this dissertation, the term ‘domestic’ refers to one of the aims of the project, namely to add softness and human quality to the currently harsh interior environment of the Meat Board building. The workplace today has evolved significantly and it is now possible and acceptable to conduct work in a more informal environment that reminds one of one’s residential comfort zone. This implies that the proposed intervention aims to create residential associations for inhabitants by creating proximal assemblies similar to those found in the residential environment. On a theoretical level, the dissertation investigates the reuse of modern movement space, often known as inhabitable and impersonal and how it can be upgraded into contemporary associative space, while respecting the heritage value.

FACILITATING INHABITATION WITHIN THE MEAT BOARD BUILDING

The concept of inhabitation led to the detailed design of furniture constellations as integral part of the design intervention in this dissertation. Furniture is intentionally specified within the context of the Meat Board building as elements with meaning and function. By approaching the specification of furniture in this way, furniture components can be considered in the overall budget of the reuse strategy from the start and in the process, the chance of a budget constraint as reason for the unintentional placement of furniture can be eliminated. The specification of furniture constellations by the interior designer will help to eliminate unqualified individuals to specify furniture that is not in line with the overall design approach, specifically in a project such as the reuse of the Meat Board building where the furniture intervention conveys a specific meaning to the user.
### 4.3 DEVELOPMENT OF DESIGN APPROACH

The following table aims to interpret the theory discussed in Chapter 2 and 3 into a physical design strategy.

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>MODERN MOVEMENT DESIGN APPROACH</th>
<th>STAUCH’S INTERPRETATION</th>
<th>COLLABORATIVE OFFICE INTERIOR DESIGN APPROACH</th>
<th>DESIGN RESPONSE</th>
</tr>
</thead>
</table>
| User/ building relationship | Standardization of elements limits user choice. Design is approached as an intellectual field, social influences of the time are rejected. | The Meat Board building was originally designed with a flexible interior system to allow for long-term adaption with organizational changes, but it does not allow for individual user control. | Designed to offer maximum choice to users in terms of:  
- Ergonomics  
- User specific thermal comfort  
- Working environment  
- Social environment | Allow for user choice in office settings in terms of personalization of space. Informal workings space offers choice of furniture according to the need. |
| Inclination | Building as ‘Machine for living in’ independent from context. | Introverted building isolated from macro context. | Mixed used developments are common: work environments are integrated with other urban functions. | A new entrance is designed to open up the building to be accessible to users within the context. |
| Services | Concealed building services. Good legibility of services within design language. | Concealed building services arranged around two central service cores. | Services are often exposed: open roof soffits with exposed conduits. | Approach to services influenced by the Hotel analogy. Back of house services is concealed, while user-specific services are incorporated within the furnishing design level. |
| Volume | Wide, open plan space is typical. Large horizontal windows and flat roofs create illusion of space extension. | Mostly horizontal volumes within office space lack of vertical views/ connection between users. | Building atriums are often a large volume of social interaction. Creates a surveyed entrance. | Vertical volumetric atrium intervention to create new entrance and social space for employees. |
| Natural light | The revolution of steel made it possible to have long uninterrupted horizontal glass facades that allows abundance of natural light within interior. | The illusion of horizontal ribbon windows is created by the repetition of small windows that allows limited views to employees not to be distracted. | Skylights are often used to incorporate maximum natural light within multi-storey office buildings. Windows and the type of glass are considered in terms of environmental factors. | Mobile volume and four storey atrium spaces created that allows large amount of natural light into the interior. A balance to be achieved between design- and environmental considerations |
| Decoration | ‘Ornament is Crime’. Interior space has no or little decoration as possible. | No loose decoration, but furniture and ornaments are custom designed with a tremendous attention to detail. | Eclectic decoration, often different aesthetic themes are used throughout the interior to create stimulating, playful environment. | Decoration to be influenced by Hotel analogy: fully decorated, formal interior character. Character of space in contrast with traditional modern movement interior space: empty and removed from decoration. |
| Design Language | Form follows function. Primary colours, Geometric shapes and perpendicular lines. | Iconic modern movement stylistic elements with a Brazilian influence. Interplay between rectilinear and organic lines. | Design language is mostly eclectic: Main drivers for the choice of interior elements include: function, technology, comfort, and working style. | Contemporary design language with references to the existing. New work to be clearly distinguished from existing. |
| Materials | Raw materials are commonly used. Steel, concrete and timber and masonry are common. | Material use includes concrete, steel, masonry and glass combined with colourful mosaics tiling. | A wide range of materials are currently being used, but the determining factors are mostly aesthetic requirement, energy efficiency and economic considerations. | New work in materials such as steel, timber, masonry and concrete (as seen in existing) with the addition of soft materials. |
| Interior Aesthetic | Machine aesthetic, industrial quality with the use of raw materials and the resistance of decoration. | Industrial quality to space but the addition of timber and soft furniture in waiting areas adds warmth to the environment. Coloured mosaic tiling creates an inspiring atmosphere. | Interior space is mostly designed with the aim to motivate collaboration and interaction between employees. | Light, open colourful environment. |
| Environmental consciousness | Although modern movement architecture is often accused of being isolated objects, climatic elements such as orientation, roof overhangs and brise-soleil are seen in this era. | Stauch did incorporate the immediate context with design decisions as he respected the residential scale and character of the context at the time. The sun control louvres (brise soleil) on the North façade is said to be the first of its type in South Africa. | Sustainability is key within material choice, programme, transportation surrounding the building and community involvement. | Consider interior environmental quality by choosing the most energy and environmentally efficient lighting, ventilation strategy and |

Table 4.1 The synthesizing of concepts into a design approach.
4.4 CASE STUDIES

4.4.1 REFURBISHMENT OF APARTMENT 50, UNITE’D HABITATION BY RONAN & ERWAN BOUROULLEC

This iconic post-war housing complex by Le Corbusier was revolutionary for its time in terms of scale but fundamental design flaws have caused this complex to be considered unsuccessful by many. Unite’d Habitation (‘The United dwelling’) is based on the concept of Le Corbusier’s garden city and consists of 337 apartments, housing 1600 people, a hotel and additional functions such as 2 floors of shopping space and the flat roof as communal space with a gymnasium, nursery school, open theatre and running track (Karrick’s M.Arch Thesis Blog 2008).

The design of the apartments creates a valuable precedent for future housing developments. The size of the apartments was determined by a modular system developed by Le Corbusier ‘Le Modular’ by integrating the proportions of an average person and the golden section (Fazio et al 2003: 175). The spatial planning of the complex consists of interlocking apartments. Many of them double storey apartments surrounded by horizontal ‘streets’ (Karrick’s M.Arch Thesis Blog (5.3.4)). Furthermore, apartments are designed to face east/west to allow for cross ventilation and each apartment is accompanied by a balcony behind the brise soleil or an exterior (Fazio et al 2003: 175).

Although an architectural icon, the success of the Unite’ d’ Habitation is a controversial issue as many of the inhabitants are of the opinion that the apartments of this housing complex are not as ideal as they are made out to be. In 2010, Studio Bouroullec fitted out Apartment 50 as a limited edition exhibition of their bespoke furniture and ornaments. The exhibition was influenced by the manner in which the current owners inhabit the apartment (Dezeen 2010). In this design, it is evident that it is possible to translate the minimalist, open interior design approach of Le Corbusier into a more realistic, contemporary and comfortable space adding ornaments that serve a function and add character to the domestic environment.

The interior of refurbished Apartment 50 is colourful, well-articulated with an element of the avant-garde. Although the designers guide the user’s lifestyle in the apartment with the arrangement of furniture and found objects, customization is catered for. It is evident that the colours of the exterior are translated into the interior environment. This case study is significant in this dissertation as it shows an interior intervention in the host building designed by a well-known architect as in the case of the Meat Board building. In this case study, the interior designer was not too nostalgic about the architecture itself, but demonstrated courage and innovation with its contemporary reaction to the existing.
4.4.2 REUSE OF THE VAN NELLE TOBACCO COMPANY,
WESSEL DE JONGE AND CLAASSEN ERDMANN
ARCHITECTS

The Van Nelle Tobacco factory is an iconic example of the Modern Movement industrial era, situated in the Netherlands. The building was originally designed by Jan and Michiel Brinkman and Leendert Cornelis van der Vlugt and was erected in 1931. Tobacco production in the building came to an end in 1995 and thereafter the owner approached heritage specialists and governmental parties to start investigating an appropriate manner in which the building could be reused (Kennis- en Projectenbank Herbestemming [S.a.]). In 2004 the building was listed as a UNESCO World Heritage site (Holland 2014). In 2004 the building was reprogrammed as a ‘creative factory’ and is currently seen as one of Rotterdam’s most important local monuments (Architecture in Rotterdam [S.a.]). The building is currently used as office space for creative businesses and serves as event space (Wessel de Jonge 2009).

The large glass facades were revolutionary at the time of erection and were designed to allow for maximum natural light in the interior and to save on overall energy consumption. With the redevelopment of the factory, the aim was to keep the interior light quality, but to improve on the indoor environmental quality. To compensate for the tremendous heat gain through the glass facades, the architects designed a secondary internal glass façade that controls the indoor temperature, but still allows daylight to penetrate deep into the building. On the south-western façade where the heat gain is the most, the secondary glass facades were placed where sun control louvres used to be and this created a ventilated double glass skin. On the north-eastern façade, the secondary glass façade is stepped back to allow for circulation space between the two glass skins. New offices are designed as box elements that are independently ventilated from the rest of the building (Wessel de Jonge 2009).

The new interior of the Van Nelle Tobacco Company resembles that of a heavy duty factory space: clinical, raw material use with minimal ornament. An element of amusement is introduced with the lighting throughout the building and with the use of colour. Existing elements such as old sign boards and various old furniture are used to create a contemporary and fresh aesthetic in the social space. This case study is a valuable example of how to handle a large scale reuse project from an interior perspective.
4.4.3 ROOM 606, SAS ROYAL HOTEL BY ARNE JACOBSEN

The SAS Royal hotel, also referred to as the Radisson Blu hotel, was originally designed for the Scandinavian Airline System housing an airline terminal and luxurious hotel. Situated in central Copenhagen, the building and all its delicate components were designed by renowned architect Arne Jacobsen and is a true example of a Modern Movement Gesamtkunstwerk. The building was completed in 1960 and was Copenhagen’s first skyscraper (Copenhagen [S.a.]). Room 606 in the hotel is currently preserved in its original state to exhibit Jacobsen’s remarkable skill with the composition of interior elements. Jacobsen’s work has been described as illustrating a unique combination of natural and abstract elements (Sheridan 2010:9).

Room 606 is currently being preserved in its original state as designed by Jacobsen. Although the interior of Room 606 is an uncluttered, minimalist space, it has a warm, soft character. The use of textiles in this room is prominent. A soft partitioning curtain closing off the bedroom internally from the lounge and a soft translucent curtain at the window to allow maximum view to the outside. What makes this architectural creation admirable is the design that follows through on building and ornament scale. Die architectural style was radically modern in Copenhagen at the time, but the interior was filled with recognisable elements such as handcrafted interior wall paneling in rooms with hand-painted crockery specified for the restaurant area (Icon 2011). Room 606 also exhibits the three famous chairs custom designed for this hotel: the drop, egg and swan chair (Copenhagen [S.a.]). These chairs have a timeless elegance to them and replicas are still being manufactured today.

This case study is a valuable example of combining different conservation processes such as renovation and restoration with an intervention. Furthermore, the aesthetic of Room 606 helped to create an understanding of how soft materials and surfaces can be implemented in the context of the Meat Board building.
4.5 DESIGN INFORMANTS

4.5.1 MACRO CONTEXT

The strategy for the implementation of the serviced office facility is directly influenced by factors in the macro context. The choice of the proposed programme is greatly affected and guided by the Tshwane 2055 vision as set out by the government in addition to the socio-economic conditions and the potential of the users in the immediate context of the Meat Board building. Furthermore, existing vehicle and pedestrian circulation movements on site, the availability of pedestrian interfaced facilities in the context and public transportation networks determined major design decisions.

4.5.2 HOST BUILDING

Existing elements within the host building such as the colour palette, articulation and material palette is used as design inspiration for the proposed intervention. The building type and other characteristics of the Modern Movement (as seen in case studies) further guided the development of the design.

4.5.3 CONCEPT: HOTEL ANALOGY

The analogy of hospitality used as a conceptual influencer to guide the manner in which the serviced office typology was developed. The fundamental idea of spatial design in a collaborative working environment is that spaces are created to accommodate employee interaction and innovation. Hotel spaces are designed to encourage user interaction and are a significant part of city environments. The absence of public interaction space currently in the Meat Board building therefore posed a major design opportunity.

4.5.4 COLLABORATION AND SOCIAL SPACE

Stauch's original intention for the building to be an inspirational, colourful and adaptable working environment was used as the one of the main design aims against which design decisions were verified. The spatial quality of the original interior as designed by Stauch also informed the spatial character of the proposed intervention.

4.5.5 ARCHITECT'S ORIGINAL INTENTION

The fundamental idea of spatial design in a collaborative working environment is that spaces are created to accommodate employee interaction and innovation. Hotel spaces are designed to encourage user interaction and are a significant part of city environments. The absence of public interaction space currently in the Meat Board building therefore posed a major design opportunity.

**Figure 4.13** Sketch showing location of new services adjacent to existing service cores as influenced by the hotel analogy.

**Figure 4.14** Sketch showing the new social character of the lower ground floor.

**Figure 4.15** Sketch of original building by Stauch (Stauch 1951: 5)

**Figure 4.16** Sketch showing the new social character of the lower ground floor.

**Figure 4.17** Sketch showing the new social character of the lower ground floor.

**Figure 4.18** Design exploration sketch.

**Figure 4.19** Photograph of the original reading rooms on the lower ground floor (Howie 1952: 16).

**Figure 4.20** Photograph of the original recreation area on the upper ground floor (Howie 1952: 16).

**Figure 4.21** Photograph showing the original furniture constellation of an office (Howie 1952: 16).

**Figure 4.22** Photograph of the original committee room on the lower ground floor (Howie 1952: 16).
The proposed intervention aims to meet the existing fabric in a way that re-establishes the value of the existing significant elements. Second, existing poetic elements are used as a generator for the new elements. Furthermore, the design approach to the project consists of a tri-scale intervention:

1. **PERMANENT**: Large scale, overall service upgrade and maintenance to extend the life expectancy of the building and to bring the services up to date with the current SANS 10400 requirements.

2. **FURNITURE**: Intervening on a medium scale: this involves furniture, lighting, interior finishes and interior environmental quality to facilitate inhabitation.

3. **CUSTOMIZATION**: The design of space that allows for the claiming of personal space and for personification of space.

**Heritage Strategy**

Firstly, the heritage strategy includes the stripping of all the additions that do not align with Stauch’s original vision for the building. The building is then returned to an against phase and it can be seen as a blank canvas from where the new intervention can be implemented.

**Interventionist Approach**

Shauh originally designed most of the furniture in the Meat Board building. Of these custom-designed pieces, only the tables in the original boardroom are intact. Photographs of the original interior reflect a sensitive, specific choice of furniture to enhance the spatial design. The style of the original furniture speaks of the time: Raw timber and mechanically clean articulation between members.

The furniture specified in the interior of a building plays a big role in the way that users interact with space. The aim with the furniture constellations is to create associations of a heritage nature. Concerning the style of the new furniture, the specified objects are functionalist (contemporary), furniture with maximum character (as in the case of the side chairs). In this way the furniture constellations and ensembles relate back to the heritage of the building but are of contemporary nature.

**Approach to Services**

4.8 APPROACH TO SERVICES

The intake strategy aims to meet the existing fabric in a way that re-establishes the value of the existing significant elements. Secondly, existing poetic elements are used as a generator for the new elements. Furthermore, the design approach to the project consists of a tri-scale intervention:

1. **PERMANENT**: Large scale, overall service upgrade and maintenance to extend the life expectancy of the building and to bring the services up to date with the current SANS 10400 requirements.

2. **FURNITURE**: Intervening on a medium scale: this involves furniture, lighting, interior finishes and interior environmental quality to facilitate inhabitation.

3. **CUSTOMIZATION**: The design of space that allows for the claiming of personal space and for personification of space.
The design process commenced with the composition of the zoning plans that reprogrammes the host building according to the proposed programme. The following diagram summarises the zoning concept:
4.11 CONCLUSION

This chapter considers the theoretical and physical approach to the holistic design. The design informants and information gathered from the context analysis and literature review have been synthesized into strategies. The detail design and technical approach towards the design are guided by the strategies formalized in this chapter and follows in Chapter 5.

Figure 4.32 Conceptual section as presented in June showing the proposed staircase intervention and new entrance.

Figure 4.33 Longitudinal conceptual section as presented in June.