3

Theory

"Located within a volume, which can range from a building block to a fully realised construction, the public interior greatly determines interior architecture. Thus the contribution of interior architecture to the public interior should be self-evident."

(Poot, Van Acker, De Vos 2015:51)

3.1   Introduction

This chapter investigates the validity of the use of public spaces in the interior through creating a sense of place for the residents in the proposed housing development. The theory discussed will firstly identify public spaces in the interior as a relevant area of investigation in the field of interior design, and define a term for the public spaces created. Secondly, theories concerned with place-making in a low cost housing environment will be discussed. Lastly, theories influencing the perceptions and design of public spaces are compared.

The sources consulted in this chapter have been deliberately chosen from a variety of sources, such as peer-reviewed journals, printed books, and critiques of older sources, where deemed necessary. This was done in order to develop a balanced approach to the theories chosen.

The outcome of this chapter will be the identification of a relevant term, and definition of, a term for the public spaces in the interior, as relevant to this study. The confirmation of the relevance of public and shared spaces in the interior, especially within a housing context, will be investigated. The final outcome will be a set of guidelines derived from the public space theories for the application in the interior environment.

3.2   Towards a definition

In order to define the current perception of public spaces in the interior, and to establish whether this project requires a specific term, an investigation was done on the origin of the original term and its placement within the field of interior design.

3.2.1 Public spaces and interior design

Poot, Van Acker and De Vos investigated the phenomenon of the "public interior" as a concept to explain internal public spaces (Poot et al 2015:46). They have chosen the term public to mean both accessible and with ownership. These spaces are accessible in the sense that they are open to all, their entrances are often ambiguous and the spaces can be entered into without effort or hesitation, and the surrounding street seems to flow into the space and vice versa, creating a highly permeable space (Figure 75). The level of accessibility is often influenced by ownership, as public interiors can often be physically owned by private entities. However, in order to create a truly public space that holds a sense of place for the users, the mental ownership must lie with the users (ibid.).

A complicated relationship exists between the realms of interior and public conditions; although they are related
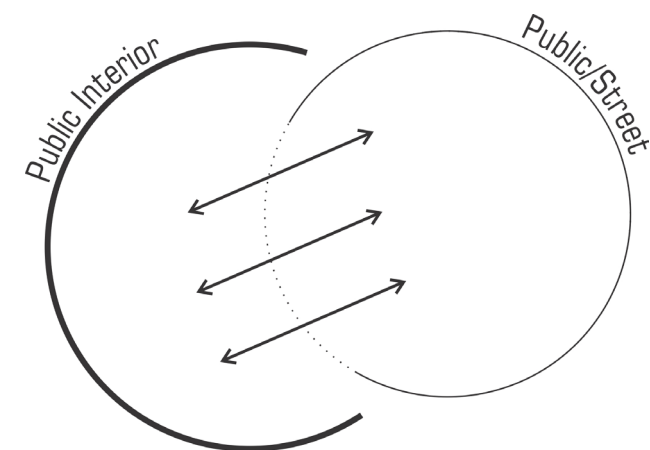

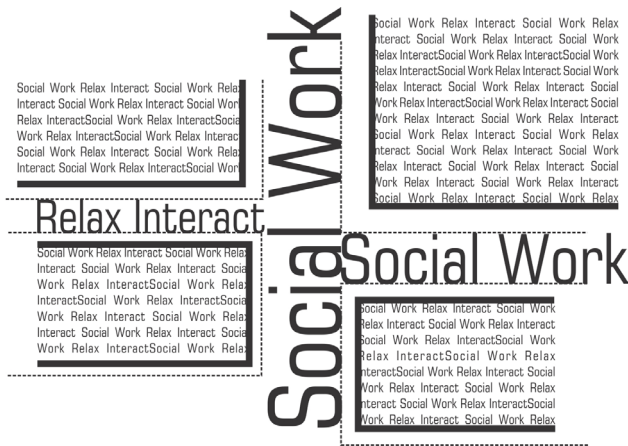Figure 75 - Diagram of "Public Interior" (by Author)

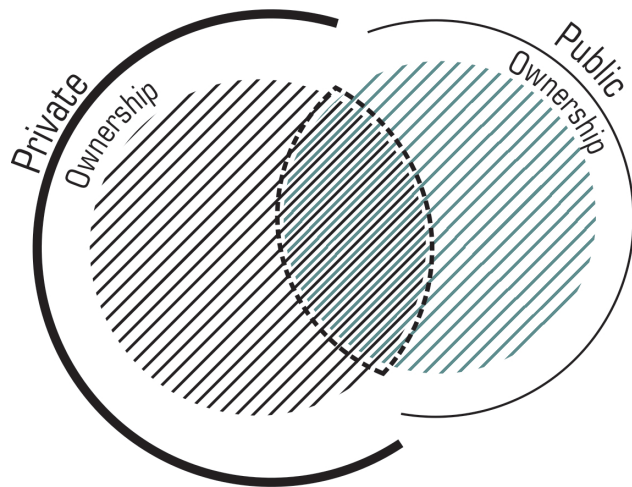Figure 76 - Diagram of the interior versus the public room (by Author)

Figure 77 - Diagram of collective spaces (by Author)

to a large degree, they also differ to the same extent. The interior "room" can be seen as a device that contains our human experience, and is defined by the function, activity, and experience in the room itself. Our memory of a building is often connected to a single room or series of rooms within (Farelly & Mitchell 2008:9). Rooms serve as containers for our activities and interactions, the understanding of these rooms, the potential and engagement of the bodies within (Figure 76). Thus the room is the container of our activities and interactions (Farelly & Mitchell 2008:9).

This statement, that a room is defined as a container of activities and interactions, brings into existence the definition that the urban environment is also a room, albeit on a different scale. Both interior spaces and urban rooms have different scales – the interior space could be a large entrance hall or a small bathroom, whereas an urban room can take the form of small courtyards or large piazzas. When the analogy is taken further to the detailing, 'carpet' can be translated to the surfaces in the urban rooms, both of which have an influence on the experience and comfort of the spaces (ibid.).

Although the location and function of these urban rooms are determined in a larger framework and context, it falls mostly in the urban designer and planner's area of expertise. The experiences and use of space by the residents falls in the area of social sciences, and designing the interaction by the residents with the spaces falls in the realm of the interior architect (Poot et al 2015:47). Poot et al continue by proposing that it is necessary to develop design principles that draw on the expertise of interior architects, urban planners and members of the social sciences community, such as environmental psychologists, social geographers, and anthropologists (ibid.).

3.2.2 The changing perception

In a capitalistic and secular urban culture, which developed in the nineteenth century, the perception of public space changed into public life as performance. This has declined in the twentieth century, as a more commercially driven culture began to emerge, as more and more public interiors surfaced in the shape of shopping malls and glass roofed shopping streets that combine the exterior and interior (Poot et al 2015:49).

Although this privatisation is seen as a loss by most designers, there are contrasting opinions. Manuel de Solá-Morales focuses on the social meaning and value of 'collective spaces', spaces that are both more and less than purely public, they are where everyday life plays out, is represented, or serve as reminders to it. Collective spaces are public and private simultaneously, they could be public spaces used for private use or private spaces open to the public (Figure 77). He questions whether certain well-known buildings are public or private, such as the Santa Maria del Mar, or the Barcelona football stadium – both under private ownership but publicly accessible (de Solá-Morales 1992:6). It could be argued that these elements are purely urban interiors, as they perhaps have private ownership, but the mental ownership lies with the users, to a large degree.

As outlined above, the interior designer and architect influence the experiences of users in the public spaces, whether they are on the interior of a building or within the urban environment. However, with the increasing amount of privately controlled public interior spaces, the perception of the users that the ownership lies with them becomes more difficult to achieve, while simultaneously more essential to the success of these spaces.

Interior architecture focuses on the micro-spatial level, such as the relationship of private buildings and public spaces, the street and how the entrances into buildings establish these streets, the gradual progression of public to private spaces, and the visibility of various spaces (Poot et al 2015:50).

The thresholds and transitions between the different levels of privacy gradients refer directly back to the connectedness of the public spaces to semi-public spaces, as the entrance into the more private realm from a public realm influences how one feels inside the building (Poot et al 2015:50). A poor integration would lead to a diminished experience of the interior public spaces. It is also important to limit the amount of boundary crossings within the building itself, as this increases the territorial depth, and leads to the conclusion that the space is more private than was intended (ibid.).

3.2.3 A new term: Interior Public Spaces

There are various terms and related definitions for the types of public spaces that this project investigates. However, most of these terms relate to interior public spaces that are accessible to all members of the community, whereas the project would limit access to the building itself for security reasons. A new definition or refinement of the above terms is required. In summary, the above definitions are as follows:

Poot et al focuses on the term public interior;

"…the context of this paper… 'public' refers to two partially overlapping meanings: accessibility and ownership.. 'accessibility' denotes that these spaces are open to all… [which] can be limited in time for practical reasons… accessibility should be understood as permeability, being able to enter a space without hesitation and effort" (Poot et al 2015:46).

De Solá-Morales defines his perception of the collective space;

"… [it] is much more and much less than the public space as limited to public property. The … richness of a city is that of the collective spaces, where everyday life is played out, represents it or serves as reminder to it… it is also the spaces that are neither private nor public, but both simultaneously; public spaces used for private activities or private spaces used for collective use" (de Solá-Morales 1992:6, translated by author).

Mitchell and Farrelly link the interior and the urban so closely that they become one;

"The language of the interior affects the urban idea, but also the urban scale infects interior space. It is a consideration of scale, but using varying forms and uses of material… The interior space can be mapped and described
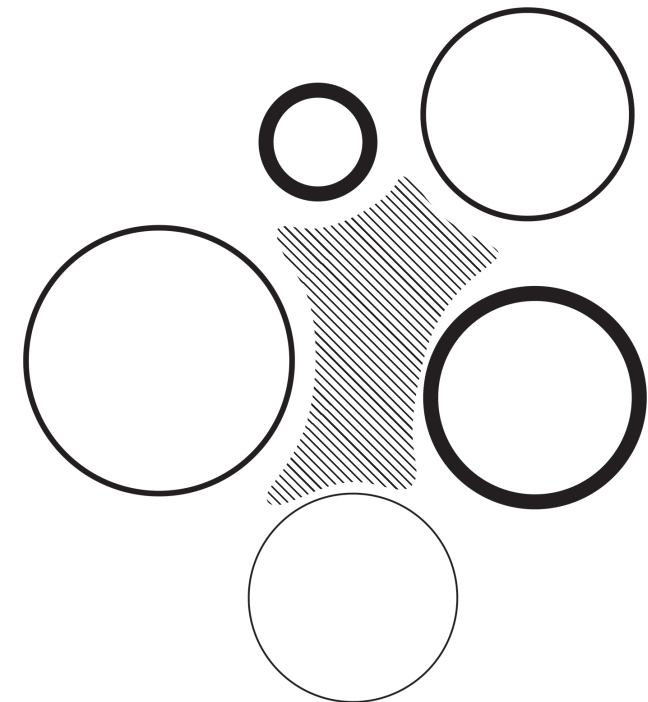

Figure 78 - Diagram of co-mingling spaces (by Author)

as a journey, an environment where events take place, analogous to the city… understanding context or place is also common to both interior and urban scales… transition between interior and urban space allows for a new understanding of the idea of the 'room'" (Farelly & Mitchell 2008:1).

As an alternative, Porter discusses the term of co-mingling;

"… co-mingling space refers to that part of a building or the built environment where people can spontaneously assemble, move about and mix together… [they] occur when two or more spaces, each with its own function, overlap to cause a common meeting ground… found in lobbies, foyers, corridors, landings and, indeed, in any space that, either by accident or design, allows people to congregate and associate" (Porter 2004:22).

None of the above terms accurately describe the types and uses of spaces the project will seek to develop. Poot et al's definition is relevant to the level of accessibility that will be provided to residents of the building, although they are not accessible to all members of the larger public. De Solá-Morales' definition of collective spaces is in part correct, as the spaces are privately owned and available for public use, but, once again, not to the greater public. Mitchell and Farrelly closely link the urban and the interior, but do not describe accurately the relationship of interior spaces (as found within buildings) with an urban approach or function. Porter's "co-mingling" spaces (Figure 78) is also limited in the sense that these spaces exist purely because of their adjacency to other functions. Although these might be created in the project, they

are not the main provision of the public spaces, nor the focus of this project.

The project's proposed term for these spaces is interior public spaces, which describe public spaces within an interior that is only accessible to the users and residents of the building. From the public space or street, there is a defined and controlled entrance area. This leads to public spaces within the building which are accessible only to residents and users of the building, the interior public spaces. Off these spaces lead the more private interior units, the smaller rooms to contain human activities. These spaces are privately owned, by both the client and the residents, but the mental ownership lies with the resident, the most frequent user and the main informant in the design of these spaces.

3.3   Place-Making

When considering that the aim of the interior public spaces is to create a feeling of ownership amongst the users, the residents of the building, other influences on place-making must be considered and investigated. The investigation was centred around place-making in low income environments, as the amount of options for housing in this income group is much less than for those in higher income groups. This is partly due to the recent introduction of the medium income subsidy, and the limited private investment in this type of housing. This leads to very little stock in this portion of the market, as well as the slow turn-over of residents in these types of developments (Sebake 2014:56;89).

A home place is created through a series of place making constructs, such as social interactions, surveillance, care and civilities, and place is created through a series of place making constructs, such as social interactions, surveillance, care and civilities, and personalisation – among others – and can be divided into three main categories – attachment, appropriation and identity. These categories were the main focus of a comprehensive literature study done by Azhan Abdul Aziz and Abdullah Sani Ahmad in 2009, focusing on various methods users employ to create home places – methods that create environments that are enjoyable, supportive to their endeavours and is not just an environment which is tolerated (Aziz & Ahmad 2009:269). These endeavours can most often and most prominently be seen in the outdoor housing area – areas typically visible to other members of the community.

Low-cost housing environments are often high density due to cost constraints, which often prevents users from regulating their contact with other members of their development. This social interaction plays a substantial part in how these individuals experience their home place. A high-density living arrangement could lead to an over-abundance of social interaction, causing residents to retreat from the necessary social support and social network offered by the other residents (ibid). This is especially found if the boundaries between different users' spaces and territories are not gradual transitions or if they are not defined at all.

Allowing users to personalise and define the territory of their near-home place serves as both a visual indication of place

but also provides a defined area for controlling the intensity of interaction with the surrounding community.

3.3.1 Appropriation

Appropriation (Figure 79) or territorialization refers to the familiarity a user has with a place, streamlining activities around the house and the regulation and demarcation of boundaries, as well as the surveillance of these boundaries. It is firstly seen in the physical occupation and control of a space, either through occasional use of the space or habitual activities taking place. Lewicka's study has found that good upkeep of the building precincts and personalization of the residence area had consistent positive effects on the attachment to the residence area (Lewicka 2010:46). The habitual activities contribute to the vibrancy of the place, as the streamlining and consideration of necessary activities that take place within the near-home place encourage the appropriation of these spaces (Aziz & Ahmad 2009:274). The habitual occupation of the near-home space encourage neighbour involvement and a feeling of shared responsibility as this involvement avoid infringement or loss of the user's privacy. Through appropriation, the user controls the permeability of the near-home space, thus bringing a sense of comfort to the user, which in turn encourages the use of these spaces (Aziz & Ahmad 2009:275).

3.3.2 Attachment

The attachment to place is a psychological condition, and presents itself as maintenance of place, the development of social relationships, along with the support of and participation

Figure 79 - Diagram of appropriation (by Author)

Figure 80 - Diagram of attachment (by Author)

in these social networks (Figure 80). Social events and activities such as working towards a common goal are experiences that are necessary to bind people together. Attachment can also develop incrementally by displaying territorial behaviors such as modifying the environment, or putting care into the local social connections and being unwilling to leave their current housing environment. The manifestation of the users' rootedness, the identity attached to the place, their affiliation to the neighbourhood, promotes a positive evaluation of the home place atmosphere (Aziz & Ahmad 2009:275).

Lewicka argues that attachment can be closely linked to places of different scales. Place attachment is experienced not only to places of residence, but also in places that are visited for recreational purposes, like landscapes and wilderness (Lewicka 2010:36). Lewicka also found that residence length positively predicted place attachment, as well as the stability of the community. This stability is often increased by the amount of generations the inhabitants have been found to live in the residence or neighbourhood (Lewicka 2010:37-38). Home ownership is an unquestioned positive indicator of place attachment, and provides further support for the local regulations to decrease the waiting period before housing stock is transferred to residents (Lewicka 2010:38).

3.3.3 Identity

The idea of identity arises from the physical attachment to the place as it allows territory for associations with self-image or social identity – the residents typically identify with a place that corresponds to the image they want to convey to their

community or the lifestyle they subscribe to (Figure 81). Residents typically adapt their home place to the identity they associate with, an identity which is typically ever-changing. If the residents cannot adapt their current housing environment to their changing identities, they typically move away – not always possible in this or similar housing environments. These places must therefore have certain characteristics as described above, or have the potential to be appropriated to become an integral part of the home place. This personalisation accommodates the residents' need to express their identities by modifying the exterior of their units or by exhibiting personal items (Aziz & Ahmad 2009:277). Alexander et al also consider this step of displaying items unique to oneself, or reflections of one's identity in the final step of creating a home place, by creating a "living expression of a person" (Alexander et al 1977:1165-1166).

3.4   Public Space
3.4.1 An overview of public space theories

With public spaces forming such an integral part of any urban environment, it is not surprising that there are various existing theories and analyses of public and urban spaces. The three main sources, A Pattern Language (Alexander; Ishikawa & Silverstein 1977), Life Between Buildings (Gehl 1987), and Defensible Space (Newman 1972), have been chosen for their variety of research methodologies and different approaches to the research of public spaces, their spatial qualities, and their uses, as outlined below. The sources have been compared in direct relation to one another in order to extract a series of guidelines with which to approach the design of public spaces
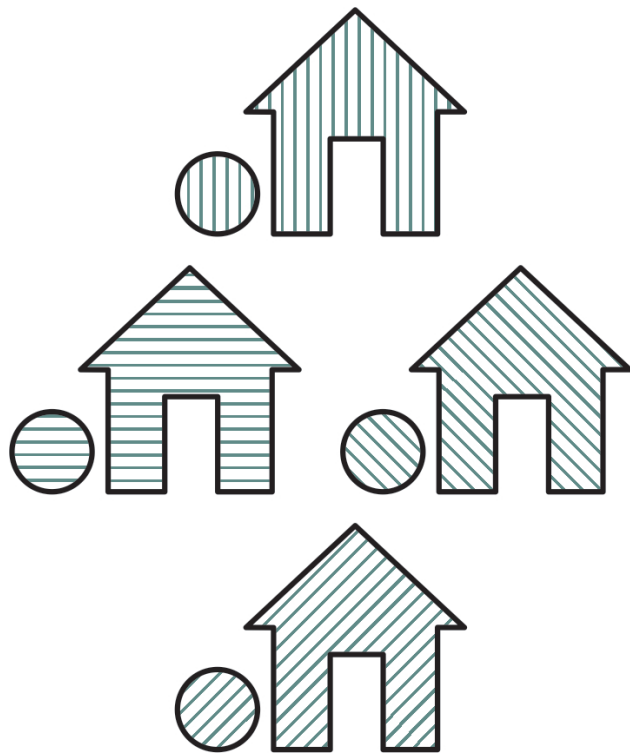

Figure 81 - Diagram of identity (by Author)

Pattern Language

"It is shown there, that towns and buildings will not be able to come alive, unless they are made by all the people in society, unless these people share a common pattern language, within which to make these buildings, and unless this common pattern language is alive itself" – Alexander et al (1977:x)

A Pattern Language, developed following years of research and practical experience and works in various scales, identifies and describes a series of patterns found in our everyday environments which have been summarised. The scales range from the layouts of whole neighbourhoods to the layout of a room to the construction of said room. Each pattern is given a social or physical context and problem, to which a possible spatial solution has been proposed. However, not all of the solutions are undeniably the best solution and should be questioned if called for, while still maintaining the essence of the pattern (Alexander et al 1977:xiv).

The pattern starts off with very large spaces – to identify where buildings themselves should be placed within a large open space and the development of towns or communities, and becomes progressively smaller – how the buildings should be shaped and grouped, the spaces in and around them, down to the scale where the elements are truly under the influence and control of the individual or small groups of individuals, working in a context of existing buildings. The smallest scale in the language is then derived from the construction of these

spaces themselves – from the development of a philosophy of structure to the colouring of the finishes and finally, the most personal, "Things from your life" (Alexander et al 1977:xix-xxxiv), the personal items with which you adorn your home and most private spaces.

Life Between Buildings

Jan Gehl graduated from the Royal Danish Academy of the Fine Arts, School of Architecture as an architect and has worked toward the creation of humane cities for most of his professional career. Despite his modernist architectural education, Gehl became concerned with how people experience the spaces they reside in, particularly public spaces – the spaces between buildings. Elements such as the size, shape and layout of the public spaces were his main focus (Gehl & Svarre 2013:60). He also developed a spatial approach to ensure the ease of flow from inside the home to the outside, into the public realm.

Introducing a semi-private front yard with many functions allows for the users to have an excuse to spend an extended period of time in this space, thus creating the opportunity for chance encounters with neighbours and the community. The transition from inside to outside should be as fluid as possible, he argues, a 'soft edge' to encourage simple flow from inside to outside and make the outside activities as natural and inviting as those inside, ensuring the street will always have some life and activity in it (Gehl 1987:195).

Defensible Space

Defensible Space: People and design in the violent city by

"History has proved the virtues of these elements to such a degree that, for most people, streets and squares constitute the very essence of the phenomenon "city". This simple relationship and the logical use of streets and squares – streets based on the linear pattern of human movement and squares based on the eye's ability to survey an area…"

Jan Gehl (1987:91)

Oscar Newman reports on a detailed study funded by the Safe Streets Act of 1968 in the United States of America, which was tasked to investigate how the built environment affects behaviour. The study focused specifically on public housing developments' forms and how they influenced the residents' victimisation by criminals (Newman 1972:xiii).

The study itself was mostly focused on New York City, due to the fact that the city's Housing Authority kept detailed records of the residents of the projects, as well as any crime reported to any of its 1 600 strong dedicated police force. The crime reports themselves were also highly detailed, with the exact location of the crime (whether inside one of the buildings or in the surrounding area) always noted. This enabled the author and his team to identify areas and buildings with the highest crime rates in different building types and layouts (Newman 1972:xiv). The housing projects themselves possessed a large variety of building forms, densities, and locations through which the study could make highly sophisticated and accurate conclusions (ibid). In order to measure the impact of various building layouts, the social characteristics of the users were kept as constant as possible, with the only variant in their profiles being the layouts of their respective buildings (Newman 1972:xv).

3.4.2 Comparison

The three main authors investigated for this study; Gehl, Newman, and Alexander and his colleagues, all developed a comprehensive approach to public spaces. There are, however, various similarities between their approaches

and observations. In fact, both Gehl and Newman refer to Alexander and his colleagues' work (Newman 1972:148&150; Gehl 2011:150). Alexander also references Gehl's research when discussing activity nodes (Alexander et al. 1977:164), as well as Newman's when referring to the height of various types of housing (Alexander et al. 1977:118).

3.4.3 Guidelines

The theories of the aforementioned authors will be limited in their application, as the focus of this project is limited to the public spaces and the transition from public to private. The theories have been investigated and analysed, and the approaches and patterns relevant to the scale of the project and the building highlighted. As identified above, there are some similarities between the different sources.

These similarities have been identified to fall into specific space categories. After they were identified, each source was analysed and specific proposals and observations relating to each of these categories were collated and summarised, and is shown graphically in Figure 82. The definition of the categories was to consider the resident's experience and route through the building, leading from the most public area of the street, through intermediate spaces, the home.

The first category outlines the manner of entry from the street, or "Entrance from street". This category influences the spatial experience of the building's exterior, its relationship to the street and the safety of the route taken from the street to the entrance.

Secondly, the "Entrance Area" is outlined. This deals with functions and flow of the lobby or reception area, as well as its relationship to and views towards the street. The guidelines in this category are focused on creating a legible and easily navigated space, as it is mainly used for circulation, but is also used for casual interactions.

The "Vertical Circulation" and "Paths" are discussed in depth in all sources. The views to and from the vertical circulation, views along the paths, articulation and placement of paths and vertical circulation are key elements to the success of the public spaces and the feeling of safety for the residents.

The "Public Spaces" category was investigated thoroughly and is the richest, with a remarkable amount of similar suggestions and observations between the sources, as well as various proposals mentioned in one source but not another. This category emphasises the approach to these spaces, as well as the movement and staying opportunities within the spaces. Main and ancillary functions are also discussed and proposed, in order to ensure a lively and interactive space.

The "Public to Private" category is important not only for safety considerations, but also as a key element of how the residents can control access and display their identities in the semi-public areas. This category also influences how the residents experience the public spaces, as abrupt transitions between their private home areas and the shared public spaces are not comfortable or conducive to regular use.
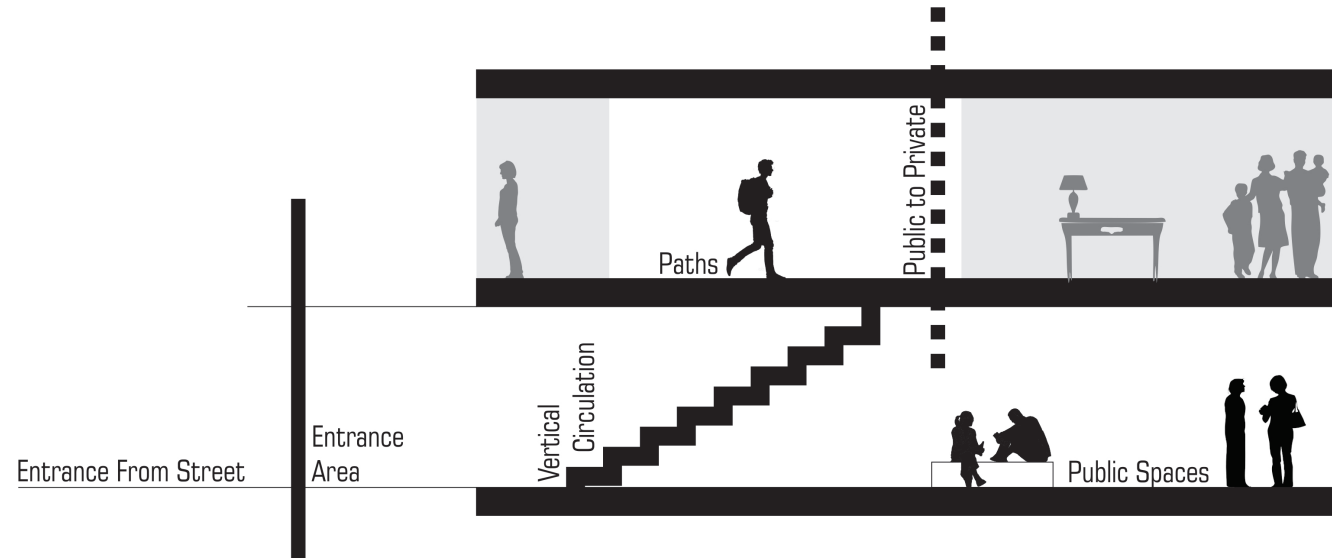

Figure 82 - Diagram of guidelines developed from public theories (by Author)

The categories and their guidelines as compiled from the various sources are available in Appendix A. The aim of the guidelines is to apply them in the first design stage in future projects, as they were applied in this project. This encourages the designer to consider the residents and their use of the building as a whole from the outset of the project. These guidelines can also be tested and expanded on in future projects, as there are new public space theories developed and tested each day.

3.5   Conclusion

The theoretical investigation has led to the definition of a new term to describe the type of spaces this project will focus on. The interior public spaces focus on the user's ownership of the space, in order to encourage their perception of the spaces being user-owned. The transition between the private (units) and public spaces should be well defined, in terms of thresholds and difference in use, while maintaining a low territorial depth from the private to public spaces.

The mental and perceived ownership of the public spaces can be enhanced by allowing users to territorialise and adapt the spaces in order to reflect their own identities within the public spaces, as well as in the transition zones between public and private. This allows users to feel comfortable in their environment and makes them more receptive to developing social relationships with other members of the community. To help the user feel that they are in control of the situation, the elements identified by Aziz and Ahmad – appropriation, attachment and identity – must be allowed.

Lastly, the investigation of public space theories and the development of the guidelines seek to combine the requirements of successful interior public spaces with the residents' need for mental ownership and to encourage a sense of place. The guidelines focus on the residents' experience of the public spaces and elaborate on how to use certain elements in the public spaces. These guidelines will encourage regular use by combining different functions and creating spaces which take on different meanings depending on how the residents occupy the spaces.

Chapter 4 will identify a series of precedents which will inform the design development.