## URBAN LANDSCAPE CHANGE AND ITS RELATIONALITY TO SENSE OF PLACE: THE CASE STUDY OF SWAKOPMUND

ΒY

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## Dedication

I dedicate this dissertation to my wife as the foundation on which all future endeavours – academically and for my career – will be built.

Secondly, to my family to honour them and mark my pursuit of geographic knowledge.



I, Antal Faghan Pocsi, hereby declare that the dissertation/thesis, with the title: Urban landscape change and its relationality to sense of place: the case study of Swakopmund, which I hereby submit for the degree of Master of Science: Geography at the University of South Africa, is my own work and has not previously been submitted by me for a degree at this or any other institution.

I declare that the dissertation /thesis does not contain any written work presented by other persons whether written, pictures, graphs or data or any other information without acknowledging the source.

I declare that where words from a written source have been used the words have been paraphrased and referenced and where exact words from a source have been used the words have been placed inside quotation marks and referenced. I declare that I have not copied and pasted any information from the Internet, without specifically acknowledging the source and have inserted appropriate references to these sources in the reference section of the dissertation or thesis.

I declare that during my study I adhered to the Research Ethics Policy of the University of South Africa, received ethics approval for the duration of my study prior to the commencement of data gathering, and have not acted outside the approval conditions.

I declare that the content of my dissertation/thesis has been submitted through an electronic plagiarism detection program before the final submission for examination.

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## Abstract – English

This dissertation presents Swakopmund, Namibia, as a case study and asks how changes in the landscape brought about by urban development and modernisation influence the sense of place experienced by the resident population.

A mixed-method investigation was carried out for the study through semi-structured indepth interviews and an anonymous online questionnaire. The questionnaire consisted of questions relating to the identified components that contribute to a sense of place, namely, image, form, activity, place attachment and place meaning, which the respondents had to rate according to a novel five-point Likert scale.

The global theme that emerged from the data was that the modernised facilities selected for the study had a positive influence on the sense-of-place components. Moreover, the data suggested that there was a significant relationship between the facilities and the sense-of-place components.

These results highlight that the influence of the modernised facilities on the resident population's sense of place is determined by how they perceive and experience the facilities and the value they attach to the facilities. Several recommendations are made regarding areas of further study and for Swakopmund's municipality.

### Abstract – Afrikaans

Hierdie verhandeling ondersoek hoe veranderinge in die landskap as gevolg van stedelike ontwikkeling en modernisering die gevestigde pleksin van inwoners van Swakopmund, Namibië, beïnvloed.

Gemengde metodes in die vorm van indringende semigestruktureerde onderhoude en 'n anonieme aanlyn vraelys is vir hierdie gevallestudie gebruik. Die vraelys het vrae oor die geïdentifiseerde komponente van pleksin, naamlik beeld, vorm, aktiwiteit, konneksie en betekenis van die plek, bevat wat die respondente deur middel van 'n nuutgeskepte Likertskaal van vyf punte moes beoordeel.

Die oorhoofse tema wat uit die data na vore gekom het, was dat die moderne fasiliteite wat vir die studie gekies is 'n positiewe uitwerking op die verskillende pleksin-komponente gehad het. Die data het daarbenewens op 'n statisties beduidende verband tussen die fasiliteite en die pleksin-komponente gedui.

Die uitslae beklemtoon dat die invloed van die moderne fasiliteite op die inwoners se pleksin deur hulle persepsie en belewenis van die fasiliteite en die waarde wat hulle aan die fasiliteite heg, bepaal word. Verskeie voorstelle rakende verdere studies in hierdie verband, sowel as voorstelle aan die plaaslike munisipaliteit van Swakopmund, word op grond van die uitslag van die studie gemaak.

#### Abstract – IsiZulu

Lolu cwaningo luveza i-Swakopmund, e-Namibia, njengesibonelo socwaningo futhi lubuza ukuthi izinguquko esimweni esilethwa ukuthuthukiswa kwamadolobha kanye nokuthuthukiswa kwesimanje ziwuthinta kanjani umuzwa wendawo izakhamuzi ezibhekana nazo.

Uphenyo lwezindlela ezixubile lwenziwe ocwaningweni ngezingxoxiswano ezijulile ezisakhiwe ezingaphelele kanye nohlu lwemibuzo lwe-inthanethi olungaziwa. Uhla lwemibuzo belunemibuzo ephathelene nezingxenye ezihlonziwe ezinomthelela emqondweni wendawo, okungukuthi, isithombe, isimo, umsebenzi, okunamathiselwe kuyindawo kanye nencazelo yendawo, okuyinto abaphendulile okufanele bayilinganise ngokwenoveli yesikali se-Likert samaphuzu amahlanu.

Indikimba yomhlaba wonke eyavela kudatha yayiwukuthi izikhungo zesimanje ezikhethelwe ucwaningo zibe nomthelela omuhle ezingxenyeni zomqondo wendawo. Ngaphezu kwalokho, idatha iphakamise ukuthi kunobudlelwano obubalulekile phakathi kwezinsiza kanye nezingxenye zomqondo wendawo.

Le miphumela igqamisa ukuthi umthelela wezikhungo ezithuthukisiwe kumqondo wendawo wezakhamuzi unqunywa indlela abazibona ngayo futhi nabazizwa ngayo izinsiza kanye nenani abalinamathisela ezikhungweni. Izincomo eziningi zenziwe mayelana nezindawo okusazoqhutshekwa nazo kufundwe kanye nomasipala waseSwakopmund.

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## List of acronyms

Average variance extracted
Computer assisted qualitative data analysis software
Council for Scientific and Industrial Research
Construct reliability
Discriminant validity
Exploratory factor analysis
Geographic information systems
Kaiser-Meyer-Olkin
Principal axis factoring
Perceived urban change
First World War

# Chapter 1: Setting the scene for exploring implications of modernising urban developments for sense of place in Swakopmund.

#### 1.1 Introduction

The natural environment is being altered into urban landscapes, and it is a universal problem due to the relentless global population growth that demands living space and constructed amenities. Accordingly, the developmental paradigm of modernisation transforms the natural environment into an urban landscape (Inglehart, 2001). Modernisation leads to urban development, and decisions about urban development influence the character and liveability of the physical place. As the rate of change to the natural environment increases, these changes will become more severe, exasperating their effect on human well-being (United Nations, 2019). Therefore, it is becoming critical to understand the impact of landscape changes on the physical place. Sense of place is, in this regard, an insight into the relationship between the developmental paradigm of modernisation and the concept of place, as argued by Jabbari and Hosseinalizadeh (2016).

The central argument of this study is that the sense of place experienced in the local context should be used as a guide to assist urban development and design within the local setting. This argument is based on the notion that, as the landscape continues to develop, urbanise, and become modernised, the established sense of place experienced by the individual may become damaged, which ultimately, could hurt the individual's wellbeing. To address this problem, Minucciani and Saglar (2020) suggest that changes made to the urban landscape should be planned for and designed to enhance the relationship between the individual and their place. Therefore, the researcher of this project believes that incorporating the contextualised sense of place into the urban design and development process is crucial to creating urban landscapes that will improve the relationship between the individuals and their place (Marques, Freeman, Carter, & Zari, 2020; Minucciani & Saglar, 2020; Sanga & Mbisso, 2020).

#### 1.2 Understanding the central argument

As the global population rises, the world is becoming increasingly urbanised (Falahatkar & Aminzadeh, 2020). In 1950, 30% of the worldwide population resided in urban areas, compared to 55% in 2018, and is estimated to increase to 68% in 2050 (United Nations, 2019). There is no doubt that the future of the world's population is urban.

Modernisation has become the developmental theory followed by the urban design and land planning professions that guide the growth of urban areas (Inglehart, 2001). Modernisation mechanises and industrialises the urban landscape and, along with an increasing residential population, leads to urban sprawl that stimulates abrupt and sometimes significant changes to the landscape (Udeaja, Trillo, Awuah, Makore, Patel, Mansuri, & Jha, 2020; Inglehart, 2001).

Through the developmental process of modernisation, the modifications made to the urban landscape follow an economic determinism and functional logic type of trajectory. Through this process, the place's prevailing and distinct identity and character slowly disappear by adding modern-looking features that lack any resemblance to the established culture and historical heritage (Sariri, Afzalian, Sheybani, & Sarvari, 2020; Rezafar & Turk, 2018). Modernising features highlight the desire for economic gain at the expense of the existing cultural heritage. According to Inglehart (2001: 9966), "modernisation dismantles a traditional world in which the meaning of life is clear. The warm, personal ties to communal societies give way to an impersonal, competitive lifestyle geared to individual achievement".

We can experience modernisation in the universal example of urbanisation. Here, the development of peri-urban areas sees a dynamic conversion of natural land to infrastructure with a complex pattern of multifunctional land use (Hewitt, Pera, García-Martín, Gaudry-Sada, Hernández-Jiménez, & Bieling, 2020; Udeaja *et al.* 2020; Wang, Li, Cheng, & Luo, 2020). Moreover, the increase in rural to urban population migration adds to the process of physically changing the landscape (Zali, 2021; Hewitt *et al.* 2020). As a result, modernisation and the subsequent urbanisation of urban landscapes present a mounting problem experienced in major cities and small- to medium-sized communities worldwide (Dasgupta & Garg, 2021; Kortelainen & Albrecht, 2021).

Zali (2021) suggests that modernisation changes the identity and character of the place and Wang *et al.* (2020) state that the individuals who experience these changes may respond positively or negatively, based on their perception of these changes and the influence these changes may have on their established sense of place. By investigating the relationship between modernisation and the individual's sense of place, we can better understand the implications of urban landscape change. Additionally, understanding the relationship between the individual and their place can illuminate the sense of place experienced by the individual and can highlight the potential that sense of place can contribute to the design and development of urban spaces.

1.3 Research question

The research question for this case study is: how is the established sense of place experienced by the residential population of Swakopmund influenced by modernised facilities within the context of Swakopmund?

1.4 Aim and objectives.

The aim of this research project is to present a case study that investigates how, in the context of Swakopmund, modernised facilities influence the sense of place of the individuals who interact with these facilities. The objectives of this research project are to:

- 1.4.1 Map the historic spatial development of Swakopmund and map the location of selected modernised facilities appropriate to this research project.
- 1.4.2 Explore the relationship between the selected modernised facilities and the sense of place of individuals who interact with the facilities by surveying their perceptions and attitudes towards these facilities.
- 1.4.3 Identify significant aspects of the relationship between the individual's sense of place and the selected modernised facilities.
- 1.4.4 Use the key aspects of the relationship between the individual's sense of place and modernised facilities and provide recommendations to Swakopmund's municipality on encouraging sense of place when planning future urban landscape change.

#### 1.5 Purpose of the study

The aim of this research project is to expand our understanding of sense of place within the context of Swakopmund, specifically the relationship between the individual's sense of place and urban landscape changes that occur during modernisation.

Given the global context of increasing population, modernisation and urbanisation, concepts such as sense of place and urban design will become increasingly relevant, as the global population is projected to reach 9.7 billion in 2050 (United Nations DESA, 2019). Accommodating this population will force urban development, leading to significant physical changes to the urban landscape, especially in Africa and South-East Asia, where the greatest population increases occur (Udeaja *et al.* 2020; United Nations DESA, 2019). Improving our understanding of sense of place will allow decision-makers to better accommodate the population by considering the human-nature relationship of the individual within the expanding urban landscape. Many sense-of-place studies have explored western and well-developed countries. However, fewer studies have focused on the modernising and developing world of the Global South (Dasgupta & Garg, 2021). This constitutes a gap in the academic literature about sense of place and creates an opportunity to expand our understanding of sense of place within urban design. This research project is this researcher's contribution to the academic knowledge of sense of place and urban design.

#### 1.6 The research location for this study

The research location for this study is the coastal town of Swakopmund, Namibia (see Figure 1). Swakopmund has been chosen as the study area for this research project due to the rapid urban development in Swakopmund and the unique urban landscape that shapes the town's character. This character is due to the Germanic history of the built landscape and population. Historically, Swakopmund is considered a small German town that is expanding and experiencing changes made to its landscape by modernisation and the development of the urban landscape.



Figure 1.1: Study location of Swakopmund. Insert: Location of Swakopmund within Southern Africa. Source: Mapbox Studio (2020)

In 2020, the local municipality approved a developmental plan called the Swakopmund Structural Plan 2020-2040 (Stubenrauch, 2020). This plan aims to modernise and guide the urban landscape development and is necessary to accommodate a population that has grown by 88% between 2001 to 2011 (Namibia Statistics Agency, 2013). However, given the evident population increase plus the potential to negligently implement the Swakopmund structural plan 2020-2040, the small-town character of Swakopmund may be threatened. Over the last decade, several large-scale developments have taken place which have dramatically changed the urban landscape. From these developments, an indoor multi-sport centre, known locally as the Dome Sports Centre, a beachfront mall called the Platz am Meer, and a seaside hotel called the Strand Hotel, have been selected for this research project.

#### 1.7 Background

To better understand how an individual's sense of place may respond to modernisation and urban development within the built landscape, one must first look at what sense of place is and how it relates to landscape change.

#### 1.7.1 Sense of place

Sense of place originated from the Latin phrase *Genius Loci*, which first appeared in Roman poetry during the eighteenth century to describe the pervading spirit of a place, the guardian divinity of a place (Jivén & Larkham, 2003). Alexander Pope, in 1731, addressed both architecture and gardening in that "all must be adapted to the genius of the place, and ... beauties not forced into it, but resulting from it" (Oxford Reference, 2020). The spirit of the place is the essence of the place, created from the tangible and intangible components combined that create a feeling, a sense of place. In modern-day landscape literature, the place's spirit has transitioned from its origin to the place's atmosphere and character. The notion captured here is that the place has a unique personality that resonates with the individual who interacts with and experiences the place. Here is a point of confusion, as modern-day literature often refers to the spirit of place and sense of place as the same concept. However, Edward Relph succinctly distinguishes the sense of place from the spirit of place by arguing that the spirit of place is the characteristics of the place

that occur outside of the human mind, whereas sense of place forms within the human mind as a response to experiencing the place (Relph, 2015). Sense of place is subjective, and each person will respond to the same place in a unique way shaped by their experiences and perceptions of interacting with the physical place (Zhang, Deng, Yan, & Tang, 2020).

Sense of place develops from the communication between the individual and the physical location and falls under human geography (Seamon et al., 2017). One highly influential thinker of human geography is Yi-Fu Tuan, who put the idea forward that one creates a place out of the space by imbuing meaning to the place when interacting with the space (Tuan, 1977). Tuan made the connection among geographers that the intimacies of personal encounters with space produce a "sense of place" and believed that human beings derive meaning from the geographic world around them (Hashemnezhad, Heidari & Hoseini, 2013; Tuan, 1977). Acknowledging the fundamental importance of space and place is crucial to creating and understanding a sense of place (Tuan, 1977). Notably, an individual's sense of place is influenced by the scale of the individual's place attachment, expanding from the personal level outward onto the societal level (Eaton, Eanes, Ulrich-Schad, Burnham, Church, Arbuckle, & Cross, 2019; Masterson, Enqvist, Stedman, & Tengö, 2019). The theory of sense of place includes the idea of place attachment and are sometimes used interchangeably. Sense of place develops through an individual's daily habits and routines and is bound to meaningful physical places (Abusaada & Elshater, 2021; Sapkota, 2017; Seamon et al. 2017). Through being attached to the place, meaningful interactions occur between the individual and the physical space, which develops a shared place identity and an attachment to the place that establishes a sense of place (Marques et al. 2020).

Sense of place first appeared in "peer-reviewed" literature in 1968 and has become more common since the 1990s (Nelson, Ahn & Corley, 2020). Early academic writings on sense of place emphasised the influence of the physical setting on sense of place, which was regarded as an 'aesthetic' relationship (Beidler & Morrison, 2016). The research emphasised the importance of the physical setting in developing a 'town's character' and 'local identity', noting positive relationships between the natural features, built landmarks and conceptions of the town's character (Barkat, Ayad & Elcherif, 2019; Beidler & Morrison,

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2016). According to Sebastien (2020: 108), "natural settings determine the context of social experiences that if maintained in these settings are likely to lead to higher levels of [place] attachment."

Sense of place is, at its core, a social process that forms within a geographic location (Sanga & Mbisso, 2020). From this perspective, we can regard the physical setting as a primary influence on the individual's sense of place (Beidler & Morrison, 2016). The physical environment is, therefore, crucial in developing an individual's sense of place (Ghavampour & Vale, 2019; Beidler & Morrison, 2016). Unique physical characteristics of a geographic location plus how the individual interacts with these characteristics as part of their daily routines shape the sense of place experienced by the individual. During rapid urban development, changes made to the physical landscape may force a reinterpretation of one's attachment to the geographic location (Buchecker & Frick, 2020).

#### 1.7.2 Landscape change

Considering the relationship between the physical setting and sense of place, one can see that all social interaction occurs within the physical setting. Over time, an individual's sense of place takes on the identity of the physical environment while simultaneously being developed through the social interaction that occurs as part of their daily routines (Beidler & Morrison, 2016). According to Stedman (2003a: 671), "the local environment sets bounds and gives form" to social constructions. Kortelainen and Albrecht (2021: 3) extend this sentiment by noting that a "place's material and expressive characteristics give it a form and identity, territorialising forces maintain its coherence, [and] coding activities create meanings for it". The landscape that moulds an individual's sense of place takes shape and form from the physical environment with natural and constructed amenities that satisfy the individual's needs (Stedman, 2003a). Built amenities, in this regard, are the constructed infrastructure such as buildings, roads, walkways, street furniture, and gardens. Natural features of the landscape act in the same way as built amenities and can strongly affect the character of the landscape (Stedman, 2003a).

The universal form of landscape change is the process of urbanisation that occurs as the landscape becomes modernised. Landscape studies about urbanisation were initially focused on the impacts and effects of urbanisation, and in recent times, this focus has shifted towards political, ecological, historical, and cultural studies (Qviström, 2017). These new research avenues demonstrate the potential to contribute richer stories of the landscape's complex role in urbanisation (Qviström, 2017). Research within these avenues can "provide more differentiated conceptualisations of urbanisation, enhance knowledge of the complex relationships between planning, environmental change and everyday life in the shadow of an expanding city and nurture discussions on alternative urban futures" (Qviström, 2017: 239). One example of this complex relationship is the change in the social-cultural activities that one sees in the physical appearance of a place and the alteration of how the architectural heritage is used (Said & Hamzah, 2020). Consequently, Qviström (2017) argues that the landscape has a complex role in the urbanisation process and is not just the victim of the changes being experienced but can also be a driver for the changes made to the landscape.

The relationship between urbanisation and sense of place has been studied from several perspectives. Yet, according to Buchecker and Frick (2020), the socio-psychological implications are still poorly understood. The general understanding here is that urbanisation would negatively affect the individuals within a specific context by diminishing their relationship to the local environment and creating a loss of a sense of community (Buchecker & Frick, 2020; Mouratidis, 2018). Contrarily, a number of studies found positive relationships between urbanisation and place attachment, albeit by using simplified measurements (Buchecker & Frick, 2020). This suggests inconsistencies and uncertainties are present when studying urbanisation and place attachment. Compounding the above and in agreement with Buchecker and Frick (2020), Wang *et al.* (2020) postulates that most studies about urban change have taken place in developed countries with inconsistent results calling for further research into urban change and its influence on sense of place within the developing world.

#### 1.8 Rationale

The fundamental question posed by this research project of how an individual's sense of place is affected by modernisation is becoming increasingly important due to urbanisation as the local population grows and space becomes limited. The importance of this question is reflected in the ability of decision-makers to adapt to changes that are made to a landscape (Jabbari & Hosseinalizadeh, 2016). By considering sense of place, decisionmakers can design urban landscapes that can still maintain some level of the landscape's established identity and character during urbanisation, thereby allowing the individual's sense of place to remain intact. By understanding this relationship and the power of the place, decision-makers can make more appropriate decisions when planning for their local land use (Sebastien, 2020). At the same time, understanding this relationship can set a sense of place firmly within the larger socio-political context, enabling decision-makers to anticipate how the individuals will react to the changes made to the local setting (Sebastien, 2020).

By answering the fundamental question posed by this research project, this study argues that the concept of sense of place should be included in the decision-making process when planning changes to the landscape. As the physical features form part of the place's identity, which add to the individual's place attachment, any changes made to the landscape that create a feeling of unfamiliarity or a feeling of loss within the individual may negatively affect the sense of place experienced by the individual (Ghavampour & Vale, 2019; Jabbari & Hosseinalizadeh, 2016; Ciobota, Sliacka, & Obradovici, 2015). Sebastien (2020) noted that the physical environment is a key building block for developing a sense of place, and this research project will extend our understanding of sense of place by investigating the relationship between sense of place and modernisation in Swakopmund. Although this avenue of research has been populated by previous research attempts and empirical studies, as suggested by Wang *et al.* (2020), the combination of sense of place and landscape change has not yet been applied to the context of Swakopmund and its structural plan 2020-2040, according to the author of this research endeavour.

Given that this research project revolves around modernisation and the perceptions and attitudes associated with landscape change, this project may produce opportunities for future research as part of its recommendations. The importance hereof is implied in the growing body of research suggesting that place-related identities and meanings should be incorporated into development policy and planning processes to minimise disruptions to place attachment (Clarke, Murphy, & Lorenzoni, 2018). Therefore, sense of place can influence environmental policy, resource development, and economic decisions (De Wit, 2013). Given the strong and unique physical characteristics of Swakopmund, the contribution of this research project may be valuable for both town planners and developers, as well as decision-makers over the landscape changes made to the geographic location. Furthermore, this research undertaking will contribute another 'piece of the puzzle' to our understanding of sense of place and place attachment by researching the case of Swakopmund. This research project contributes an empirical study about sense of place within a developing country's context and within a research location that has not had a study like this done before.

#### 1.9 Outline of chapters

Before the first chapter, the declaration is presented along with the abstract, table of contents, figures, and tables. This research project starts with the introductory chapter called Chapter 1. This section sets the scene for this study by presenting the global problem of modernisation and urbanisation along with the potential changes made to the landscape and how the sense of place of an individual may be affected on the local scale. This section also presents the aim and objectives of this research project of its contribution to the academic literature on sense of place and landscape change by answering the question posed in the research problem. Along with the scene being set, the conceptual background of sense of place and landscape change is presented before addressing the rationale of this research project is presented and motivated as to why this geographic location was selected. This chapter makes the central argument of this study that sense of place is a critical point of view that decision-makers should take into consideration when approving developments that may lead to significant physical changes to the landscape that could alter a geographic identity.

After contextualising the research problem, Chapter 2 critically evaluates the academic literature available surrounding sense of place, urban design, and landscape change. This chapter identifies the literature gap that this research project sets out to fulfil. The literature that was used for this study showcases how the concept of sense of place and landscape change has been developed through their academic pursuit. Although combining sense of place with landscape studies is not new, this combination has not yet been applied to the selected research location.

Chapter 3 is the research methodology and data chapter. This chapter explores the research philosophy behind this study by looking at the theoretical framework that fundamentally underpins this research project. This chapter deals with the interpretivism and post-positivism that guides the approach used in this study to investigate sense of place and landscape change. From theory, we move to practice and discuss the mixed-method research paradigm before delving into the qualitative and quantitative forms of data that were collected in this research project. This chapter looks at the research strategy followed to sample the residential population that made up the sample group. This chapter also presents the pilot study in which the data-capturing instruments were tested and revised and addresses the methods of data analysis. This chapter aims to discuss the methodology when investigating the physical changes made to Swakopmund over the last decade and how the attitudes and perceptions of the residential population may have responded to them.

To understand the case study of Swakopmund, Chapter 4 presents a brief chronological history of the town, and through that establishes how the identity of the town has changed. This chapter highlights the historical transitions that have taken place in Swakopmund, both through physical changes and social changes, and speaks to the heritage and culture of the inhabitants that has shaped the visual character and the place identity. This chapter presents how the research problem is relevant and applicable to the study area.

Chapter 5 is the keystone of this study, in which the collected data is presented. This chapter presents and analyses the data that were collected during this study by showcasing the qualitative and quantitative data. Furthermore, scale validation occurs in this chapter, that allows for further analysis. Lastly, the themes and findings are applied to the selected facilities before the conclusion is drawn.

Chapter 6 is where the researcher interprets the data and applies it to the central research question. The purpose of this chapter is to answer the central research question and it interprets the findings made in this project.

Chapter 7 is the conclusion and the recommendations chapter that brings this research project together and highlights the findings of this study. From here, several recommendations are made for future research opportunities for sense of place and landscape change. This chapter will showcase how the objectives for this study have been achieved, which ultimately allows the research question to be answered, resulting in a conclusion being drawn about how physical changes to Swakopmund have influenced the residents' sense of place.

#### 1.10 Conclusion

By identifying the research problem of modernisation and landscape change, this research project suggests that sense of place may be able to explain the relationship between the person and their place. In presenting this investigation, the researcher of this project argues that the contextualised sense of place should guide urban design policy during the process of urbanisation to maintain the established character and identity of the geographic location, which may encourage a sense of place for the residents.

To substantiate this argument, this research project will apply the central research question to the sense of place experienced by the residents of Swakopmund, Namibia, and investigate how modernised developments, selected for this study, that have occurred during the last ten years may have influenced the sense of place experienced by the residential population.

The first chapter sets the scene for this investigation by asking the central question and motivating the argument of incorporating sense of place into the design process of urban development. Along with the central argument, the rationale behind this study is also looked at before introducing the outline of this dissertation. Using this chapter as a departure point, the following chapter presents the literature applicable to sense of place and landscape change and provides a clearer conceptual understanding of the focal point in this research project.

#### Chapter 2: Literature review on sense of place and landscape change

#### 2.1 Introduction

From the preceding chapter, we can already begin to understand the nature of sense of place and how it relates to landscape change. Undoubtedly, sense-of-place studies have gained momentum because, according to Nelson *et al.* (2020), a surge of interest in sense of place has led to a plethora of available studies in different research avenues. However, in the context of urban design, transitioning from theory to practice and applying sense of place seems to be a challenge that urban planners and designers face. Even though sense of place is a principle in urban design, some confusion remains about how sense of place is included in urban development (Hu & Chen, 2018). Therefore, this chapter will evaluate the literature on sense of place and how it applies to urban design and landscape change.

The first section explores sense of place to understand better what sense of place is before discussing the research components selected for this study. After that, a bridge between sense of place and urban design will be formed, linking the established development theories that apply to this research project. The last section will look at several articles that have applied sense of place to landscape change. This chapter aims to present the academic literature that falls within the scope of the present study by discussing the central arguments within the literature and supported by recent trends and developments, identify how this study fits into the academic field of sense of place.

#### 2.2 Exploring sense of place

Sense of place is a multidisciplinary concept applied in various academic disciplines, including anthropology and sociology, landscape architecture and design, geography and environmental psychology (Kapoor, 2021; Sariri *et al.* 2020; Hu & Chen, 2018). Due to this variety in its application, there is no agreed-upon definition of sense of place (Eaton, Eanes, Ulrich-Schad, Burnham, Church, Arbuckle & Cross, 2019). However, we can fundamentally understand sense of place as the emotional connection an individual attaches to a place that forms from their perception and experience of the setting (Tuan, 1977). As a result, their sense of place is as unique to each person as the physical features that make up the geographic location. To put it another way, sense of place explains the relationship

between the person-place bond based on the unique characteristics of the place and the personal connections that the individual attaches to the geographic location (Shamai & llatov, 2005).

Furthermore, an individual's sense of place strengthens over time due to the connection to the place that forms and develops (Sariri *et al.* 2020; Lewicka, 2011). This is due to time's influence on the individual's conception of the physical environment and their opportunity to interact with others (Beidler & Morrison, 2016). Tuan and Relph indicate that an individual develops their sense of place while living in one setting for an extended time and is defined by a 'rootedness' and 'authentic self', in which the individual belongs to the place and is a member of the community (Beidler & Morrison, 2016). Shamai (1991) proposes that a sense of place is created from a long and deep involvement and experience of the place. Permanent residents notably experience this, as their social networks heavily influence their sense of place (Beidler & Morrison, 2016). Moreover, meaningful interactions with a geographic location through daily activities and routines establish a positive connection to the place, thereby enriching the individual's sense of place (Kapoor, 2021).

This emotional connection or bond is called topophilia, which means love of place (Seamon *et al.* 2017; Hashemnezhad *et al.* 2013). Consequently, a place can be described simply as a meaningful location. A meaningful place does not necessarily have to be special, such as a culturally or symbolically significant area, nor a historical heritage location, to be meaningful but rather a location that holds value for the individual (Kolodziejski, 2014). Therefore, an ordinary place where individuals live and interact through their daily activities can also be considered meaningful. The key idea is that a place only exists once humans attach emotions and meanings to the physical space (Sanga & Mbisso, 2020; Marques *et al.* 2020; Alyani & Herlily, 2019).

According to Nelson *et al.* (2020), scholars are confused across disciplines, including the natural sciences, social sciences and humanities, due to the interchangeable use of the sense of place concept. In agreement with Nelson *et al.* (2020), there is a noticeable problem within the sense of place literature of an increasing tendency to apply the concept of sense of place without clarifying what is meant by sense of place. Consequently, unclear

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working definitions are still used with a significant overlap between the components, leading to difficulty operationalising the sense of place concept consistently across the relevant disciplines (Nelson *et al.* 2020). A similar point was made in the review article by Lewicka (2011), in which unclear relationships still exist between the components that constitute sense of place. However, Arefi (1999) contends that different disciplines address different components of sense of place. Nelson *et al.* (2020) on the other hand, argues that no specific combination of components creates a sense of place, and components are selected based on the scope of the scholarly interest and the perspective from which one approaches sense of place.

Sense of place is an established concept in environmental psychology which focuses on the person in the person-place bond (Nelson *et al.* 2020; Lewicka, 2011). From this perspective, the individual's experiences, social activities, and cultural heritage, or rather the individual's symbolic connection to the geographic location, underpins the components of sense of place. Therefore, the components of place attachment, place meaning, place satisfaction, place identity, place dependence, sense of belonging and sense of community are sometimes used interchangeably to suggest a sense of place. From the phenomenological approach, these components operate from the person's perspective in the person-place bond and focus on the person's psychological, emotional, and experiential aspects (Nelson et al. 2020). Jorgensen and Stedman (2001) refer to these aspects as the cognitive, affective, and conative components that create a *place*. Collectively, these components should be understood in the context of the individual's demographics, cultural and historical heritage, and the guidelines of what the individual's society considers socially accepted behaviour (Sariri et al. 2020; Adams, Greenwood, Thomashow, & Russ, 2017). Utilising a phenomenologist's perspective, it is the experiences of the individual that are the central theme in sense of place (Sariri *et al.* 2020).

Urban design, on the other hand, approaches sense of place from the place perspective, in which the place components are mainly concentrated around the physical features that make the setting unique, features such as the ecological environment, architectural presence, historical landmarks and geographic landscape (Navickienė, 2015). These features enhance the uniqueness of the place identity, the form and the legibility of the geographic location that defines the space in which the individual's daily routines occur.

Together, these features improve the quality of the built environment (Fachrudin, 2020). The place components are the features that the individual becomes attached to through their perception and interaction with these features in a social environment. For this reason, authors such as Canter and Punter have developed known theoretical models explaining the relationship between place-creating components as part of urban design quality for urban environments (Ghoomi, Yazdanfar, Hosseini, & Maleki, 2015). Authors such as Montgomery (1998) have further developed these models to describe better the relationship between the components that create a place, by expanding the scope of these components (see Figure 2.1). Montgomery (1998) suggests that the physical form of a geographic location, along with the activities within the space and the meanings ascribed to these activities, create a place. Furthermore, these components are established within the geographic landscape, and that design and architecture utilise these features to create places that, once occupied by the individual, establish a sense of place (Ghoomi *et al.* 2015).

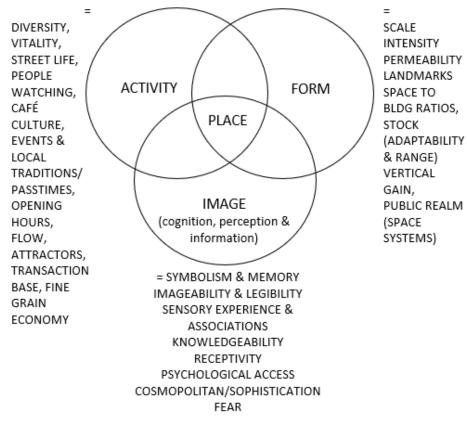


Figure 2.1: Components that create place. Source: Montgomery (1998).

Ghoomi *et al.* (2015) go one step further and present several components that contribute to the creation of a sense of place, such as the meaning of the place, the form and activities, the quality of design and physical features of the geographic location. From an architectural and design perspective, the materials used, the textures created, and the incorporated colours can all contribute to the uniqueness of the place, which leads to making a sense of place (Navickienė, 2015). Sariri *et al.* (2020) suggest that human perceptions (senses) of the physical properties add to an individual's sense of place. However, it is only through interacting with these features and imbuing social-cultural significance to this interaction that physical features can add to the sense of place experienced by the individual.

#### 2.3 Components of sense of place

This dissertation suggests that when looking at the influence of landscape change on the person-place bond, the components that create a sense of place can be grouped according to the place and the person. In this regard, the components of form, activity, and image and aesthetics are grouped to suggest the place. Conversely, the components of place attachment and place meaning explain the person's experience of the place. These two groups of components can potentially explain the relationship between an individual's sense of place and landscape change.

#### 2.3.1 Form

In the context of urban design, form refers to the legibility and the patterns of buildings and the physical features that allow for social activities (Montgomery, 1998). The form is the *fit* of interlocking patterns in the urban layout that stimulate activity, a positive image, and a strong sense of the place, by creating a safe and positive environment (Montgomery, 1998). Furthermore, the density of buildings and the harmony between the urban fabric and the natural environment influence the individual's perception of the form (Mohammad-Moradi, Yazdanfar, & Norouzian-Maleki, 2020). Part of the landscape's form lies within the complexity of interlinking networks that allow movement between the physical features, the imageability of the place and the knowledgeability of the relational location of significant elements within the urban landscape (Montgomery, 1998). When creating urban form, planners and designers aim to establish a sense of continuity across the urban landscape, as suggested by Cozzolino, Polívka, Fox-Kämper, Reimer, & Kummel, (2020: 40), that "urban design introduces spatial order" into the urban landscape.

#### 2.3.2 Activity

Along with the form and navigating the place, the individual interacts with the place through their daily routines and transactions. In doing so, they actualise their experiences and enhance their connection to the setting. For this reason, activity or, as David Seamon refers to it, "place interaction", is crucial in developing an emotional connection with the place (Seamon, 2018: 8).

According to Montgomery (1998), activity is the product of vitality and diversity. Vitality is the life force of the urban area through the number of people partaking in activities throughout the day. In comparison, variety is the scope of activities or rather the number of things to do. Montgomery (1998) suggests that vitality is how lively the place is, and it is what distinguishes successful urban environments from non-successful areas.

As the second activity element, diversity can be the extent of variation in land uses. As an accepted rule, the most exciting and lively places tend to have complex vitality and diversity in activity and allow for transactions to easily occur between individuals and between the individuals and the setting (Montgomery, 1998). Consequently, by improving the opportunity for positively-perceived activities, an individual responds by forming a positive connection to the place. Mohammad-Moradi, Yazdanfar and Norouzian-Maleki (2020) assert that land use and functional diversity are essential for increasing the activity of the geographic location. In contrast, Sariri *et al.* (2020) note that increasing the activity and diversity of land use within a place can lead to an improved experience of the place, which can strengthen the individual's sense of place.

#### 2.3.3 Image and aesthetics

Aesthetics refers to the visual appeal of the physical features within the space and acts as visual cues that contribute to the uniqueness of the place identity. Aesthetics is a crucial principle of urban design and architecture in creating places by attracting individuals and connecting them to decorative features through their perceptions and cultural heritage. An argument can be made that architecture can preserve socio-cultural and traditional

heritage through aesthetics (Jolaoso & Bello, 2017). Architectural studies may often try to establish the place's *Genius Loci* through the design of the built environment, by capturing special features within this environment (Vecco, 2020; Ciobota *et al.* 2015). Sariri *et al.* (2020) note in their study that the visual enclosure and diversity of views, symmetry and size, spatial relationship and decoration all improve the aesthetics of the built landscape. Together, these parameters refer to formal aesthetics that describe the buildings' physical characteristics. Along with the formal visual characteristics, aesthetics can also be grouped symbolically through the human experience of the built landscape, which is not solely defined by physical attributes (Rezafar & Turk, 2018). For this reason, some authors argue that an individual's experience of a place's aesthetics cannot be separated from their meanings and attachments to the surrounding landscape (Rezafar & Turk, 2018). Furthermore, Jordaan, Puren and Roos (2009: 13) suggest that "spatial planning should recognise these unique identities and seek innovative ways to treat and protect these identities".

Together, the place components establish the uniqueness of the place in the person-place bond. However, the sense of place of the individual in relation to a geographic location must also include the experiences of the individual and how they make meaning of their connection to the physical place. To understand the sense of place experienced by the individual, the component of place attachment should accompany the equally important component of place meaning. Place meaning is included in sense of place because sense of place forms through the individual's daily routines and activities (Masterson *et al.* 2019). As the individual interacts with the place, the place's meaning becomes clearer and thus more important, through the continued experience of the place. This is especially applicable when one compares permanent to seasonal residents (Lewicka, 2011). Furthermore, place attachment and meaning may indicate individuals' responses to landscape change (Quinn, Bousquet, & Guerbois, 2019).

#### 2.3.4 Place attachment

Scholars agree that place attachment is understood as the bonding between the individual and place when the individual interacts with the place as part of their daily routine and activities (Hay, 1998). The theory of place attachment underpins the concepts of space and place and is included in the theory of sense of place. As a result, a sense of place is established because humans are bodily beings who live life in a physical space and are bound to places (Sapkota, 2017; Seamon *et al.* 2017).

Place attachment is often explained through its sub-components of place identity and place dependence, in which a functional relationship exists between the individual and the place. Place attachment is considered an essential component of a sense of place (Scannell & Gifford, 2010). This is because the individual's place attachment is formed from the interaction between the individual's emotional identity and the physical place (Minucciani & Saglar, 2020).–For this reason, the component of place identity is included in the formation of place attachment due to the idea that the place identity is formed by the individual's attitude towards the place and is based on felt experiences and emotional perceptions of the place (Hu & Chen, 2018).

The fundamental consideration about place identity is that the physical elements that make up the place form the geographic identity and the individual's attitude towards the place (Karasu Avci, Ibret & Recepoglu, 2017). The individual's experience and attitude towards the place form part of the individual's attachment to the place. There is a consensus among scholars that place identity acts as an essential driver for place attachment (Sebastien, 2020). The individual *identifies* with a specific place for various reasons, ranging from a sense of belonging and community to the symbolic significance of the landmarks of the place that shape their place attachment and is experienced through their sense of place (Acedo, Painho & Casteleyn, 2017; Darijani & Nikpour, 2016; Qazimi, 2014; Leyden *et al.* 2011; Shamai & Ilatov, 2005).

Apart from identifying with the place, the individual also forms a functional relationship when interacting with the place. This is explained through the notion of place dependence. The functional relationship in this regard pertains to the activities in which the individual participates through their daily routines, often to sustain the individual's livelihood. Moreover, how the place meets the needs of the individual affects their place dependence and their place meaning. Parallel to being attached to a place, place meaning also forms as the individual interacts with the place and continually reinterprets their relationship to their place.

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#### 2.3.5 Place meaning

We can understand place meaning as the relationship between the physical and psychological characteristics of the geographical location and the individual (Sariri et al. 2020; Ujang & Zakariya, 2015). The meaning that the individual attaches to a place responds to the social process of manifesting the place through the place identity, level of place attachment and the human culture (Ujang & Zakariya, 2015). In this regard, place meaning is related to the emotional aspect of the individual's sense of place (Sebastien, 2020; Jordaan et al. 2009). Ujang and Zakariya (2015) argue that the meaning attached to a place results from the individual's interaction with the geographic setting, the importance of that interaction and the setting itself. At the same time, Sebastien (2020) postulates that ties to a place are formed through sentimental development and bestowing specific meaning onto the place. As a result, Sebastien (2020) suggests that the meaning of a place will emerge from the relationship between the individual and the landscape features. According to Masterson et al. (2019), understanding the place meaning can assist in understanding what aspects of a place the individual values. By including place meaning in understanding a sense of place, we can create a clearer image of the individual's sense of place. At the same time, removing meaningful elements threatens an individual's place connection and is a real threat during development (Jordaan et al. 2009).

By combining the above components into the individual's sense of place, a clearer understanding of how modernisation and urban development can influence the individual's sense of place can be presented. These components form the basis of this research project that attempts to investigate this relationship. With a better understanding of sense of place, we can now look at how sense of place relates to urban design.

#### 2.4 Sense of place and urban design

In her seminal literature review article, Maria Lewicka posed a seemingly trivial question: how important is place? (Lewicka, 2011). The answer she provides is "that despite the growing number of the so-called non-places, not only have places not lost their meaning but their importance in the contemporary world actually may have grown" (Lewicka, 2011: 209). Place is, therefore, starting to be recognised by several academic disciplines as growing in importance (Leyden *et al.* 2011). Considering the universal trend of urbanisation and the growth of megacities that can potentially lead to non-places which may diminish sense of place, one can begin to see the importance of understanding sense of place and how it responds to landscape change. Urban design, therefore, plays a vital role in creating place and is inextricably linked to sense of place (Scott, Adams, Curtis, Kouremenos, & Riddle, 2002).

Sense of place is established as a guiding principle in designing liveable urban environments and promoting a high-quality lifestyle (Hu & Chen, 2018). However, according to Elrahman and Asaad (2021), urban planners need to re-evaluate the planning and design of urban areas because developments do not always turn out in practice as intended in theory. Consequently, urban designers play a critical role in defining the physical qualities of a place but still struggle with the inherent problem that "it has always been difficult to quantify the relationship between a physical environment [place] and a person's emotional experience," as mentioned by Hu & Chen (2018: 3). Because urban design focuses predominantly on the place in the person-place bond, Jivén and Larkham (2003: 67) suggest that "urban designers in particular need to revisit the theoretical underpinnings of the terms and concepts that they employ to fully understand the contributions of sense of place, authenticity and character". The urban environment is a complex mixture of image, activity, and culture. Urban designers should attempt to combine sound design principles with opportunities for individuals to establish their sense of place.

However, building and preserving the sense of place is a complex and sophisticated process (Montgomery, 1998). This is due to the multiple components comprising sense of place and the many factors (variables) that influence the individual's sense of place (Nelson *et al.* 2020). Sense of place is strengthened through the dynamic interaction between "mind, culture and the environment" (Grenni, Soini, & Horlings, 2020: 412; Raymond, Kyttä, & Stedman, 2017). Although it is possible to apply sound design principles and good practices to urban design, developments within the built environment should reflect the collective relevance of the local context and the societal need to create a responsible urban form (Cozzolino *et al.* 2020; Minucciani & Saglar, 2020). In practice, however, it seems to be the case that urban design still applies a functional logic based on the principles of modernisation, when designing built environments without considering the local context

and social values (Cozzolino *et al.* 2020; Ghavampour & Vale, 2019; Jordaan *et al.* 2009). One major criticism of modernisation and contemporary urban design is urban development is antithetical to conserving traditional heritage (Jolaoso & Bello, 2017). This is evident when insensitive urban development of the local context threatens the community's sense of place by disrupting their place meaning (Jordaan *et al.* 2009). This dissertation, therefore, argues that incorporating the individual's experiential sense of place into the urban design process may make it possible to identify critical elements of the person-place bond that should remain during urban development.

A significant article on applying a sense of place to urban design is titled "Making a City: Urbanity, Vitality and Urban Design", written by Montgomery (1998). In his article, Montgomery presents a well-constructed argument about the developmental principles of urban design. According to Montgomery (1998), to create good and active cities, one must know how best to manage, develop, and design them. Good cities tend to balance ordered and legible city forms with places of various comings and goings, meetings, and transactions (Montgomery, 1998). A similar argument is made by Andersson (2018). Andersson argues that cities are densely populated, lived-in landscapes where human perceptions are deeply enmeshed with the natural and built infrastructure (Andersson, 2018).

Urban design should apply several principles to create good cities, such as good city form, image, activity, street life and urban culture, all of which contribute to urbanity (Ardoin, Gould, Lukacs, Sponarski, & Schuh, 2019; Jolaoso & Bello, 2017; Montgomery, 1998). As a result, urban design should take a holistic approach to urban planning, development, and management. Good cities should be diverse and multifunctional in that the quality of life is essential and not just a luxury. The core argument made by Montgomery (1998) is that sense of place in the community should be central in urban planning. This research project is in agreement with the argument made by Montgomery (1998), which can be understood as combining the design principles of urbanity with the components of the experiential sense of place to create a place within the urban environment that manifests the sense of place experienced by the inhabitants.

The manifestation of the individual's sense of place within the urban design principles is the central argument made by the Victorian Metropolitan Strategy Report, Australia, which argues that "urban design should help to strengthen people's sense of place" (Scott *et al.* 2002: 11). The MSR suggests incorporating sense of place principles into the strategic urban design and planning practice for the entire region of Victoria by preserving the character of the landscape and natural heritage, the urban fabric of the dominant urban centres and regional towns, the structure of the urban areas and activities, and the form of these areas (Scott *et al.* 2002). The MSR goes beyond the established realm of applying a sense of place to purely the aesthetics of urban design but instead incorporates the broader social context and nuances for whom the design is for (Scott *et al.* 2002). According to Scott *et al.* (2002: 11), the design principles and guidelines for creating a sense of place within the urban landscape of Victoria are to construct an urban environment that allows for:

- "A set of milieus for events and activities so that as behaviour settings, they afford the sensory, formal, and symbolic experiences that make places culturally relevant and pleasant to inhabit,
- > Sequences of agreeable experiences, or patterns of places, and
- Places having a clear conceptual framework that is the basis for the spatial geometry of places and the links between them".

Expanding on the last point, Scott *et al.* (2002: 12) continue:

- "Respond to and reveal, express, or highlight the following aspects of the area:
  - Underlying (natural) landscape character
  - Cultural heritage
  - Valued existing built form context
- Respond to or express the values, needs and aspirations of groups in the community for whom the place is being designed, and make it welcoming to them,
- > Assist in making the area more 'legible', and
- Provide opportunities for individual and community self-actualisation and expression".

By applying these principles, Scott *et al.* (2002) suggest that strengthening the characteristics that differentiate a particular place will lead to a strengthened sense of place for the individuals interacting with the place. However, one consideration that should be kept in mind is that there is no agreed-upon research supporting universal design guidelines for all urban contexts (Hu & Chen, 2018). For this reason, Minucciani and Saglar (2020) and Jordaan *et al.* (2009) suggest that urban designers need to be aware of how their local context will respond to physical changes. At this point, objective four of this research project is highly relevant to the urban planners of Swakopmund, in which recommendations can be given to the planners on how best to incorporate sense of place into the development of Swakopmund.

Within the Namibian context, urban planning theory is governed by the Urban and Regional Planning Act 5 of 2018, which "provides for principles and standards of spatial planning" along with the "approval and review of the national spatial development framework, regional structure plans and urban structure plans" (Republic of Namibia, 2018: 1). One of the main objectives of this act is equity in spatial planning that promotes social and economic inclusion along with the principle of minimising negative financial, social, economic and environmental impacts while protecting Namibia's cultural and natural heritage (Republic of Namibia, 2018). The Urban and Regional Planning Act intends to maintain the relationship between the individual and their environment, arguably on which the individual's sense of place is based. However, how the objectives and principles of the act are achieved are open to interpretation by the planning practitioners and the stakeholders involved in the developmental plans. Along with the above act, urban design and planning are guided by the "red book" of urban planning titled Guidelines for Human Settlement, Planning and Design Volume 1 & 2 written by the Council for Scientific and Industrial Research (CSIR) (CSIR, 2000). This book is regarded as the "best practice" guide to urban planning and development within the Southern African context and socialeconomic conditions by "assisting professionals to create sustainable and vibrant [emphasis added] human settlements" (CSIR, 2000: 1).

The urban planning and design profession applies sense of place to the perceptual qualities of the physical space; the qualities that can be perceived through our senses when interacting with the place (Al-Obeidy & Shamsuddin, 2017). However, the "attainment of

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a sense of place cannot be achieved through standardised planning and design" (CSIR, 2000: 67). For this reason, we can employ the concept of place-making to promote a sense of place through recognising the natural and cultural uniqueness of the physical landscape and its population and incorporating this uniqueness into planning proposals (Kortelainen & Albrecht, 2021). Place-making considers the local context and emphasises the experiences of the individuals who interact with the physical place (Knox, 2005). To achieve a holistic sense of place, a contextualised understanding of sense of place should be incorporated into the planning and design of an urban landscape to embrace the local context.

Considering the above design principles, one can see that constructing a place is complicated, and the quality of the place-making depends on how the individuals respond to the landscape changes (Hu & Chen, 2018). Physical features in a place give cues to how the individual perceives the place, and how the individual experiences the place will be influenced by the amount of time spent in the place. In turn, the individual's perceptions and experiences of the place will also respond to the physical changes that occur around them with the natural ebb and flow of community members, the activities taking place and the transactions that occur. Research within urban design tends to agree that, in one way or another, changes made to the physical features of the urban landscape influence the character of the place, which can affect the level of attachment to the place (Grenni et al. 2020; Von Wirth, Grêt-Regamey, Moser, & Stauffacher, 2016). Consequently, changing the physical features can influence the sense of place experienced by the individual (Grenni et al. 2020). Hu & Chen (2018) share the view that both architecture and urban design can create a sense of place. Therefore, understanding an individual's contextualised sense of place can be a good predictor of how the individual will react to the changes made to their urban landscape (Kasim, Azizan, & Hussin, 2016; Tuan, 1977). We explore the relationship between sense of place and landscape change in more detail in the following section.

# 2.5 Sense of place and urban landscape change

Promoting the contextualised sense of place can become difficult when developing an urban landscape in which town planners utilise a non-holistic approach to modernising the urban environment (Mehrbani, Mansouri & Javadi, 2017). Unchecked urban planning, design and architecture can lead to landscape changes that are perceived as destructive to the city's character if not managed correctly and fully integrated into the prevailing landscape and environment (Kortelainen & Albrecht, 2021). Consequently, homogeneity in urban design, architecture, and form may destabilise the sense of place experienced by the individual residing in the urban landscape (Hu & Chen, 2018). Design practises that lead to *non-places* can be rooted in the application of generic design principles in which the design fails to capture the local context and the established sense of place of the individual residents (Hu & Chen, 2018; Jabbari & Hosseinalizadeh, 2016). The result hereof is the potential to create a place that has lost its place identity and the attachment that the individual has to the place, leading to the individual becoming disconnected from their place (Hu & Chen, 2018).

Several studies have explored the person-place bond. Approaching urban change from the perspective of place attachment, Von Wirth et al. (2016) explored the influence of perceived urban change (PUC) on the resident's place attachment in a region of Switzerland experiencing rapid urbanisation and population growth. As noted by the authors, surprisingly, understanding how environmental change influences place attachment is still in its infancy (Von Wirth et al. 2016). Von Wirth et al. (2016) built upon previous research that investigated landscape development in the mountainous regions of Switzerland by looking at landscape change within an urban environment relevant during times of rapid urbanisation. Their study found a significant relationship between urban change and place attachment in that change that was perceived as welcoming, upgrading, and maintained a sense of familiarity was positively associated with place attachment (Von Wirth et al. 2016). One of the significant findings of this study was that urban change that was perceived as beneficial to the residents strengthened the person-place bond. This means that the residents may perceive urban development through modernisation positively, if the development benefits the individual through employment opportunities or opportunities to express one's identity. Von Wirth et al. (2016) suggested that it is not specifically the change itself that is considered positive or negative. Instead, the meanings ascribed to the changes are perceived as positive or negative. This implies that urban design can, directly and indirectly, influence how the residents relate to their place as it is undergoing landscape change.

The second implication of this study is the opportunity for further research into "identifying particular aspects of the built environment that locally represents familiarity" (Von Wirth *et al.* 2016: 76). The current research project will extend this research by incorporating place attachment into the broader sense of place when investigating urban change through objective three, which will investigate and identify the key aspects of the relationship between sense of place and urban landscape change in Swakopmund.

Combining the concepts of landscape change and sense of place, Wang et al. (2020) explored the influence of urbanisation on sense of place in the fringe zone between the rural and urban landscape. The findings of their study highlighted that the sense of place of the local population grew despite the negative effect that the urbanisation had on the level of sense of place experienced by the residents. (Wang et al. 2020). This is an interesting conclusion as it appears to contradict the accepted view that urbanisation may destabilise an individual's sense of place. According to the authors, a possible explanation of these findings is that sense of place grew due to the increased convenience of living conditions, improved environmental cleanliness and increased income through economic growth and infrastructure development (Wang et al. 2020). Together, this study and these factors revolve around the improved concept of place dependence. The findings also indicated that social bonding and place identity declined (Wang et al. 2020). Upon further inspection of these findings, this study highlighted that the rate of urbanisation negatively affected the residents' experiential sense of place. This suggests that as urbanisation takes place, the sense of place experienced by the residents became *uprooted*. The accepted view of how urban landscape change influences sense of place is understood as landscape change that is perceived negatively may threaten the experiential sense of place created by the individual residents of that place (Vanclay, 2008). This notion is reinforced when Vanclay (2008: 4) suggested that "when spaces are modified, or access to some favourite location denied, there can be opposition and conflict." In agreement with Vanclay (2008), Wang et al. (2020) suggest that it is not what has changed but rather how the local individuals perceive the change that is more associated with sense of place. This is similar to the conclusion reached by Von Wirth et al. (2016).

The significance of the study by Wang *et al.* (2020) highlighted that sense of place may, in fact, increase or decrease depending on how broad a definition of sense of place is used,

and particularly which components of sense of place are selected to be investigated, which highlights the multidimensional nature of sense of place (Wang *et al.* 2020). The recommendation made by Wang *et al.* (2020) calls for more attention to the rural-urban fringe; however, equal attention should be given to urban change within a single town undergoing urbanisation and its effect on the sense of place experienced by residents. For this reason, objective two of this research project is applicable. It will explore how the developmental changes made to the urban landscape influence the residents' experiential sense of place by surveying their perceptions and attitudes towards these changes. A further recommendation made by Wang *et al.* (2020) is to incorporate the use of geographic information systems (GIS) to apply a spatial layer to mapping urbanisation and landscape change. One way of understanding how urbanisation has taken place is by mapping the landscape change through GIS, which can illuminate how the place identity has evolved and can assist in operationalising a sense of place within the urban context (Acedo, Painho & Casteleyn, 2017).

Approaching the person-place bond from the concepts of place-making and placelessness, the study by Kortelainen and Albrecht (2021) investigated how place-making efforts through "planning and design can create placeless constructs when they separate the planned or constructed elements from the crucial identifiers of the place" (Kortelainen & Albrecht, 2021: 3). The location for this study was Äänekoski, Finland, which underwent several significant changes to its place identity when the town developed from an industrial forest mill producer to an information-age hub and then rejuvenated to become a newgeneration pulp-mill industrial village. The goal of this transition was to establish a local bio-production "ecosystem" of innovative companies that would utilise the waste of the pulp production, and as a result, a rejuvenation plan for the town centre was created (Kortelainen & Albrecht, 2021). The relevance of this study is that, given the context of the study location and its historical significance, the rejuvenation plan failed to capture this historical legacy, meaning that its historical identity was effectively ignored (Kortelainen & Albrecht, 2021). Furthermore, this study highlights a common problem in urban planning and design professions of "dual objectives". In the case of Kortelainen and Albrecht (2021), the rejuvenation plan aimed to generate new industries and attract business while

attracting new residents to the village. The authors argued that to achieve these objectives, the genius loci of the landscape is vital to consider (Kortelainen & Albrecht, 2021).

The results of this study were that although the rejuvenation plan and resultant architectural projects followed many guidelines of urban design offered by the current international planning literature, they had the problem of showing a "highly selective and favourable picture of their core contents, and in doing so, they detached themselves from many crucial relations with material and expressive identifiers of the place" (Kortelainen & Albrecht, 2021: 14). Furthermore, the results indicated that there was a missed urbandesign opportunity that could have served the purpose of rebranding, as well as highlight the identity of the place as a new-generation mill village, which would have had a positive effect on the village and the residents (Kortelainen & Albrecht, 2021). The implications of this study are highlighted by arguing that rejuvenation projects can lead to a state of placelessness, if place-based collaborative urban design projects are not considered. This article is applicable to the context of Swakopmund, which has its own rejuvenation plan in place that may have the potential to create a state of *placelessness* through non-place-based design projects.

The study by Hu and Chen (2018) presented a framework for understanding the relationship between design and people's perceptions about a place within an urbandesign context. This study built upon the design literature that shows how a variety of perceptual qualities in the physical environment can affect human behaviour (Hu & Chen, 2018). Their study looked at the empirical relationship between architecture/urban design and people's perception of a place and what contributions this made to their perceptual sense of place. Three different urban sites that varied in design elements were selected and cross-examined to several physical characteristics and perceptual qualities. The physical features used in their study were urban form and pattern, streetscape, architectural context, and character. Additionally, the perceptual qualities were imageability, visual enclosure, human scale, and complexity. Their study concluded that "nature has a meaningful correlation with imageability, visual enclosure, and urban form; pattern has a correlation with complexity; architecture has a correlation with human scale and imageability; and, streetscape has a correlation with human scale and complexity" (Hu & Chen, 2018: 18).

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The results of this study align with the existing design literature that speaks about how the aesthetics and visual identity can influence the perceptual sense of place. Moreover, the results of this study suggest that an individual's perceptual sense of place can be influenced through urban design and architectural change that inadvertently alter the visual characteristics of the urban landscape. The relevance of this study is, by the extension of reasoning, that, if altering the landscape's visual image can influence the sense of place, so can the individual's sense of place be influenced by a developing landscape that alters the character of the urban environment. This study implies that "an understanding of space and placemaking could help architects and urban designers to improve the quality of urban design" (Hu & Chen, 2018: 18).

However, the questions need to be asked about whose perspective will the urban design represent and what are the implications for sense of place within a heterogeneous population? These questions are practically relevant to the design professions because the members of a heterogeneous population could experience changes made to their landscape differently from one another. Considering that sense of place is subjective to each individual and depends on the nature of the interaction between the individual and their place, it will be incorrect to assume that all the individuals within an urban population will respond the same way to landscape change. Quinn, Bousquet and Guerbois (2019) argue that a population does not respond to change uniformly. Given that a consensus is needed to achieve inclusive adaptation, it will be important to understand why individuals of a population are more sensitive to certain changes than others. Investigating the cognitive and emotional or affective attachments to a place provides a useful framework for understanding landscape change, as individuals do not have a homogeneous attachment to place (Quinn et al. 2019). Instead, an individual's attachment to their place is constituted through their dynamic interaction; hence, if this interaction is disrupted, so would their attachment. The opposite is also true in that, if the interaction between the individual and the place is encouraged, their place attachment will be enhanced. The difference between the two is in how they approach the landscape change, in the sense of, "what does the change mean to me?". This is in alignment with Quinn et al. (2019), in that it is place meaning – the symbolic significance of the place – that shapes an individual's perception of landscape change.

An argument can be made that urban design and the resulting landscape change represent the political agenda of the ruling national government (Schildkrout, 1995). This can be noted in the literature about museums in Namibia in that, since Independence in 1990, the national government has pushed to present Namibia as a land with a mosaic of harmonised cultural and racial cohesion (Schildkrout, 1995). However, just as the museums feel pressured to display this national identity, the same impression can be seen within the urban design profession (Müller-Friedman, 2008). Consequently, overdevelopment is a significant risk to all dimensions of sense of place (Quinn *et al.* 2019). Ruhlig (2018) points out in her dissertation that colonial architecture is being destroyed through postindependence development. Perhaps the memory of the colonial times is enough to not protect these buildings through the National Heritage Act of 2004, thus allowing them to become dilapidated (Ruhlig, 2018). Is this the same situation in Swakopmund during the development of its urban landscape?

Focussing our attention on Swakopmund, the proposed Swakopmund Structure Plan 2020-2040 (SSP 2020-2040) aims to redevelop Swakopmund into a well-planned and administered urban development node (Stubenrauch, 2020). The plan's vision is "to create a sustainable, livable and inclusive city" (Stubenrauch, 2020). At the same time, the plan aims to create liveable spaces by honouring town planning and urban design while utilising engineering-based approaches to developing human spaces. The SSP 2020-2040 is based on a similar approach used in cities like Copenhagen and recognises the need to transform Swakopmund into an intelligent town where life, work and play are in harmony. Here, urban densification and place-making initiatives are encouraged in the SSP 2020-2040 in which the dependence on motorised forms of transport is reduced, thus reducing urban sprawl.

In the final version of the SSP 2020-2040, sense of place is only mentioned twice, in which no details are provided as to how sense of place will be encouraged and strengthened besides mentioning that "street cafes, seating and public meeting places can contribute to creating a special sense of place" (Stubenrauch, 2020: 84). Yet the plan makes statements about Swakopmund becoming a sustainable city, a livable city, an inclusive city and a human-scale city. Without concrete measures to achieve these urban design environments in which sense of place is arguably central, these statements can be interpreted as grandiose and even utopian. For example, a livable city is defined as a convenient (meaning easily accessible and legible), safe and secure place where people can live, work and play (Stubenrauch, 2020). The inclusive city calls for all inhabitants of the settlement area, irrespective of race, gender, income or creed, to enjoy equal access to opportunities and amenities (Stubenrauch, 2020). However, the existing and typical Namibian city is primarily made up of single residential dwellings in which there is a "one erf, one house" typology and when densifying a city by converting these spaces into high-rise and mixed-use developments could be "unsettling or uneasy for some" (Stubenrauch, 2020: 73).

In theoretical terms, the SSP 2020-2040 includes world-class design concepts and admirable outcomes but fails to capture the local context, specifically the needs of Swakopmund's residents. The SSP 2020-2040 is contradictory because it calls for inclusive design, planning, and development but does not fully incorporate the human scale into the urban design within the African context. Given the modernistic underpinnings of the current urban design philosophy that fails to capture the essence of place-making in which the citizens are central to the development, the SSP 2020-2040 runs the risk of not delivering on the promises made. By approaching the urban design of Swakopmund from the perspective of sense of place, place-making and new urbanism, which are all people-orientated, the SSP 2020-2040 would better adjust to the local context of Swakopmund and its specific environmental, socio-political and economic nuances.

### 2.6 Conclusion

Space forms the geographic location and how the individual identifies and interacts with the space, forms the place for the individual, based on their social constructs, activities, and transactions, and how the individual attaches meaning to these interactions. It is both the physical and the social environments of the daily routine that forms sense of place. Urban areas are highly complex environments with a multiplicity of interchanging parts that interact simultaneously, with many actors taking part at the same time, and the same is true for the context of Swakopmund. The proposed urban-design plan has some great potential if sense of place is added as a core pillar to the plan. From the above literature review, the central question and argument of this research project is established and justified. Now the question becomes how best to investigate how physical changes made to the urban landscape may influence sense of place. The following chapter will answer this question by looking at the study methodology used to investigate the research question.

# Chapter 3: Research methodology for investigating sense of place and landscape change

# 3.1 Introduction

To answer the research question, this research project followed a mixed-method study design to analyse the influence of urban landscape change on sense of place in Swakopmund. This approach was relevant to the study's objectives of identifying modernised facilities that represent landscape change, surveying the attitudes and perceptions of the residents towards these selected facilities, and identifying key aspects of this relationship between the person and place. By applying a mixed-method research design, this research project could investigate sense of place from both a qualitative and quantitative perspective and create a clearer image of sense of place.

The purpose of this chapter is to outline the theoretical framework, the research design and methodology, and the challenges of the data-gathering stage that applied to this research project. This chapter will also present the pilot study conducted to test the suitability of the data-capturing instruments. This chapter will start by looking at the theoretical framework that underpins this research project before proceeding to the pilot study. After that, the research design and methodology are presented before exploring the researcher's experience of the data-gathering process, and the limitations of the study. This chapter aims to showcase the mechanics behind conducting the research for this case study.

# 3.2 Theoretical framework

The theoretical framework is a critical aspect of the research process and often equates to the blueprint and theoretical underpinning of the investigation that guides the research process (Grant & Osanloo, 2014). It is the foundation on which all knowledge is constructed for the research project and serves as the structure and support for the research rationale (Grant & Osanloo, 2014). The theoretical framework of this research project is grounded on interpretivism and post-positivism within a humanistic worldview (Beidler & Morrison, 2016). This is due to human geographers' fundamental belief that the natural world can be

explained by interpreting the experiences of individuals and members within the natural world (Rodaway, 2006). Researchers utilise interpretation and often reflection to understand social realities to achieve this explanation. Sense of place is a subjective, socially constructed phenomenon that interpretivism can explain by understanding individuals' experiences and perspectives. Furthermore, given the multidisciplinary nature of sense of place that encompasses both the socially constructed realities experienced by the individual and the physical characteristics of the geographic location, the modernised facilities selected for this study can be investigated in a post-positivist way. For this reason, post-positivism is employed alongside interpretivism to create a more holistic picture of sense of place.

Humanistic geography employs interpretivism as an epistemological belief that we can interpret the geographic world through human perceptions and experiences, awareness, agency, consciousness and creativity (Sapkota, 2017). In practice, humanistic geography is concerned with how place, space and environment are part of the conditions and consequences of human activities (Hashemnezhad *et al.* 2013; Lewicka, 2011). The study of humanistic geography is based on the accepted understanding that people have a relationship with the geographic location they find themselves in, a geographic area that provides an individual with a sense of security and means to utilise resources, and in which societal norms are practised (Hashemnezhad *et al.* 2013). According to the views of humanistic geography and the theory of sense of place, the individual determines their perceived and experienced sense of place. Accordingly, Rohkramer & Schulz (2009) suggest that the social role players present within a geographic location construct their sense of place through their experiences and perceptions of their natural environment.

Humanistic geography tries to understand the human world by looking at how people relate to nature, their geographic behaviour, associations, and feelings and ideas about space and place (Sapkota, 2017). Ultimately, humanistic geography brings humans to the centre stage when understanding the complexity of interpreting the natural world (Sapkota, 2017). Humanistic geography pursues this objective while looking through the lens that humans are not static characters who do not influence their geographic environment (Sapkota, 2017). Instead, according to Rodaway (2006), humanistic geography is people-centred and utilises an empirical approach to exploring the

geographical experiences of places, while being interested in the complex relationship between the individual and their surrounding environment.

On the other hand, post-positivism directs research towards creating new knowledge by combining theory and practice (Ryan, 2006). Post-positivism, as the succession to positivism, relies on quantifiable data and, more specifically, using the "correct techniques will provide correct answers" (Ryan, 2006: 14). According to Fox (2008), the measurement of phenomena is central to developing a new understanding within the social context and from the *subject's perspective*. Therefore, "understanding rather than causality is the key element to this approach" (Fox, 2008: 660). Consequently, post-positivism balances positivism and interpretivism (Panhwar, Ansari, & Shah, 2017). As applied to the social sciences, a critical point within post-positivism is that the researcher must keep in mind that their subjects are active, sense-making human beings engaged in understanding and interpreting their own social realities. The researcher should be cognisant of their interpretation and understanding of their subjects' reality, not imposing preconceived ideas of what the natural world should be like onto their subjects (Fox, 2008). We can further argue that post-positivism offers the basis for interpretivism, yet attempts to reduce social order into measurable components (Fox, 2008). One benefit of utilising postpositivism is that it is a flexible research perspective and allows the researcher multiple methods to conduct their research (Panhwar et al. 2017). As such, objective truths are not the goal of this approach but rather understanding subjective realities (Fox, 2008).

The central theme of interpretivism and post-positivism is to understand the social realities of the individuals under investigation. Together, interpretivism and post-positivism allow the researcher the theoretical underpinnings necessary to investigate the relationship between sense of place and landscape change and to gather insightful data about lived experiences. Each theory, therefore, has its methodology to capture the data under investigation, namely, qualitative, quantitative, or combined as mixed-method research.

# 3.3 Mixed-method research methodology

The mixed-method research methodology was selected for this present research project because it provides the best opportunity to investigate the complex nature of sense of place and landscape change as grounded in the theoretical foundation of interpretivism and post-positivism. The sense of place discourse suggests that a mixed-method approach has the potential to navigate the complexity of sense of place and is promising but requires more research (Hu & Chen, 2018). Qualitative studies have been the methodology of choice applied to studying sense of place through phenomenological or heuristic investigations utilising an interpretive approach (Shamai 1991). However, as Shamai and Ilatov (2005) noted, the sense of place has also been studied using positivistic (behavioural) approaches. In his seminal article Sense of Place: an Empirical Measurement, Shamai (1991) proposed an ordinal measurement scale as an empirically sound methodology to elucidate a sense of place. Shamai's core message was to develop a systematic approach to measuring sense of place through a psychometric scale expanded from previous literature (Shamai, 1991). Given the popularity of the Likert scale, the opportunity to quantitatively investigate sense of place was presented, which addressed the shortcomings of the existing methodology. Richard Stedman pointed out that sense of place is rich in theory but relatively poor in quantitative applications (Stedman, 2003b). Hu and Chen (2018) argue that most researchers agree that the lack of quantitative studies has limited our understanding of the city's built environment's effect on sense of place.

The study by Hu and Chen (2018) used a hybrid research method of both a qualitative and quantitative design that showed promise but still requires more research to generate a comprehensive understanding that can provide novel insights. To achieve valid and reliable data about how people perceive a social phenomenon, in-depth interviews and questionnaires, based on the aim and objectives, are preferred as they "offer the most profound insight into people's relations with meaningful places" (Lewicka, 2011: 221). For this reason, this research project adopted a mixed-method research methodology to investigate how the sense of place of the sampled residents respond to the selected modernised facilities.

Within the mixed-method approach, this study utilised a concurrent nested research strategy (see Figure 3.1). This strategy and methodology aimed to investigate a rich and indepth source of information about lived experiences in Swakopmund (Moser & Korstjens, 2018; Sapkota, 2017; Seamon *et al.* 2017). Phenomenological principles were employed to look at qualitative data, and a psychometric Likert scale was used for the quantitative data.

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# Concurrent Nested Strategy

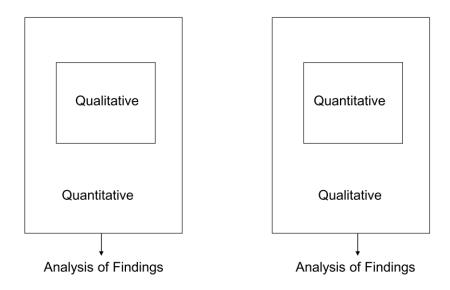


Figure 3.1: Exploratory sequential design. Source: Terrell (2012).

The selection of a concurrent nested strategy was based on the notion that the qualitative data would provide context to the quantitative data. For this reason, the primary study component was quantitative, with the second component being qualitative. The data-collection phase of this project looked at the qualitative interviews before conducting the quantitative survey, and the data from the two components were analysed and integrated. The role of the qualitative data was to provide a contextualised insight and understanding that supported and made sense of the results obtained from the quantitative data (Terrell, 2012). This research project aimed to investigate how the residents of Swakopmund responded to the modernised facilities selected for this study and suggested that a better understanding of the quantitative data could occur through the qualitative data. Before conducting the research, the data-gathering instruments were tested and finalised through a pilot study.

#### 3.4 Pilot study

The pilot study took place on the 29<sup>th</sup> of May 2021, with a sample size of three (n=3). The goal of the pilot study was to test and refine the data-capturing instruments. The pilot

study successfully gathered feedback from the respondents and incorporated their suggestions into revising the interview questions and the questionnaire.

The pilot interviews also allowed the researcher to test the audio quality of the recordings and the transcripts produced from the discussions. An application called Otter.ai was used to record and produce a live transcript as the interviews took place. This application successfully transcribed the interviews with an estimated error rate of 15%; this reduced the time spent transcribing considerably. The interview audio recordings were used to rectify incorrect words in the transcripts before being imported into the analysis software called ATLAS.ti for data analysis.

The respondents suggested that the interview questions should be revised to better distinguish the questions from one another and that the number of questions should be reduced to 12. One of the respondents noted that some of the questions were very similar and, therefore, suggested combining these questions (Respondent 1, 2021). Based on the suggestions made by the respondents, some of the questions used together with a Likert scale were reworded to clarify their meaning. The negative questions were recoded to align with the direction of the positive questions to reduce the acquiescence bias.

Regarding the questionnaire, the respondents suggested that the wording of the questions should be reconsidered to clarify the meaning of the questions. Furthermore, the respondents indicated that a shorter questionnaire would be more convenient to answer. The result thereof was the decision to limit the survey to three pre-defined modernised facilities to conduct this study. These three facilities were the Strand Hotel, the Dome Sports Centre, and the Platz am Meer mall (refer to figures 4.5, 4.6 and 4.7 in Chapter 4).

The SPSS (version 27) programme was used to analyse the ordinal data obtained during the pilot study which looked at the frequency of response from each of the respondents through the descriptive statistic of the mode. Overall internal consistency in the form of Cronbach's alpha was .849, which indicates an acceptable level of internal consistency for the scale (Ahmad, Zulkurnain, & Khairushalimi, 2016). However, when further broken down into the individual variable components that created the scale, internal consistency fell to .471, indicating an unacceptable Cronbach's alpha level (Ahmad *et al.* 2016). For this reason, a fourth question was added to each component to improve the component's

internal reliability and validity, bringing the total number of questions used in the scale to 20.

Based on the concurrent nested strategy followed in this case study, the qualitative interviews were done before the quantitative survey and we can now look at these methodologies in more detail, starting with the qualitative research.

# 3.5 Qualitative research

The goal of the qualitative research component was to build an in-depth and rich information basis around the respondents' perceptions and attitudes to assist in the understanding and support of the quantitative data. The method to achieve this goal was exploratory, in-depth and semi-structured anonymous interviews with the sampled group of residents and public figures of Swakopmund. In-depth interviews allowed the individual respondents to sufficiently elaborate their answers to produce a high-density data source (De Wit, 2013). Refer to Appendix A for the interview questions used in this research project. The interviews were recorded audio-only and transcribed during the data-analysis phase of this research project.

The interviews occurred during the initial stages of data collection and followed the guidelines of phenomenology. Phenomenology aims to develop new knowledge of humanlived experiences and phenomena (Gentles, Charles, Ploeg, & McKibbon, 2015). Firstperson accounts were recorded through participant interviews until a satisfactory understanding of the themes presented was achieved.

The interviews took place during a lockdown period in Swakopmund. However, the interviews with the sampled participants were allowed to take place face-to-face, as the preferred method suggested by Moser and Korstjens (2018). Following the Covid-19 guidelines from Unisa, the interviews were conducted through social distancing of 1.5m along with facial masks and hand sanitiser. This was necessary to reduce social contact with the respondents and curb the spread of the Covid-19 virus. The researcher and interviewee agreed on a time and safe place to conduct the interview that best suited both parties.

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#### 3.5.1 Data type

Qualitative data is descriptive and is used to understand social phenomena (Nassaji, 2015). Furthermore, qualitative data can come from both primary and secondary sources. Primary sources will be from the respondents directly, typically their experiences, opinions and attitudes (Nassaji, 2015). This dissertation used primary data and focused on nominal text in which numerical values cannot be allocated to the data. The qualitative data were constructed from the interviews, direct quotations, and extracted themes.

# 3.5.2 Sampling size and method

The sample population size was based on the guidelines of phenomenology, which stated that "fewer than ten interviewees were deemed adequate" (Moser & Korstjens, 2018: 11). Phenomenologists such as Guetterman (2015) identified a sample size ranging from 8 to 31 interviewees as acceptable and Gentles *et al.* (2015) estimated a range from 10 to 30 participants as adequate for data saturation. However, it is accepted that the analysis unit ultimately determined the sample size (Moser & Korstjens, 2018). As a result, a sample size of 15 was sufficient for this research project.

The sampled group was selected deliberately using a stratified sampling method of purposively choosing the sample group most applicable to the research question (Bryman, 2012). Purposive sampling does not allow for generalisation of a population but can qualify for a representation as a non-probability sampling method (Bryman, 2012). The purpose of the qualitative data was for the researcher to identify key themes of how the modernised facilities selected for this research project influence the respondents' experiential sense of place.

The sample was stratified to include civilian residents (n=9) and selected stakeholders (n=6). Length of residence and economic status were used as selection criteria for the civilian residents. This dissertation looked at residents living in Swakopmund for less than 10 years, those between 10 and 20 years, and more than 21 years. This criterion was based on Lewicka (2011), who notes that residence time is one of the best indicators of place attachment. The civilian resident group's second criterion was their upper, middle, and lower-income social-economic categories. This sample group was selected from the

ethnically diverse population of Swakopmund through the accumulated knowledge and experience of the researcher of interacting with the general resident population over a number of years of living in Swakopmund. The respondents in this group were approached individually and invited to participate in this research project.

The second group were composed of selected stakeholders (n=6) based on their knowledge of Swakopmund, the economic sector they work in and their experience of the research topic. The stakeholder group comprised public and private figures from organisations like the Swakopmund municipality, a local environmental NGO, and several local businesses (see Table 3.1).

Group 1					
Social Economic Status	Length of Residence				
	0 – 10 years	11 – 2	20 years	21 – 30 years	
Upper income	Respondent 1	Respondent 2		Respondent 3	
Middle income	Respondent 4	Respondent 5		Respondent 6	
Lower income	Respondent 7	Respo	ondent 8	Respondent 9	
Group 2					
Organisation	Role of Respondent		Respondent		
Swakopmund Municipality	Town planner		Respondent 10		
Local Environmental NGO	Director		Respondent 11		
Local Business	Owner		Respondent 12		
Local Business	Owner		Respondent 13		
Local Business	Owner		Respondent 14		
Local Business	Owner		Respondent 15		

Table 3.1: Criteria for qualitative sample selection.

Table 3.1 indicates the grouping of the individual respondents who were interviewed during the data-collection phase. Group 1 consists of civilian residents, and group 2 consists of public and private business figures. The two groups of respondents provided a rich data source of lived experiences from varied backgrounds.

#### 3.5.3 Method of analysis

The interview response rate was 100% because all the required interviews took place. A considerable advantage during the interviews was the use of the Otter.ai mobile application that transcribed the interviews in real-time. Based on the researcher's experience, the application successfully transcribed roughly 85% of the conversation during the interview. This dramatically reduced the amount of time for transcribing.

The transcriptions of the interviews (*n*=15) were added to ATLAS.ti, version 9, to create a new project. ATLAS.ti is an example of computer-assisted qualitative data analysis software (CAQDAS) that is used to assist the data analysis of qualitative data, in this case, from the transcripts. Each interview was combed and coded by following the interview guide by which each question became a code. Fourteen codes were identified from the interviews through deductive reasoning and focused on what the respondent said during each interview. From the initial set of codes, seven code groups were generated by combining related codes. The seven code groups became the overarching themes used in the qualitative data analysis. The qualitative themes were used to provide a contextualised understanding of the quantitative data.

### 3.6 Quantitative research

The goal of the quantitative research component was to gather data of the respondent's perceptions and experiences that would allow the researcher to infer the relationships between the modernised facilities and the respondent's sense of place. The data was captured through an anonymous online survey using a Likert scale. The respondents completed the questionnaire about attitude statements that allowed for statistically valid data (Joshi, Kale, Chandel, & Pal, 2015).

In the questionnaire, the first section dealt with demographic information, such as gender, ethnicity, age, length of residence and residential area, and the respondent's activity at the selected facilities. The second section of the questionnaire explored the residents' attitudes and perceptions of the chosen modernised facilities. The different components of sense of place which were identified in the literature (refer to Chapter 2) informed the questions in the data-collection instrument. This section contained a scale with 20 questions divided between 5 variable components: image and aesthetics, form, activity, place attachment and place meaning (refer to Appendix B for the questionnaire and Table 3.2 for the structure of the scale). The scale used in the questionnaire was a Likert scale, with responses ranging from strongly disagree = 1, disagree = 2, neutral = 3, agree = 4 and strongly agree = 5.

The scale proposed in the questionnaire was an original scale developed by the researcher to achieve the aim and objectives of this research project. Creating a new scale was necessary because the researcher could not find an existing scale that applied to the research question used in this case study of Swakopmund. Based on the resourced literature on sense of place, several example scales were consulted to aid in the process of developing the scale for this research project. Nevertheless, the questions used in the scale were created from the researcher's knowledge gathered from the literature and the researcher's experience of Swakopmund and were guided by the aim and objectives of this study.

Location A	Q1	Image	
	Q2		
	Q3		
	Q4		
	Q5	- Form	
	Q6		
	Q7		
	Q8		
	Q9	. Activity	
	Q10		
	Q11		
	Q12		
	Q13	Place Attachment	
	Q14		
	Q15		
	Q16		
	Q17	Place Meaning	
	Q18		
	Q19		
	Q20		

Table 3.2: Data structure of the sense of place scale used in the questionnaire

From Table 3.2, we can see the selected facility under investigation had 20 question indicators separated into the five sense-of-place components. The same scale was used for the Strand Hotel, the Dome Sports Centre and the Platz am Meer mall.

# 3.6.1 Data types

Given the research problem, aim and objectives, the quantitative data applicable to this study were categorical for the demographic data and ordinal for the Likert scale used in the sense of place scales, allowing a numeric value to be given to the data, and descriptive statistical analysis could occur (Subedi, 2016). Ordinal data refers to data that has an order and rank but cannot accurately distinguish the distance between categories. During the scale validation process (refer to Chapter 5, Section 5.4), an exploratory factor analysis was conducted that produced factor scores that were used during further statistical analysis. Essentially, the data in this research project consisted of categorical and ordinal data. The researcher imported the data from the completed questionnaires into SPSS, where data analysis took place.

# 3.6.2 Method of analysis

The data analysis methods used in this research project were applicable to each data type. The categorical data were analysed through descriptive statistics of cross-tables and frequency of response. The ordinal data were analysed through the descriptive statistics of mode and displayed through clustered bar graphs. Lastly, the ordinal data were further analysed through the non-parametric Mann-Whitney U Test that compared the median ranks of the variables under investigation to illuminate if the comparison was statistically significant.

# 3.6.3 Sampling size and method

According to Moser & Korstjens (2018), several factors influence identifying the sample group size, such as participant availability, access to the research setting, finances and time considerations. Given the population size of Swakopmund, an online sample size calculator was consulted, which provided an estimated sample size of 381 (Raosoft, 2021). This sample size was calculated with a 5% margin of error, a 95% confidence level, and a 50% response distribution on a population of 45 000 residents.

The respondents were identified on-site at the three identified modernised facilities through a convenience sampling method. The researcher exercised caution in the selection of the respondents, to not disproportionately target one ethnic group.

# 3.7 Conducting the fieldwork for this study

This will be the researcher's account of conducting the fieldwork for this study and going through the research process, highlighting some of the challenges faced by the researcher.

The fieldwork of this study took place during the months from July to November 2021. After explaining the study, each respondent was asked if they would like to partake in this research project. The respondents who agreed to be a part of this research project wrote their email addresses down on an A4 form attached to a clipboard. The questionnaire was uploaded to Survey Monkey. The access code was downloaded and incorporated into an email and sent out to the respondents who agreed to take part in this study.

During this period, 118 surveys were returned out of the desired amount of 381. This equates to a response rate of 31% and can be considered a low response rate. Based on the researcher's experience, there seemed to be some resistance to participating in the study. Many respondents declined to participate or agreed to participate but failed to complete the survey. Covid-19 restrictions contributed to a lower-than-expected response rate. Possible further factors limiting the participation were a limited understanding of the purpose of the study, apathy towards the project or perhaps even fear of expressing an opinion about the changing landscape in Swakopmund.

# 3.8 Limitations of the study

Restrictions of the Covid-19 lockdown period impacted the methodology followed in this research project. Following the guidelines from Unisa and adhering to the applicable lockdown conditions in Namibia, an online questionnaire was selected for this research project. The questionnaire was made available on the online platform Survey Monkey and accessed through an email sent to the respondents that contained the survey link. This questionnaire method allowed the researcher to reduce social contact with the respondents. As a precaution against the Covid-19 pandemic, the respondents used face masks and hand sanitisers when writing down their email addresses. Pens used to write

down the email address of the respondents were sanitised between being used, and the completed A4 forms were placed in an envelope and stored for three days before being handled by the researcher.

As a non-probability convenience sampling method was applied to identify respondents on the three research sites, the collected data could not be generalised to the broader resident population of Swakopmund. This is due to the sampled population not reflecting the total population of residents. Based on the researcher's experience and observations, it is apparent that not all residents have equal access to the selected facilities, due to financial constraints.

#### 3.9 Conclusion

This chapter explored the philosophical and methodological aspects of conducting the research by discussing the theoretical framework and presenting the mixed-method research methodology of this research project. After that, the pilot study was presented to discuss how the research instruments were tested, and suggestions were made to improve the research instruments. The qualitative and quantitative data were then discussed before looking at the sampling size and method. Furthermore, this chapter also looked at the research er's experience conducting fieldwork for this research project.

This chapter ultimately explained how the researcher captured the data for this research project by employing interpretivism and post-positivism to understand how the resident's sense of place may respond to landscape change. The underlying theme of this research project is to understand the social realities of the residents who interact with the facilities under investigation. To achieve this goal, it was necessary to use a mixed-method research methodology that would allow the research to generate a clearer understanding of sense of place within the context of Swakopmund. The instruments used in this investigation were created specifically for the objectives of this research project and successfully generated data that allowed the researcher to generate novel insights into the sense of place experienced in Swakopmund. Still, to fully grasp this research undertaking, it is necessary to present the contextualised image of the sense of place in Swakopmund. This can be done by looking at the historic development of Swakopmund, which will be shown in the following chapter.

# Chapter 4: History and changing image of Swakopmund

# 4.1 Introduction

The history of Swakopmund spans from the pre-colonial era with indigenous inhabitants in the early 19<sup>th</sup> century to the German invasion and British rule and, lastly, taken under control by the Namibian government after independence. This chapter provides a brief overview of the historical development of Swakopmund that illustrates the changing image and character of the town. This chapter will explore the town's growth, including the built environment and resident population, and present the sense of place experienced in Swakopmund. This chapter aims to understand the contextual sense of place in Swakopmund and show how this sense of place may be influenced by urban landscape change and modernisation. Here we can see how the aim and objectives of this study apply to the context of Swakopmund, which is undergoing landscape change, and the influence thereof on the sense of place. We start by presenting a map of Swakopmund.

# 4.2 Map of Swakopmund

Figure 4.1 was created to assist in the visualisation of Swakopmund and graphically present the pertinent information in this chapter. The primary purpose of this map is to show the three developmental periods relevant to this study and contextualise the location of the selected study sites.

While looking at the map, we can begin to understand that the historic district contains most of the historically significant buildings and landmarks that give Swakopmund its unique place identity. During the apartheid period, the residential areas were the focal points, due to housing demand as the population grew, and rapid urbanisation occurred towards the north and east. The post-independence period shows the continued urbanisation of Swakopmund to the north and east at an incredible rate, through new residential areas. By investigating landscape change, specifically urban development, and by referring to Figure 4.1 during this chapter, one can get the sense of how the town of Swakopmund has become modernised.

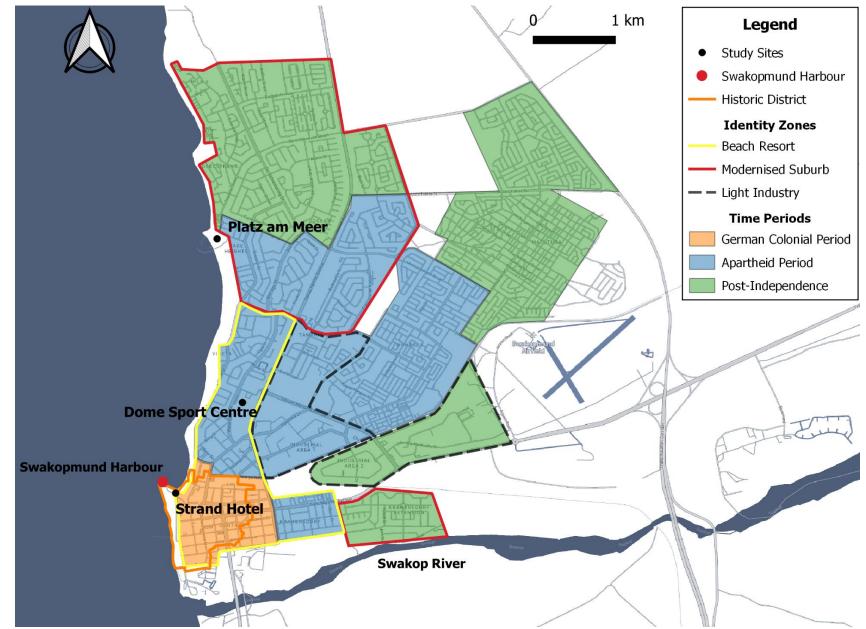


Figure 4.1: Map of Swakopmund showing the study sites, the historic district, identity zones and the time periods. Map created in QGIS (2022).

Figure 4.1 presents a snapshot of Swakopmund, its geographic location, its developmental progress, and the location of the study sites, along with identity zones. However, to better understand the development of Swakopmund, we must first look at each of the applicable time periods that contextualise the development of Swakopmund.

### 4.3 Pre-colonisation era (before 1878)

Before the German colonisation period, several nomadic groups occupied various parts of Namibia (Pineo, 2014). One such group were the Nama, who occupied the river that emptied into the sea to the south of modern-day Swakopmund (figure 4.1). The Nama referred to this river as the *Tsoakhaub*, which meant excrement opening to describe the colour of the water when the river flooded into the Atlantic ocean (NamibWeb, 2021a; Van Zyl, 2016). Not much is known about these groups, as before the colonisation period the history of Namibia was not well documented.

#### 4.4 German Colonisation (1878 – 1914)

The German colonisation occurred between 1878 and 1914 (Massmann, 1983). The Imperial German Army took control of Namibia under the name of German South-West Africa, which ended during the first World War (WW1) (Massmann, 1983). During this time, Swakopmund's land belonged to the German Colonial Company of South-West Africa, an early trading company of this period (Massmann, 1983).

#### 4.4.1 Founding of Swakopmund (1892)

Swakopmund was founded in 1892 as a harbour for the German South-West Africa colony. Curt von François, the acting commissioner of the Imperial German Army, selected Swakopmund to become the main harbour and trading port due to its German occupancy and favourable landing conditions; as several attempts failed to land ships to the north of Swakopmund (NamibWeb, 2021a; Kalb, 2020). In August of 1892, the crew of the gunboat Hyäne discovered a spot where they could access the coast and disembark. The crew marked this point with two beacons that later became the pier (*Mole*) (Info-Namibia, 2020). The Swakopmund harbour became the main link between Germany and German South-West Africa for transporting goods and persons of interest (refer to Figure 4.1). During this time, the indigenous name for the river, *Tsoakhaub*, was changed to the *Swachaub* and is commonly referred to as the *Swakop* River [emphasis added] (NamibWeb, 2021a; Massmann, 1983). The town's name was derived from the place where the Swakop river flows into the ocean, the mouth of the river referred to in German as "mund" (NamibWeb, 2021).

#### 4.4.2 Period of German Architecture (1892 to 1914)

According to Kalb (2020), it was an underlying desire for the German colonialists to develop Swakopmund into a prosperous town. Dr Max Rhode, a representative of the German Colonial Company, drew up the first building plan for Swakopmund, after which construction on the Alte Kaserne (Old Barracks) began. The Alte Kaserne housed the Schutztruppe (German Imperial Army) soldiers that arrived in 1893 (Massmann, 1983). Their purpose was to support the trade towards the inland and with Windhoek. Soon after, more soldiers and civilians arrived to put down roots, due to the commercial activities made possible through the harbour (Massmann, 1983). In 1895, the Damara & Namaqua Trading Company settled in Swakopmund and built three more accommodation facilities. Following this, a postal service was established, and the first zoning map of Swakopmund was created. According to Massmann (1983), there was a rapid population increase from 1892 to 1905, when there were 1433 residents made up of soldiers, their families and civilian traders. By this time, Windhoek and Swakopmund were connected by a railway line that allowed for more accessible and thus quicker travel and more economic activity between these areas. By 1909, Swakopmund received municipal status and was developing into a prosperous town (Massmann, 1983).

Swakopmund's image and character resembled the national identity of Germany through the colonial architectural styles that were popular during the early 1900s (Van Zyl, 2016; Jaeger, 2009). The goal hereof was to recreate the German national identity in the place of colonial conquest, through architecture. The Wilhelminsche style, the neo-Baroque style and the Rundbogenstil style were used during the colonial period, as noted by Walter Peters in his article about the architectural style used during the colonial period of German South-West Africa (Peters, 1983). Several historic buildings were constructed within these architectural styles, such as the Railway Station Building (Figure 4.2), the Woermannhaus (Figure 4.3) and the Hohenzorllern Building (Figure 4.4). These buildings gave Swakopmund a strong Germanic place image and created a historical and architectural character that can still be experienced today (Van Zyl, 2016; Hartman, 2007).



Figure 4.2: Railway Station Building, Rundbogenstil style merged with Renaissance features. Source: Decker (2020).

The Railway Station Building (Figure 4.2) was constructed in 1901 as the central travel node of the Kaiserliche Eisenbahn Verwaltung (Imperial Railway Authority) and linked Swakopmund to Windhoek (Decker, 2020). The railway sped up the German colonialists' territorialisation and allowed quicker transport to Windhoek and the rest of the country. The railway station was an extension of the urban space that bustled with activity as travellers arrived and departed (Decker, 2020). Passengers of the railway line could purchase meals, stock up on cold beverages, and, if needed, passengers could telegraph in and pre-order meals for their journey (Decker, 2020). For many German travellers, these conditions gave them a feeling of being in a place that was "almost like in Germany" (Decker, 2020: 81). There was a sense of familiarity achieved through the sense of place experienced by the German travellers when they interacted with the railway station.



Figure 4.3: Woermannhaus, Wilhelminsche style. Source: Author (May 2021).

A defining feature of present-day Swakopmund is the Woermannhaus (Figure 4.3). The Woermannhaus was constructed in 1904 by the Damara & Namaqua Trading Company and served as their place of business before being sold to the Woermann family. A vital characteristic of the Woermannhaus was the Damara tower which was used as a lookout for ships off the coast and ox-waggons from in-land (NamibWeb, 2021b). In 1909, the Damara & Namaqua Trading Company sold its shares to Woermann Brock & Co, which created the Woermannhaus as it is known today.

The Woermannhaus was often full of guests and employees who stayed in the house during their travels (NamibWeb, 2021b). While at the house, guests could use the reception room, the kitchen, a wine cellar, a music room, and a dining room that boasted gracefully panelled walls and stucco ceiling manufactured in Germany (NamibWeb, 2021b). As first-hand accounts about personal experiences are difficult to come by, as noted by Duchhardt (2013), one can only imagine the atmosphere felt when using these facilities: celebration, music and dance, art nouveau and splendour. What is known about sense of place thus far

is that positive experiences contribute to a positive sense of place. It is plausible that the German inhabitants experienced a positive sense of place when considering this notion. This point can be substantiated by a news article from 2008, which reported that plans were submitted to alter the Damara tower into an office space (Hartman, 2008). Although initially approved by the local council, the plans were ultimately rejected because the alterations would remove the tower's aesthetics and disturb the town's character (Hartman, 2008). These plans failed because of the attachment to the Woermannhaus felt by the inhabitants of Swakopmund. Several committees were established in recent years to ensure that future developments did not damage the town's character, like the Building Heritage Committee and the Swakopmund Aesthetics Committee, which would review developmental plans before being accepted by the local council (Hartman, 2008). The objective of the aesthetics committee is to protect the town's character by considering visually appropriate factors, such as form, scale, height, character, colour, texture, and materials (Hartman, 2012). The establishment of the aesthetics committee illustrates the importance of preserving the visual character of Swakopmund for its residents.

A prominent hotel during the early 1900s was the Hohenzollern Building, which is a part of the historical buildings protected by the heritage and aesthetics committee (see Figure 4.4). The hotel was built in 1905 to accommodate travellers (NamibWeb, 2021). Furthermore, the Hohenzollern Building was a well-known gambling den and rumoured to be a secret brothel, which is why in 1912, the local magistrate revoked its hotel licence (Namibia-accommodation, 2021). After that, it was used as municipal offices and later turned into single-tenant accommodation units (Smit, 2018). This hotel showcases the grandiose design of the German colonial era and based on observations made by the author; it is a commonly sought attraction among tourists.



Figure 4.4: Hohenzorllern Building, Neo-Baroque style. Source: Author (May 2021).

These created amenities were the foundation for the visual character of Swakopmund and set the theme for the built landscape during the 1900s and as it grew (Massmann, 1983). "In 1914, Swakopmund had 38 craft works, 8 industries and 51 commercial undertakings and shops, 4 banks and 18 hotels and inns" (Massmann, 1983: 30). As a result, the town pulsated with life through music and several active clubs, festivals and many cultural activities (Massmann, 1983; Van Zyl, 2016). Music formed a sense of belonging for many German residents, and they described Swakopmund "as both a cultural and physical oasis" (Van Zyl, 2016: 46).

Swakopmund was growing rapidly in popularity and developed into an active and festive place to live in through the built landscape and the sense of place created through the German place identity and culture. The sense of place created and experienced in Swakopmund during the 1900s was rooted in social connections between the community members and their daily interactions with the physical place. As can be described by Kolodziejski (2014), as an ordinary place, Swakopmund could be regarded as an ordinary

place to live in from the perspective of its residential population. Swakopmund had an extensively settled German community, living in a place built and styled to look like Germany, which allowed the daily business and social transactions between the community to occur as they could have in mainland Germany (Duchhardt, 2013). In this way, the inhabitants formed a shared identity with the physical place through the image created from the architectural styles and visual appearance that evoked an emotional link to mainland Germany (Duchhardt, 2013). According to Parr (2014), the German colonialists strived to recreate Heimat or home, which carried a set of cultural and ideological connotations that combined the concepts of belonging and identity through affective attachment to the specific place instance of colonial conquest. By combining the cultural norms and beliefs of the community, an attachment to the place was formed through diversity and vitality of activity and meaningful interaction between the individual and their place. The individuals' place meaning was strengthened by ascribing meaning to their place that resulted from the social interactions with the physical features of Swakopmund that were symbolically important to the individuals. This can be noted when looking at photographs of this time that, as suggested by Jaeger (2009: 469), "showed Europeanized views of colonial reality."

# 4.5 World War 1, transition to a holiday resort and apartheid architecture (1914-1990)

In 1914, the first world war started, in which the town of Swakopmund was targeted on several occasions by the British forces. Swakopmund's residential population were forced to evacuate once their food supplies and provisions were cut off (Massmann, 1983). Immediately, the sense of place experienced by the community was damaged during the evacuation by disrupting the connection between the residents and their place. In 1915, troops from the Union of South Africa entered the town of Swakopmund. Shortly after that, the residents of Swakopmund were allowed to return to what was described as a "lifeless town to eke out a more or less miserable existence. The once flourishing town had slumped to become nothing more than a fishing village" (Massmann, 1983: 31). This quote suggests that the genius loci of Swakopmund, as it was before WW1 and the forced evacuation, disappeared. The grandiose atmosphere surrounding the architecture in Swakopmund was

perceived and experienced differently upon the return by the German inhabitants, with the onset of the British South Africa occupation.

During WW1, British South Africa took control of South-West Africa, which relocated all maritime operations to the British-controlled harbour in Walvis Bay. According to Kalb (2020), this stopped ships from docking at Swakopmund, effectively ending trading. Along with being mandated to South Africa, this also meant that a new wave of immigrants would influence the architectural style in Swakopmund at the time (Peters, 1983). Due to Swakopmund's unique geographic location, and under Section 8 of the London agreement of the Treaty of Versailles signed in 1923, it was promised that Swakopmund was to develop as a health and holiday resort for the South-West African people (Kalb, 2020; Massmann, 1983). Swakopmund's town council seized this opportunity. The Mole developed into an activity area with a water park and a swimming area with an Olympicsized heated indoor swimming pool. In addition, green space was created along the tennis court, and a permanent promenade was established between the Mole and the jetty that housed a permanent music pavilion and a café (Massmann, 1983). Swakopmund attracted many inland tourists during the summer months thanks to its warm summer climate and weather conditions. This attraction to holidaymakers cemented the identity of Swakopmund as a seaside holiday resort.

In 1928, uranium was found in the Namib Desert in the greater surrounding area to the East of Swakopmund. The Hansa Brewery was established in 1929 at the onset of an economic development period through new mining industries that became a key attractor for many labourers (Van Zyl, 2016). In 1955, further intense mining exploration occurred (Massmann, 1983).

The place identity of Swakopmund was evolving through the influence of more modern architectural styles, which meant that the place identity created by the German inhabitants would no longer be as it was before WW1. The place identity now included the British South Africans and the idyllic image of a coastal holiday resort. From the German community's perspective, the question must have arisen, were these changes to the place identity welcomed or unwelcomed? Considering that social connections between the German community could have been re-established under this new place identity, it can

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be a sure estimate that these social connections would not have had the same feeling in the German national identity as before WW1. At the very least, the place identity of Swakopmund would live on in the memories of the community members (Ruhlig, 2018). The result is that the British settlers would have influenced the sense of place in the German community. Through the influence of the British, the transition of Swakopmund's place identity to being a seaside holiday destination was successful, and this place identity has remained intact until today even though significant changes to the built landscape through modernisation have occurred (see Figure 4.5) (Hartman, 2007).

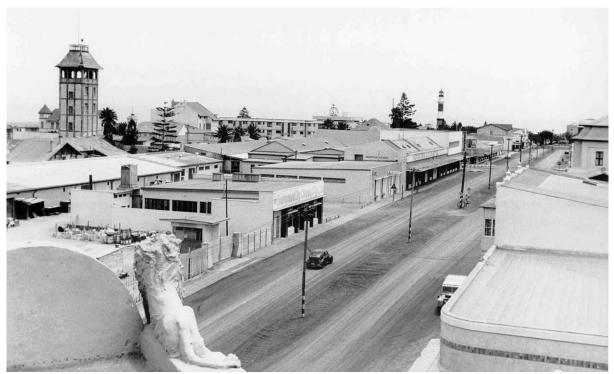


Figure 4.5: Developments during the apartheid era. Reference the Woermannhaus tower in the foreground. Source: Facebook/Swakopmund – down memory lane (May 2021)

From the 1950s to 1990, Swakopmund was under the control of British South Africa, which introduced an architectural style influenced by the apartheid regime that resulted in racially segregated residential areas along with urban sprawl (Van Zyl, 2016; Müller-Friedman, 2008). The white population resided in Kramersdorf, the coloured population resided in an area called Tamariskia, and the black population resided in Mondesa during the 1960s (Müller-Friedman, 2008; Massmann, 1983). By 1976, the Rössing Mine started operating. At this point, Swakopmund had a massive increase in its residential population

due to the employment opportunities created by the newly opened mine (Pineo, 2014; Barnard, 2006). This boom in population led to the modernisation and expansion of Swakopmund with supplementary markets and small-scale industries, such as the bakery and various small shops, the local municipality, and several schools. Many general improvements to the roads and transportation had resulted in attracting holidaymakers from South Africa that showed continued demand for plots to build holiday homes, leading to the development of new suburbs and the expansion of Swakopmund. After the Rössing mine had opened, the construction industry was rampant, with new developmental projects taking place in all areas of Swakopmund. One such project was to build new houses for the Rössing Mine officials and employees in the Vineta suburb. "Virtually overnight, hundreds of new houses mushroomed out of the ground, considerably changing the landscape of the town and almost making Vineta a separate town in itself" (Massmann, 1983: 33). Swakopmund's place identity was no longer a quiet and remote holiday resort but rather transitioned into a metropolitan area in which many businessmen have chosen to retire in. Many of which are German in descent with several generations still living in Swakopmund. The German residents now co-existed with many different nationalities to the point at which Smit (2018) suggests that Swakopmund has become cosmopolitan, in which all of Namibia's dialects can be heard along with several foreign languages.

#### 4.6 Independence and Modern development (1990 – present day)

After independence in 1990, the national government of Namibia focused on creating a national identity that encouraged economic development to be its focal point (Simon & Ekobo, 2008; Schildkrout, 1995). In Swakopmund, this meant introducing economic growth and development that could provide for a fast-growing population, which in 1991 reached nearly 21 000 residents (Namibia Statistics Agency, 2013). One such key industry was tourism (Simon & Ekobo, 2008). Due to economic investment and thus a growing economy, Swakopmund created the image of better livelihoods that keeps attracting many migrants. In 2011, the population reached almost 45 000 residents (Namibia Statistics Agency, 2013). The result was that the characteristic German colonial-building style and historical buildings were juxtaposed with newly constructed modern-looking buildings. This architectural discrepancy can be traced back to the apartheid planning policies of spatial segregation and urban sprawl before independence, as suggested by Müller-Friedman

(2008). One noteworthy feature of Swakopmund was the decision by the town council to limit the height of the built landscape to prevent skyscrapers from being constructed, which ensured that the town's image and character could be preserved as a seaside oasis (Barnard, 2006). In doing so, the historical buildings in Swakopmund have been preserved and protected under the National Heritage Act 27 of 2004 and the aesthetics committee (Stubenrauch, 2020).

However, Müller-Friedman (2008) argued that present-day urban practitioners plan and design buildings as technically and politically neutral under the Modernist approach. Pineo (2014) suggests that this approach to architecture can create a built landscape that no longer resembles the prevailing character and, in the case of Swakopmund, could potentially be a form of colonial liberation. Furthermore, as Swakopmund grows, new residential areas that lack a clear identity are expanding towards the north and the east to accommodate the more affluent and less affluent populations, respectively (Hartman, 2007). As a result, economic development and increased population are increasingly influencing the character of Swakopmund through large-scale developments such as the Strand Hotel, the Dome Sports Centre and the Platz am Meer mall (refer to figures 4.6, 4.7 and 4.8). Each of these facilities has a distinct visual character and serves a specific purpose. The Strand Hotel is an upmarket hotel that includes restaurants and cafes that open to the hotel's promenade; the Dome Sports Centre caters to indoor sporting events and the Platz am Meer offers shopping that is not found anywhere else in Swakopmund.



Figure 4.6: Photo of the Strand Hotel in 2015. Source: The Namibian (2015).



Figure 4.7: Ground view of the Dome Sports Centre. Source: Author (March 2022).



Figure 4.8: The Platz am Meer waterfront shopping mall. Source: The Namibian (2018).

Figures 4.6, 4.7 and 4.8 show that the appearance of these buildings is distinctly different from one another and shows the changing character of Swakopmund. The Strand Hotel is located within the historic district of Swakopmund, overlooking the Mole, and based on the experience and observations from the researcher; it seems to be the case that the Strand Hotel is built as a modern hotel but has the appearance of blending into the historical buildings in the surrounding area. In contrast, the Dome Sports Centre and the Platz am Meer mall are built outside the historic district (refer to Figure 4.1). The Dome Sports Centre is located in an area known locally as a sports area in which significant sporting events occur. Moreover, the Platz am Meer mall is constructed in a modern suburb and based on the researcher's observations, it seems that the mall may represent a modern appearance.

Fast-paced urban growth is driven by what Angelica Fortuzzi calls a functionalist logic (Fortuzzi, 2017). From a functionalistic developmental perspective, the modernisation of a town does not necessarily meet the needs of the inhabitants but is instead focused on achieving the developmental plan (Fortuzzi, 2017). The city or town becomes a place of

contradictions and conflicts between the "rational-ideal-static image and the everchanging community that strives to live in those spaces" (Fortuzzi, 2017: 221). This contradiction is evident in Swakopmund between the architectural heritage still present and the modernised building styles that have dominated the growth of Swakopmund (Müller-Friedman, 2008). Since 1990, Swakopmund has retained some of its colonial place image by preserving the historical buildings and the large active German population (Schildkrout, 1995). From the researcher's observations and experience, the place image of a seaside resort is still present in Swakopmund when interacting with the town's central business district, including the Mole beach and the historic district. However, when moving away from the town's centre, this identity soon dissipates into the activities of light industry economic zones and modernised residential areas (refer to Figure 4.1).

In the process of placemaking, the individual identifies with the place through their attached place meaning when interacting with the urban area. As the place develops, the established identity shifts as a response to the changes experienced, and the meaning ascribed to the place becomes influenced (Fortuzzi, 2017). This change in identity and meaning will respond positively or negatively based on how the individual perceives and experiences these changes. If the individual reacts positively, one can say that their sense of place was positively influenced and strengthened. If the individual responds negatively, it is because the individual is experiencing unfamiliar and unwelcome changes, which may lead to a destabilised sense of place (Jabbari & Hosseinalizadeh, 2016).

#### 4.7 Implications for the sense of place in Swakopmund

Pierre Smit, in his article, posed the question of what makes Swakopmund so unique? He notes that Swakopmund is an attractive town potentially due to the historic buildings, the town's layout, and the tranquillity and the charm of the natural ambience (Smit, 2018). Maggi Barnard presented a similar sentiment, "whether you call it charm, appeal, charisma, or ambience, Swakopmund has a special character that seems to be growing in popularity...among overseas tourists, regional holidaymakers and developers" (Barnard, 2006:1).

Most certainly, Smit (2018) and Barnard (2006) refer to the sense of place created by the town of Swakopmund through the culmination of the parts that make its atmosphere and

character when interacting with the town. There is an attraction to the place felt by the resident population through the strong place identity constructed from Swakopmund's heritage and historical architecture, a strong community sense and social bonding. Perhaps this attraction is created from fond memories of childhood holidays spent in Swakopmund along with cultural activities and music (Van Zyl, 2016). Or maybe, instead, the combination of these elements shapes the sense of place experienced in Swakopmund.

According to Kevin Lynch, the sense of place of the individual forms through interacting with the place features that are of value to the individual (Fortuzzi, 2017). The social connections, the symbolically significant components of the landscape, and the habits and routines of the individual all shape the individual's sense of place. Daily transactions of the individual contribute to the individual's sense of place through the routine of continued interaction with the physical place and critical developments within the built landscape. This indicates that, as Swakopmund continues to develop and grow, the individual's sense of place will respond to how the town changes. From this researcher's personal experience of interacting with Swakopmund, there is a sense of place when walking around the city centre and seeing the historical buildings. Still, there is also an underlying sense of unfamiliarity when moving across from the historical buildings towards the modernised facilities that seem to lack a clear identity link to the already established architectural heritage of Swakopmund.

#### 4.8 Conclusion

This chapter presented a brief overview of the sense of place in Swakopmund by looking at three distinct historical development phases, that of the colonial period to the influence of the apartheid regime, and lastly, development after independence. The town of Swakopmund developed further during each period, shifting its character and image. One way to visualise the development of Swakopmund is to create a map, which achieves the first objective of this research project. During the colonial period, the identity of Swakopmund resembled the national identity of Germany through the architectural styles used. In the apartheid period, urbanisation and urban sprawl occurred, due to economic opportunities and population influx. Although the same trend of economic growth still

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occurs post-independence, we can see that modernisation is at the forefront of this development.

The central question posed in this chapter is primarily concerned with whether the development and growth of Swakopmund positively influences the residents' sense of place? This research project attempts to answer this question by understanding how the residents' sense of place is influenced by landscape change. Chapter 5 of this dissertation presents the data gathered during the survey that attempted to answer the above question and discusses the results and the data analysis thereof.

# Chapter 5: Data analysis and findings

# 5.1 Introduction

This dissertation's central question is how modernisation influences the sense of place of Swakopmund's residents who interact with the facilities selected for this investigation. The themes and relationships discussed in this chapter are based on the data analysis as applied to the research question. This chapter will examine the themes discovered in the qualitative data. After that, the quantitative data from the questionnaires will be presented, validated, and analysed. The collected data aims to identify significant elements of the relationship between the modernised facilities and the respondent's sense of place. The purpose of this chapter is to present the data and analyse it to create a clear image of how the data achieved the aims and objectives of this research project.

#### 5.2 Thematic analysis of qualitative data

The respondents selected for this case study were diverse in their backgrounds, histories and experience of Swakopmund and, in doing so, the interviews generated diverse perspectives and a rich source of lived experiences (refer to Appendix A for the interview guide). Each respondent had a unique perspective and experience of the selected facilities but, when grouped together, common themes were present. The perspectives and experiences shared between respondents were collated and described to best represent the common theme shared between the respondents. Seven themes related to sense of place in Swakopmund were identified, namely, aesthetics, form, activities, place attachment, place meaning, influence on sense of place and development of Swakopmund. These themes confirm the components of sense of place identified in the literature (refer to Chapter 2, Section 2.3) and provide us with a qualitative and personalised insight into how the respondents think about and articulate their relationships to the selected facilities. These overarching themes are therefore presented in tables 5.1, 5.2 and 5.3 for the Strand Hotel (refer to Figure 4.6), Dome Sports Centre (refer to Figure 4.7), and Platz am Meer mall (refer to Figure 4.8), respectively.

Table 5.1: Summary of qualitative themes for the Strand Hotel

Theme	Summary
	The majority of the interviewees regard the Strand Hotel as a visually appealing building. Words such as beautiful, pretty,
	and architecturally well designed were used to describe the visual character of the Strand Hotel. One interviewee
Aesthetics	described the Strand Hotel as a "focal point of this town" (Respondent 8, 2021). Respondent 11 (2021) noted that the
Aesthetics	Strand Hotel is a very nice building to look at and beautifies its surrounding area. Respondent 13 (2021) pointed out that
	the Strand Hotel seemed upmarket, clean, neat, and organised for them, with an attention to detail. Without a doubt,
	the aesthetic theme suggests that the Strand Hotel is pleasing to look at.
	The respondents noted that the Strand Hotel blended well with its surrounding area through a mixture of traditional and
Form	modern architecture, because of its visual appearance and location. Respondent 12 (2021) suggested that the Strand
FOIIII	Hotel is built in a style that fits into the existing character of Swakopmund. The other interviewees shared the same
	sentiment, that the Strand Hotel fits the character of Swakopmund's architecture.
	The Strand Hotel is situated in a popular area because of the adjacent Mole beach. The Strand Hotel has its restaurant
	located on the promenade overlooking the beach. As a result, the most common response to interacting with the Strand
Activities	Hotel is for leisure, socialising with friends over lunch/dinner and sundowners, and relaxation in the hotel's spa. The
	hotel is a popular attraction for tourists and residents alike. Lastly, several respondents have added the Strand Hotel as
	a water break to their routine physical activity, such as walking and jogging (Respondent 1, 2021).
Place	The Strand Hotel had a medium level of attachment to the facility but strongly influenced the place attachment towards
Attachment	Swakopmund. A common theme in the increased attachment to Swakopmund is the improved quality of life due to this

Swakopmund	Swakopmund through facilities that offer activities that are of interest to the residents.
Development of	The overall theme for the development of Swakopmund is to preserve the historic district and modernise the rest of
	memories.
sense of place	Hotel. Interacting with the Strand Hotel allows the residents to form bonds to their place and peers and create happy
Influence on	appearance, blending with the character of Swakopmund and the activities that take place in and around the Strand
	The Strand Hotel had a positive influence on the sense of place experienced in Swakopmund through its visual
	Swakopmund more enjoyable. A common theme here was memories and comfort.
Place Meaning	Swakopmund. In other words, it would leave the most significant gap if it were to disappear as it makes life in
	The Strand Hotel increased the place meaning towards Swakopmund because it improved the quality of life in
	would negatively impact the residents of Swakopmund.
	(2021) noted that the Strand Hotel has a special ambience and a sense of peace about it. Removing the Strand Hotel
	Hotel area with a shared reason of having formed childhood memories of playing on the Mole beach. Respondent 4
	facility. A common word used here is <i>comfort</i> . Several respondents noted that they were more attached to the Strand

Source: Interview data, 2021

Table 5.2: Summary of qualitative themes for the Dome Sports Centre

Theme	Summary
	The Dome had many negative responses to its aesthetics, specifically the white canvas roof. Words such as eyesore,
	white elephant and disturbing were used to describe the visual character. Some respondents noted that the Dome Sports
	Centre looked interesting and modern from a technical viewpoint. Respondent 4 (2021) said that the Dome Sports Centre
Aesthetics	might look a little strange, but when they see it from a flight, it blends in like a giant tent had been erected. The aesthetics
	of the Dome Sports Centre adds to the diversity of the visual character of Swakopmund and can make Swakopmund look
	more attractive to tourists. In other words, the Dome made Swakopmund look better even though the building itself did
	not seem visually appealing to the residents.
	The Dome Sports Centre is located outside the historic district and is built to have a Modern appearance. It certainly
	does not continue the historical character but rather diversifies the character of Swakopmund. At the same time, the
Form	Dome Sports Centre blends well with its surroundings, made up of similar sports facilities and sports grounds. One
FOITI	respondent noted that the Dome Sports Centre disrupts Swakopmund's skyline. In contrast, another respondent
	suggested that the Dome Sports Centre helps to develop this part of Swakopmund into a well-defined sports area and
	has become a part of Swakopmund.
	The Dome Sports Centre has high activity and interaction when an event, expo, conference, etc, is presented. However,
Activities	the main reason for interaction would be the gym, sports facilities, and corporate offices for the rest of the year. This
	theme suggests that the Dome Sports Centre makes its biggest contribution to Swakopmund by offering space for events

	on a large scale. Respondent 10 (2021) noted that the Dome offers "multiple functions and multiple activities that one
	can venture into". The Dome Sports Centre has a high functionality and utility value.
	The Dome Sports Centre had a low level of attachment to the facility; however, it had a high level of influence on the
	place attachment towards Swakopmund because it makes Swakopmund more attractive to live in. A common theme in
Place	the increased attachment to Swakopmund is the increased quality of life that is due to this facility. A common word used
Attachment	here is activity. The Dome Sports Centre is very popular among students who partake in their sport of choice at the
	Dome. The Dome attracts foreign investment into Swakopmund by having a high functionality value, which benefits
	several supplement industries.
	The Dome Sports Centre increased the place meaning of Swakopmund for a few individual respondents, but not
	everybody shared the same sentiment. The Dome Sports Centre was valuable to the respondents who interacted with
Place Meaning	the Dome. A prominent theme is that, even if the respondent did not interact with the Dome, they would benefit from
	one of the supplement industries that do benefit from the Dome. A common theme is that the Dome would be missed
	if it disappeared.
	The Dome Sports Centre positively influenced the sense of place experienced in Swakopmund by the respondents who
	interacted with the Dome. Respondent 9 (2021) said, "I see the value of it [the Dome Sports Centre], and I see it has a
Influence on	place and there's meaning to it and, and it has a benefit. Even if it's not for me personally. A lot of people befit." But the
sense of place	Dome Sports Centre also had a negative influence; as Respondent 5 (2021) suggested, "the Dome definitely has got a
	negative influence on me as the way it looks. When you go in there, it's cold, it's sadSwakopmund is not right for a
	place like the Dome and the Dome is not the right thing for Swakopmund."

<b>Development of</b> The overall theme for the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district and modernise the development of Swakopmund is to preserve the historic district distribution development of Swakopmund is to preserve the historic district distribution development of Swakopmund distribution development of Swakopmund distribution development of Swakopmund distribution development				
Swakopmund	Swakopmund through facilities that offer activities that are of interest to the residents.			

Source: Interview data, 2021

Table 5.3: Summary of qualitative themes for the Platz am Meer mall

Theme	Summary
	The Platz am Meer received mixed responses about its visual appeal; in other words, it was viewed as positive by the
	respondents who considered themselves mall people and negative for the non-mall people respondents. Negative words
	such as copy and paste, plain, commercial and generic were used to describe the mall's look. In contrast, positive
Aesthetics	comments such as attractive, pleasant, and beautiful were used as well. Several respondents noted that the mall's west
	side, which overlooks the Marina, is visually appealing.
	However, the south side, which acts as a service entrance lessened the visual attraction of the mall. The mall does look
	like a modern building and therefore fits where it is located.
	The Platz am Meer did not continue the historic character of Swakopmund but rather, like the Dome, contributed to
	diversifying the character of Swakopmund. The Platz am Meer mall blends well with its surrounding area because it is
Form	built in a modern suburb. Some respondents noted that there was more traffic in the area surrounding because of the
	mall. Respondent 10 (2021) pointed out that the mall will act as a service node for when Swakopmund develops to the
	North (see Figure 4.1).
	The Platz am Meer has a high activity and interaction level. The main activity that takes place at the mall is shopping and
	restaurants. Several respondents noted that the mall is convenient for shopping, as there are various shops available.
Activities	Respondent 3 (2021) described the mall as a "one stop shop type thing". The common word in the activity theme is
	convenience. The mall brings convenience to living in Swakopmund. However, respondent 11 (2021) remarked that the
	mall is not operational to its full capacity yet as there are spaces for offices and apartments not being used. Several

	respondents also noted that Swakopmund did not need a mall but rather should encourage activity towards the smaller
	shops in the CBD area.
	The Platz am Meer had a weak level of attachment to the facility and had a high level of influence on the place attachment
Place	towards Swakopmund. A common theme in the increased attachment to Swakopmund is the increased quality of life
Attachment	through the shopping opportunities at the mall. A common word used here is variety. Some respondents noted that they
Attachment	were attached to the mall because of the options to socialise with friends and family over dinner. Several respondents
	indicated that they had formed happy memories when interacting with the mall.
	It was suggested that the Platz am Meer influenced the quality of life in Swakopmund by adding to the comfort of living.
Place Meaning	The recurring theme here is that Platz am Meer is valuable for the <i>mall-type people</i> and would be missed if demolished.
	But the opposite is also true for the non-mall-type people in that they would not be bothered if the mall did not exist.
Influence on	The Platz am Meer positively influenced the sense of place experienced in Swakopmund. This can be noted from the
sense of place	above themes in that comfort, convenience, variety, and opportunity are words used when describing the mall.
Development of	The overall theme for the development of Swakopmund is to preserve the historic district and modernise the rest of
Swakopmund	Swakopmund through facilities that offer activities that are of interest to the residents.

Source: Interview data, 2021

From the themes presented, we can see that all three facilities had a positive influence on the sense-of-place components. The Strand Hotel had the most positive influence in its visual appeal, blending with its surrounding and increasing the place attachment felt towards Swakopmund. In comparison, the Dome Sport Centre had the least positive influence in its visual appeal but had the greatest influence in its activity component. The Platz am Meer experienced more mixed responses across the sense-of-place components but notably increased the activity component and contributed to the place meaning of Swakopmund. Along with themes uncovered during the interviews, this research project also wanted to identify possible statistically significant aspects of the relationships between the modernised facilities and the individual's sense of place, and to achieve this, we can look at the quantitative data.

#### 5.3 Statistical analysis of quantitative data

The data obtained from the questionnaire allowed for a statistical analysis that may add more clarity to the relationships between the modernised facilities and the individuals' sense of place within Swakopmund's context (see Appendix B for the questionnaire). To achieve this, the questionnaire data are broken up into three parts: demographic information, descriptive statistics, and the inferential statistics. The demographic data deals with characteristics of the participants. The descriptive data looks at the responses to the Likert scale questions, and the inferential statistics explore the statistically significant relationships between the modernised facilities and the sense-of-place components.

#### 5.3.1 Demographic Data and open-ended questions

The questionnaire returned 118 valid responses for the scales used to investigate the selected facilities. However, some missing responses were noted for the demographic data. The demographic data looked at the background of the sampled population and provided a greater understanding of the character of the sampled population. The sampled population was overwhelmingly female, with 72% compared to 28% for males. From this population, 82% categorised themselves as White, 12% as Black, 5% as Mixed-Race and 1% as Other (see Figure 5.1).

			Gen		
			Female	Male	Total
Race	Mixed-race	Count	3	3	6
		% of Total	2.6%	2.6%	5.3%
	Black	Count	9	5	14
		% of Total	7.9%	4.4%	12.3%
	White	Count	69	24	93
		% of Total	60.5%	21.1%	81.6%
	Other	Count	1	0	1
		% of Total	0.9%	0.0%	0.9%
Total		Count	82	32	114
		% of Total	71.9%	28.1%	100.0%

Figure 5.1: Crosstabulation between race and gender demographics.

Furthermore, this sampled population's most common age group is 36-50 years, and the least common age group was 66 years and older. The majority of the sampled population has been living in Swakopmund for between 11 and 20 years, with 36%. In contrast, those living in Swakopmund for more than 31 years make up the smallest percentage of residents, with 14% (see Figure 5.2).

		Age					
			18-35	36-50	51-65	66<	Total
Residence_Length	0-10 years	Count	15	14	8	1	38
		% of Total	12.7%	11.9%	6.8%	0.8%	32.2%
	11-20 years	Count	9	18	10	5	42
		% of Total	7.6%	15.3%	8.5%	4.2%	35.6%
	21-30 years	Count	7	6	6	2	21
		% of Total	5.9%	5.1%	5.1%	1.7%	17.8%
	31 < years	Count	3	4	7	3	17
		% of Total	2.5%	3.4%	5.9%	2.5%	14.4%
Total		Count	34	42	31	11	118
		% of Total	28.8%	35.6%	26.3%	9.3%	100.0%

Figure 5.2: Crosstabulation between residence length and age demographics

The demographic data is intended to understand better the respondents who answered the questionnaire. From the demographic data, we can see that the sampled population in this research project are mainly female, part of the white ethnic group, aged between 36 and 50, and have been living in Swakopmund between 11 and 20 years.

An open-ended question was asked to identify the buildings/landmarks or physical features that respondent's value and would like to keep the same, as the town Swakopmund develops. Figure 5.3 shows the frequency of each response.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Historical buildings	64	54.2	54.2	54.2
	Jetty	9	7.6	7.6	61.9
	Lighthouse	24	20.3	20.3	82.2
	Mole beach	12	10.2	10.2	92.4
	N/A	3	2.5	2.5	94.9
	Nature	1	.8	.8	95.8
	The Dome	2	1.7	1.7	97.5
	The skyline	2	1.7	1.7	99.2
	The Strand Hotel	1	.8	.8	100.0
	Total	118	100.0	100.0	

#### Landmark\_Feature

Figure 5.3: Frequency table indicating landmark features

Historic buildings were indicated with the highest frequency (54.2%). The following features were specifically mentioned: the lighthouse (20.3%), Mole beach (10.2%), the jetty (7.6%), the Dome (1.7%), the skyline (1.7%) and the Strand Hotel (.8%). Note that two of the three modern facilities selected for this study were mentioned in the open-ended questions as features to be conserved. Some respondents indicated that the question was not applicable (2.5%) and that could imply that no features should be conserved.

Responses to the open-ended question on the reason for visiting the facilities indicated that, for the Strand Hotel, visiting the restaurant (53.5%), relaxation (11.9%), view and ambience (8.5%) were most frequently mentioned. Socialisation and relaxing at the beach

area that is adjacent to the hotel was also mentioned. Accommodation (1.7%) and conferences (.8%) are important functions of the hotel but were mentioned at a lower frequency (refer to Figure 6.1, Chapter 6). Furthermore, reasons for visiting the Dome sport centre included the sports facilities (39%); gym (19.5%); exhibitions (13.6%); entertainment (6.8%) and business (1.7%) (refer to Figure 6.2, Chapter 6). On the other hand, the respondents indicated that shopping (82.2%) was their main reason for visiting the Platz am Meer shopping centre, followed by shopping and restaurant (7.6%) and restaurant (3.4%) (refer to Figure 6.3, Chapter 6).

The demographic data creates a clear image of the sampled population, who are mostly white females aged between 36 and 50 who have lived in Swakopmund between 11 and 20 years. From this population, 54% would like to conserve the historical buildings. We can also see their reasoning for interacting with the three modernised facilities selected for this investigation. With this understanding of the sampled population's demographics, the following section presents the indicator variables for the sense-of-place components used in the questionnaire and compares these variables for the selected modernised facilities.

# 5.3.2 A comparison of variables for the sense-of-place components in the

#### three study sites

The descriptive statistics explored the way the respondents answered the Likert statements to present a numerically based approach to understanding the relationship between the modernised facilities and the respondent's sense of place. The descriptive statistics looked at each individual indicator variable that, when grouped together, created the component and, along with the interview data, present a baseline understanding of how the respondents reflect on the modernised facilities. It is necessary to keep in mind that the level of agreement ranges from 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree to 5 = strongly agree, and these graphs should be read in combination with the questionnaire to understand better the data being displayed. A response or level of agreement value of 4 and 5 would indicate a positive to a very positive influence on the sense-of-place component. Figures 5.4 to 5.8 present the descriptive statistics of the sense of place scales.

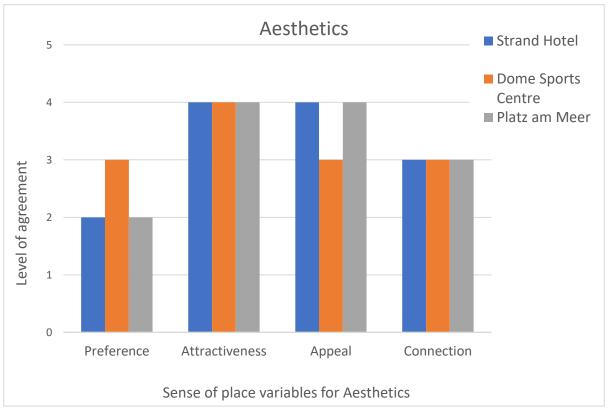


Figure 5.4: Aesthetic component of sense of place

Four indicators constitute the sense-of-place component of aesthetics (Figure 5.4). This component dealt with the visual aspects of the selected facilities and the image of Swakopmund. Here the goal was to understand if the respondents were visually attracted to the selected facilities and if these facilities influenced the respondents' perception of Swakopmund. The graph shows a positive visual appeal when looking at the Strand Hotel and the Platz am Meer mall and a neutral visual appeal towards the Dome Sports Centre. All three of the facilities positively influenced the visual attractiveness of Swakopmund and a neutral level of connection to Swakopmund. For preference, this was a negatively worded question. The question read: I prefer the way Swakopmund looked before the facility was built. A response of 2 (disagree) would indicate that the respondent disagreed with the question and preferred the way Swakopmund looked with the facility. Once recoded, this question had a positive agreement level for the Strand Hotel and the Platz am Meer mall and a neutral level of the facility agreement level for the Strand Hotel and the Platz am Meer mall and a neutral level of was built. A response of 2 (disagree) would indicate that the respondent disagreed with the question and preferred the way Swakopmund looked with the facility. Once recoded, this question had a positive agreement level for the Strand Hotel and the Platz am Meer mall and a neutral agreement for the Dome Sports Centre.

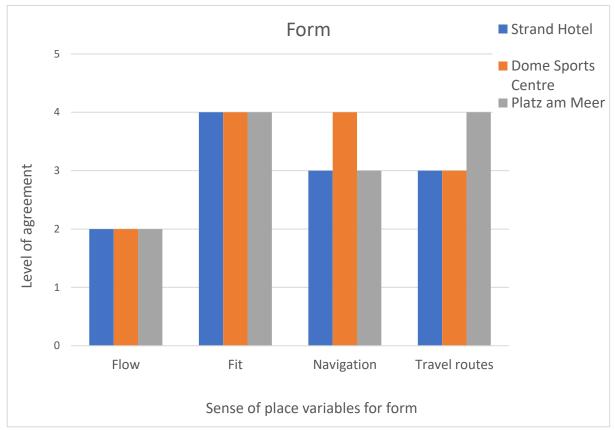


Figure 5.5: From component of sense of place

The form component (Figure 5.5) dealt with understanding if the selected facilities influenced the layout of Swakopmund's built landscape. From the graph, we can see that all three facilities fit well and blend well with their location and their surrounding area. The Strand Hotel is located in the historic district of Swakopmund, the Dome Sports Centre is between two sports fields and an area known for sport, and the Platz am Meer is located in a modern suburb of Swakopmund (see Figure 4.1). For this reason, it is no surprise that the facilities had a positive level of agreement on the flow of Swakopmund's built landscape. The question about flow was worded negatively, indicating that a response of 2 or disagree was interpreted as the facilities adding to the flow of Swakopmund's built landscape, and adding to the continuity of their surrounding landscape. Due to the location of the Dome Sports Centre being in the middle between the Strand Hotel and the Platz am Meer mall and its physical appearance, the Dome acts like a landmark that assists with navigation around Swakopmund. However, the Dome had a neutral influence on the travel

routes of the respondents, along with the Strand Hotel. On the other hand, the Platz am Meer mall had a positive level of agreement on the travel routes.

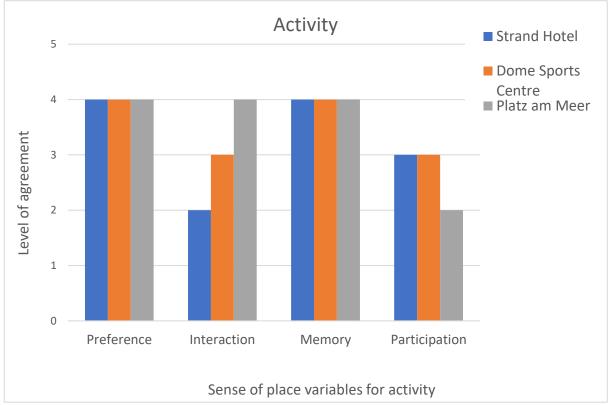


Figure 5.6: Activity component of sense of place

The activity component (Figure 5.6) dealt with understanding the activity level generated around the selected facilities and the interaction between the respondents and the facilities. Here the goal was to know if the facilities influenced the respondents' activities. The graph shows that all three facilities had a positive level of agreement for preference and memory. This indicates that the respondents preferred the activity level generated from the facilities in their surrounding areas and could easily recall a memory of enjoyable activities at the facilities. However, only the Platz am Meer mall positively influenced the respondent's interaction. The differences in interaction with the facilities should be interpreted with consideration of the type of activities that are typical in a hotel and beachfront, sport centre and shopping mall.

The Dome Sports Centre had a neutral influence on interaction. In contrast, the Strand Hotel had a negative level of agreement on the respondent's interaction. Lastly, in terms of participation, the Strand Hotel, and the Dome both had a neutral level of agreement, and the Platz am Meer mall had a negative level of agreement.

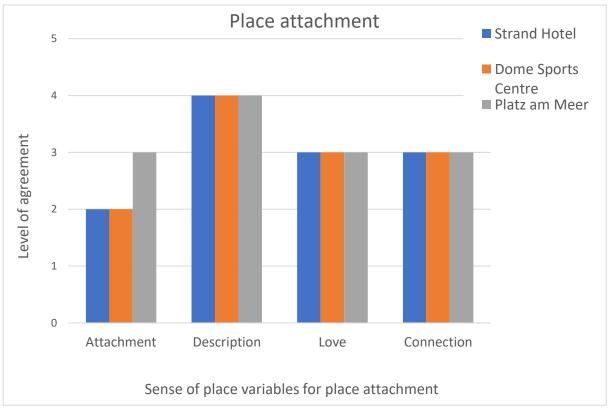


Figure 5.7: Place attachment component of sense of place

With the place attachment component (Figure 5.7), the researcher tried to understand if the respondent had a place attachment towards the facility and whether the selected facilities influenced the place attachment that the respondents felt towards Swakopmund. The graph shows that the facilities selected for this investigation had a neutral level of agreement for the love and the connection felt towards the facility. When describing the place attachment towards Swakopmund, only the Platz am Meer mall had a neutral level of agreement for attachment. In contrast, the Strand Hotel and the Dome Sports Centre had a negative level of place attachment towards Swakopmund. When looking at the description indicator, all three facilities scored a positive level of agreement, meaning that the respondents could easily include details of the selected facilities when describing Swakopmund.

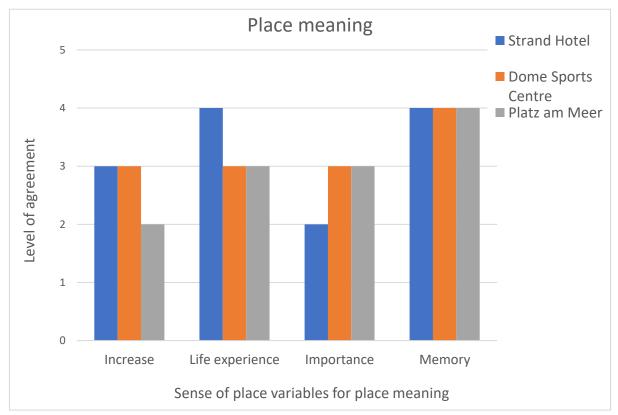
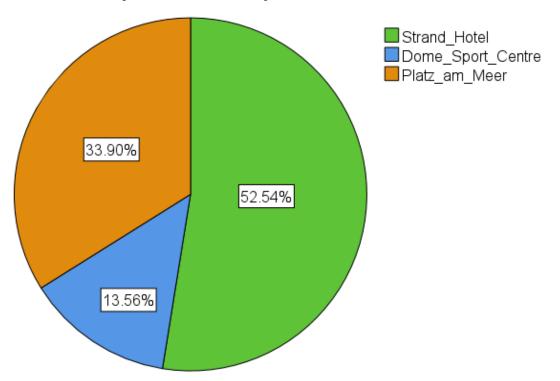


Figure 5.8: Place meaning component of sense of place

The last component in this investigation is place meaning (figure 5.8). The goal here was to understand if the facilities influenced the place meaning experienced by the respondents towards the facility and Swakopmund. From the graph, all three facilities had a positive level of agreement for memory, indicating that the respondents could easily recall a happy memory about the facilities. When asked if the meaning of Swakopmund increased for the respondent now that the facility was built, the response was a neutral level of agreement for the Strand Hotel and Dome Sports Centre and a negative level of agreement for the Platz am Meer mall. In terms of importance, the Dome Sports Centre and the Platz am Meer mall had a neutral agreement level and a negative agreement for the Strand Hotel. Interestingly, if these facilities were to be removed, there would be a sense of loss in the quality of life experienced by the respondents for the Strand Hotel, but a neutral level of agreement for the Dome Sports Centre and the Platz am Meer mall. The above descriptive statistics showed the mode frequency of response to the sense of place scale used in the questionnaire. The descriptive statistics presented the indicator variables for each component and compared these components for the three modernised facilities. The data indicate that each of the facilities had a positive influence on the respondent's sense of place, even though their influence was not uniform across the components.

Along with their relationship to these facilities, we would also like to know how the respondents think Swakopmund should develop. To answer this, we can look at the last question in the questionnaire that read: would you prefer to see more buildings that look like the Strand Hotel, the Dome Sports Centre, or the Platz am Meer mall as the town of Swakopmund continues to grow and become developed? This question aimed to understand which of the three facilities the respondents would like to conserve as Swakopmund develops. The result of this question is presented in Figure 5.9.



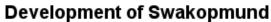


Figure 5.9: Building preference during the development of Swakopmund

From Figure 5.9, we can see that over 52% of the respondents would prefer to see more buildings that have the appearance of the Strand Hotel, whereas less than 14% would prefer to see more buildings that have the appearance of the Dome Sports Centre.

Taking into consideration the demographic and descriptive statistics, we can understand the themes in the quantitative data and the character of the respondents, and how they approach the modernised facilities. In other words, how the respondents experience and perceive their relationship towards the modernised facilities. Coupling the above quantitative data with the qualitative data, we can confidently say that we have a solid baseline understanding of the relationship between the modernised facilities and the respondent's sense of place.

However, the question remains, is the relationship between the modernised facilities and the respondent's sense of place statistically significant? To answer this question, we need to look more closely to the relationship, and we can do this by applying the sense-of-place components to the sample population's building preference of how Swakopmund should develop. The following section looks at the data validation process as the first step in the inferential statistics that would allow the data to be considered valid and trustworthy.

# 5.4 Scale validation for further statistical analysis

The scale validation process was a necessary step in the quantitative data analysis to ensure that the statistical data analysis yielded trustworthy results. The above descriptive statistics showed how the respondents answered the Likert statements. However, due to using a questionnaire with a novel Likert scale, the scale needs to be validated to allow for more advanced statistical analysis.

# 5.4.1 Exploratory factor analysis of the components of sense of place

An exploratory factor analysis (EFA) was conducted as the first step to validate the novel scale construct and understand better the nature of the data obtained from the questionnaire. The purpose of the EFA is to explore and understand how the indicator items load with one another, in other words, which items fit best together by reducing the total number of items on the scale by removing redundant indicators. The first step in running an EFA is to make sure the data is suitable for conducting an EFA. We can assess

this by looking at the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) for each of the scales. The KMO value for the Strand Hotel was .916, the Dome Sports Centre achieved .927, and the Platz am Meer achieved a KMO value of .919. These results indicate that the EFA can proceed because the KMO value was higher than the threshold value of .5 (Samuels, 2017).

The EFA was run with the principal axis factoring (PAF) extraction method with the rotation method of Promax and the default rotation value of four. The reasoning was that this extraction method is appropriate for items that share some correlation (Samuels, 2017). From the initial EFA output, factor loadings less than .4 were removed, along with cross-loading items between two or more factors (Samuels, 2017). At the end of the EFA process, two factors were adopted to achieve the necessary construct validity to allow for further analysis. The EFA output for the Strand Hotel, the Dome Sports Centre, and the Platz am Meer are found in Appendix C, D, and E.

Visualising the factors created during the EFA process may be beneficial to understanding better which indicator questions are loaded together. This information is presented in Table 5.4.

Table 5.4: Factors created during the EFA process

	Strand Hotel		Dome Sports Centre		Platz am Meer	
Question Label	Factor	Factor	Factor	Factor	Factor	Factor
Question Laber	1	2	1	2	1	2
Image_Q1_Preference		Х		Х		х
Image_Q2_Attractiveness		Х		Х		х
Image_Q3_Appeal		Х		Х		х
Image_Q4_Connection			х			х
Form_Q1_Flow		Х		Х		х
Form_Q2_Fit		Х		Х		х
Form_Q3_Navigation						
Form_Q4_Travel					х	
Activity_Q1_Preference					х	
Activity_Q2_Interaction	Х		Х		Х	
Activity_Q3_Memory	Х		Х		Х	
Activity_Q4_Participation	Х		х		х	
Attachment_Q1_Attachment	Х		х			
Attachment_Q2_Details	Х		Х			
Attachment_Q3_Love	Х		Х			
Attachment_Q4_Connection	Х		х			
Meaning_Q1_Increase	Х		х			
Meaning_Q2_Life	Х		х		х	
Meaning_Q3_Importance	Х		х			
Meaning_Q4_Memory	Х		х		х	

From Table 5.4, we can see which indicator questions loaded together on which factors. We can also see which indicator questions were omitted from the construct validity calculations and further analysis.

From the factors created during the EFA, we can see two significant themes in Table 5.4. Firstly, when looking at the Strand Hotel, all of the indicators for attachment and meaning, and the majority of the activity component loaded together. Factor 1 was named Activity, Attachment and Meaning. The same indicators loaded together for the Dome Sports Centre with the addition of image\_Q4\_connection. Factor 1 for the Dome Sports Centre was also named Activity, Attachment and Meaning. Here we can see a relationship between the components of activity, attachment and meaning when considering the Strand Hotel and the Dome Sports Centre. However, for the Platz am Meer, there were no indicators from the attachment and meaning components that loaded together, apart from meaning\_Q2\_life and meaning\_Q4\_memory, but all of the activity indicators and form\_Q4\_travel loaded together. Factor 1 for the Platz am Meer was therefore named Activity and Meaning. Here we can see that activity has a meaningful relationship with the Platz am Meer.

The second major theme is that image\_Q1\_preference, image\_Q2\_attractiveness, image\_Q3\_appeal, form\_Q1\_flow and form\_Q2\_fit loaded together for the Strand Hotel and the Dome Sports Centre, as well as, for the Platz am Meer. However, the Platz am Meer had the additional indicator of image\_Q3\_connection loaded. Therefore, the second factor was named Image and Form for all three facilities. Here we can see that the image and form components loaded together and were combined into one factor.

#### 5.4.2 Internal scale validity of the components of sense of place

In conjunction with the EFA, for a scale to be considered valid, it needs to achieve construct validity, which is measured through convergent and discriminant validity (Ahmad *et al.* 2016). Both convergent and discriminant validity should be achieved for the scale to be considered valid. The purpose of testing the construct validity is to ensure that the questionnaire measures the variables it intended to collect, ensures the quality of the gathered data is trustworthy and that the interpretation of the data is sound. At the same

time, for a construct to be trustworthy, it must achieve construct reliability. Validity and reliability are necessary conditions for a scale construct to be considered sound.

The construct validity was calculated using the factors created during the EFA. SPSS Amos was used with a plugin created by Professor Gaskin and his research team to test the questionnaire's construct validity by measuring the convergent and discriminant validity and the composite reliability (Gaskin, James, & Lim, 2019). Testing the validity includes computing the average variance extracted (AVE) for the convergent validity and the divergent (discriminant) validity and cross-referencing the scores to accepted values (Ahmad *et al.* 2016). AVE tests how the construct indicator items correlate, and the divergent validity tests how the construct indicator items differ. Table 3.4 shows the formulas used during the validity calculations. These formulas are referenced from Ahmad *et al.* (2016).

	Formula	Requirements	
Convergent Validity	Σ κ² / n	AVE value should be equal	
(AVE)		to or greater than 0.5.	
		The square root of AVE	
Discriminant Validity		should be higher than the	
(DV)	No formula	correlation between the	
		factors to be accepted.	
Construct Reliability	(Σκ)² / [(Σκ)² + (Σ1 - κ²)]	CR should be greater than	
(CR)	(2K) / [(2K) + (21 - K )]	0.6.	

Table 5.5: Formulas to calculate construct validity and reliability

From Table 5.5, we can see the formulas used and the requirements necessary to achieve the construct validity and reliability. Table 5.6 shows the results of the validity and reliability calculations. Table 5.6. Construct validity results

Facilities	Factors	Correlation (Between factors)	AVE (Square root value)	DV	CR
Strand Hotel	Activity, Attachment and Meaning	0.652	0.608 (0.780)	Accepted	0.944
	Image and Form		0.582 (0.763)	Accepted	0.873
Dome Sports Centre	Activity, Attachment and Meaning	0.646	0.657 (0.810)	Accepted	0.958
	Image and Form		0.577 (0.760)	Accepted	0.870
Platz am Meer	Activity and Meaning	0.803	0.681 (0.804)	Accepted	0.937
	Image and Form		0.647 (0.825)	Accepted	0.915

From Table 5.6, we can see that the construct validity is achieved for the sense of place factors created during the EFA process. Furthermore, the construct reliability was also successful. From this table, we can conclude that the factors produced from the EFA process are valid and reliable and can be used as the sense-of-place components for further statistical analysis in the following section of this chapter.

#### 5.5 Further analysis of the quantitative data

The inferential statistics used in this case study aimed to identify the statistically significant aspects of the relationship between the selected modernised facilities and the components of the participant's sense of place. However, due to the highly skewed and niche sample population, the results of the inferential statistics are not generalisable to the broader population of Swakopmund. Nevertheless, this section will utilise the Mann-Whitney U test to further investigate the relationship between the modernised facilities and the sense-of-place components.

The Mann-Whitney U test is appropriate for this analysis because to identify significant aspects of the relationship between the modernised facilities and the respondent's sense of place, we could compare the component scores on the respondent's building preference of how Swakopmund should develop. In this regard, the Mann-Whitney U analysis was conducted to test whether there was a statistically significant relationship between the modernised facilities and the sense-of-place components in the respondent's decision to conserve a particular facility within the context of a changing city.

The independent variable was the respondent's building preference, which was coded into a dichotomous variable – yes and no. Essentially, selecting a specific facility as the respondent's preference would reject the remaining two facilities – for example, selecting *yes* for the Strand Hotel would indicate a *no* for the Dome Sports Centre and the Platz am Meer. The dependent variable was the sense-of-place component created during the scale validation process. The sense-of-place component was split between the group who selected yes and no for each of the modernised facilities, and through their median ranks compared to one another to find a statistical difference.

The hypothesis used for this analysis was:

Ho: The median scores were equal between the respondents who selected yes and no, and therefore the difference between these groups was not significant.

H1: The median scores were not equal between the respondents who selected yes and no, and therefore that difference between these groups was significant.

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The logic behind this analysis was that achieving a significant result indicates that the difference in averaged median scores was big enough to be considered statistically significant. Moreover, a higher mean value of the median ranks would indicate a more positive relationship between the facility and the respondent's sense of place. These results suggest that having a more positive relationship with the facility may be significant in selecting a building preference. The results of this analysis are summarised in Table 5.7 that combines the results for the Strand Hotel, the Dome Sports Centre and the Platz am Meer (see Appendix F and G for the Strand Hotel, Appendix H and I for the Dome Sports Centre and Appendix J and K for the Platz am Meer for the full Mann-Whitney U Test results).

	Component	Mean Rank	Mean	Asymp. Sig. (2-tailed)
Strand Hotel	Activity_Attach-	No = 53.73	2.88	.068
	ment_Meaning_SH	Yes = 64.71		
	Image_Form_SH	No = 52.59	3.88	.21
		Yes = 65.74		
Dome Sports Centre	Activity_Attach-	No = 56.73	2.97	.21
	ment_Meaning_Dome	Yes = 77.16		
	Image_Form_Dome	No = 57.91	3.37	.172
		Yes = 69.63		
Platz am Meer	Activity Meaning Platz	No = 50.63	3.14	<.001
	//////////////////////////////////////	Yes = 76.80		
	Image Form Platz	No = 49.96	3.05	<.001
		Yes = 78.10		

From Table 5.7, we can see the results of the Mann-Whitney U Test. Looking at the Strand Hotel, we can see that the mean value was 3.88 for the image and form composite

component, indicating a positive relationship between the modernised facility and the sense-of-place component. This result was also statistically significant, which suggests that there is a significant relationship between the Strand Hotel's image and form and the decision to preserve the Strand Hotel as Swakopmund develops.

For the Dome Sports Centre, its activity, attachment and meaning composite component was significant, and had a mean value of 2.97. This result suggests that the activity of the Dome Sports Centre was significant in preserving it as Swakopmund develops. The mean value of 2.97 indicates that the respondents had a neutral relationship with the Dome Sports Centre but if they were to preserve it then its activity level would be significant in that decision.

Lastly, the Platz am Meer had a significant result for its activity, attachment and meaning, as well as its image and form composite components. The Platz am Meer's mean score averaged 3.14 and 3.05 respectively, indicating a neutral relationship between the senseof-place components and the facility. These results suggest that both composite components were significant in the respondents' decision to preserve the Platz am Meer mall as Swakopmund develops.

When considering the above results, we can see that the data suggest that there is a statistically significant relationship between the modernised facilities and the sense-of-place components in the decision to preserve the modernised facilities as Swakopmund grows and develops.

#### 5.6 Conclusion

This chapter presented the data analysis of the qualitative and quantitative data obtained from the survey. When considering the aim and objectives of this research project, we can interpret the data analysis as successful in surveying the respondent's attitudes and perceptions towards the modernised facilities under investigation. The purpose of this chapter was to present the data to understand better the relationship between the modernised facilities and the respondent's sense of place. In doing so, the interviews suggested that the Strand Hotel is appreciated for its visual character and its appeal to the respondents. The Dome Sport Centre and Platz am Meer were appreciated, creating the opportunity to partake in activities not offered anywhere else in Swakopmund. These themes were present in the descriptive statistics that were broken down into the component's individual question indicators. All three facilities positively influenced the respondent's sense of place. The Strand Hotel positively influenced the aesthetics, activity and place attachment components. The Dome Sports Centre positively influenced the form and activity components, and the Platz am Meer positively influenced the aesthetics and activity components.

Lastly, the inferential statistics showed which of the sense-of-place components were statistically significant in selecting a facility as the respondent's preference of how Swakopmund should develop and grow. The Mann-Whitney U Test indicated that the aesthetics and form of the Strand Hotel, the activity and meaning, and the image and form of the Platz am Meer, and lastly, the activity, attachment and meaning of the Dome Sports Centre should be preserved as Swakopmund develops.

Based on our understanding of the data, the following chapter will interpret and apply the data to the dissertation's central research question to support the argument that sense of place should be considered when planning for urban development that inevitably results in landscape change.

# Chapter 6: Interpretation of findings and results

## 6.1 Introduction

The central research question for this dissertation was how do modernised facilities influence the respondent's established sense of place within Swakopmund's context? In other words, what is the relationship between the modernised facilities and the sense-of-place components of the respondents? In answering this question, this research project aimed to present a case study that would build a better understanding of sense of place experienced by the respondents within the context of Swakopmund.

Three modernised facilities within the urban development of Swakopmund were selected as study sites where different components of sense of place were evaluated. The Strand Hotel is located in the historic district from the German colonial period, the Dome Sport Centre was built in an area dominated by the apartheid developmental planning and the Platz am Meer shopping mall in the post-independent era and modernised suburb (refer to Figure 4.1). In this chapter, the researcher will combine the qualitative and quantitative data to present the findings of how the sense of place of the sampled population responded to the selected modernised facilities under investigation.

## 6.2 Findings

The global theme present in the data is that each of the modernised facilities positively influenced the sense-of-place components with some neutral and even fewer negative influences. These results highlight the complexity in the sense-of-place studies in that sense of place does not have a clearly defined boundary nor a linear relationship with landscape change. In other words, the influence of the modernised facility on the sense-of-place component is determined by how the individual perceives and experiences the facility and what value they receive from interacting with it. Each of the modernised facilities is discussed below.

## 6.2.1 Strand Hotel

When looking at the descriptive statistics, the Strand Hotel had a positive relationship with the aesthetic component through its visual appeal and its contribution to the image of Swakopmund. This meant that the respondents preferred the image of Swakopmund that included the Strand Hotel, even though when seeing the Strand Hotel, they experienced a neutral connection to Swakopmund. During the interviews, one respondent said the following about the aesthetics of the Strand Hotel:

"The Strand Hotel, for me, is beautiful. The interior of it is beautiful; the exterior is beautiful. It really is a ... it stands out in quite a nice place. I would want to go there; I feel drawn and attracted to it" (Respondent 11, 2021).

Furthermore, the Strand Hotel blended well with its surrounding area and perceived continuity with the surrounding urban landscape through its visual appearance and location. Due to the Strand Hotel being located within the historical district adjacent to the Mole beach, the façade of the building was likely designed to look like a historical building with Germanic architectural accents. This can be suggested through the interview with Respondent 12 (2021), who said, "It [Strand Hotel] was built in the historic area of Swakopmund and it seems to be built in a style that fits into the existing character of Swakopmund". Considering where the Strand Hotel is located, one can understand why the fit and flow indicators scored high, and navigation and travel routes scored neutral when considering the form component. A possible reason for this is that the residents most likely only travel to the Strand Hotel when they want to interact with the Strand Hotel or spend time on the Mole beach. Even though there is a relationship between the image and form components and the Strand Hotel, the statistical analysis suggested that image and form were statistically significant when preferring the Strand Hotel's appearance as Swakopmund develops.

The activity component suggested a low level of interaction between the residents and the Strand Hotel, even though they prefer how active the area surrounding the hotel has become and can easily recall happy memories from previous activities. This result may indicate that interaction with the Strand Hotel is not necessarily routine, possibly due to having the option to interact with several other facilities that offer the same services as the Strand Hotel. This theme was presented during the interview with Respondent 1, who said:

"If you had an area that is like a big competition to Strand, that is, let's say Tiger Reef [a popular beach bar] offered what the Strand offers, then you'd have people like, you'd have an equal division, and probably also according to what is convenient for this person" (Respondent 1, 2021).

The Strand Hotel is a popular attraction in Swakopmund for the locals and tourists, but it does not seem to be the case that the sampled population regularly interact with the Strand Hotel. However, the activity indicator questions of interaction, participation and memory loaded highly with place attachment and meaning. A reasonable explanation for this theme is that interaction with the Strand Hotel may not be routine but is considered valuable and meaningful when it occurs, leading to positive connections to the Strand Hotel. Figure 6.1 shows the main reasons for visiting the Strand Hotel.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Accommodation	2	1.7	1.7	1.7
	Beach area	3	2.5	2.5	4.2
	Conferences	1	.8	.8	5.1
	Location	2	1.7	1.7	6.8
	Not applicable	10	8.5	8.5	15.3
	Relaxation	14	11.9	11.9	27.1
	Restaurant	63	53.4	53.4	80.5
	Restaurant & relaxation	8	6.8	6.8	87.3
	Restaurant & social	5	4.2	4.2	91.5
	View & ambience	10	8.5	8.5	100.0
	Total	118	100.0	100.0	

#### Visitation\_StrandHotel

Figure 6.1: Reasons for visiting the Strand Hotel

Figure 6.1 indicates the highest frequency of responses is visiting the restaurant at the Strand Hotel (53.4%). The second highest response is the relaxation experienced from interacting with the Strand Hotel (11.9%), while 8.5% of the respondents indicated not applicable, implying that they do not interact with the Strand Hotel.

A similar theme is present in the place attachment component through a neutral place attachment to the Strand Hotel compared to similar facilities. Most interestingly, though, the Strand Hotel negatively influenced the residents' place attachment to Swakopmund while being positively able to include details of the Strand Hotel when describing Swakopmund. Based on the researcher's observations this result could be understood as the sampled population having some resistance toward the modernisation of the Strand Hotel which can be interpreted as reducing the respondent's place attachment toward Swakopmund. When explaining the place meaning, the Strand Hotel had a neutral influence on increasing what Swakopmund meant to the residents and a negative influence on the Strand Hotel's importance. At the same time, happy memories of the Strand Hotel could easily be recalled. Counterintuitively, however, the residents indicated that life in Swakopmund would feel empty if the Strand Hotel was demolished. When considering place attachment and place meaning, this response could best be described as a mixed result but can be interpreted as positively influencing place meaning. Several interviewees shared a similar theme during the interviews, such as Respondent 13, who said:

"My relationship wouldn't have changed [with or without the Strand Hotel]. I would still feel about Swakopmund the way I do. The fact that the developments are there, adds to my comfort and enjoyment of living here, but if it was not there, I would still enjoy living in Swakopmund" (Responder 13, 2021).

This may indicate that, through meaningful interaction with the facility and surrounding beach area, the memories attached to this interaction may justify the place attachment and meaning experienced by the sampled population.

However, when considering the statistical analysis, the combined component of image and form and the specific indicator questions that loaded together were statistically significant in selecting the Strand Hotel as the preferred choice of how Swakopmund should develop. The statistical analysis results suggest that the visual appearance of the Strand Hotel is important for the development of Swakopmund. Considering the Strand Hotel's location, it argues for the continuity of the historic buildings that give Swakopmund its unique visual appeal.

Combining the qualitative and quantitative results suggests that the Strand Hotel's appearance is significant in terms of how Swakopmund should develop. Still, place attachment and meaningful interaction are equally important to the sampled population through social interaction and memory formation when the sampled resident population

interacts with the Strand Hotel. These results reiterate the belief that sense of place is strongly influenced by social connection and interaction, through social bonding.

#### 6.2.2 Dome Sports Centre

The Dome Sports Centre had a positive influence on increasing the visual attractiveness of Swakopmund but had a neutral influence on the remainder variables for the aesthetics component, indicating that overall, the effect of the Dome Sports Centre was neutral for aesthetics. The Dome Sports Centre doesn't add to the historical visual character but rather diversifies the visual character of Swakopmund. In other words, the Dome Sports Centre adds variety to the visual character that is perceived and experienced in present-day Swakopmund. This can be seen through the interview with Respondent 10 who said:

"Traditionally, Swakopmund was perceived as a tourism destination, but Swakopmund is now moving away from only being a tourism destination to commercial and an administrative capital of the Erongo region" (Respondent 10, 2021).

From the form perspective, the Dome Sports Centre blends well with its surroundings and fits within the immediate skyline, due to its being in an area known for sports. The Dome Sports Centre also positively influenced the residents' ability to navigate and orientate themselves in Swakopmund while having a neutral influence on the routes travelled by the residents.

Due to the Dome Sports Centre being centrally located, its activity levels have increased, noting a positive influence on activity preference. However, there was a neutral influence on the level of interaction and participation, indicating that the residents who are not members of the gym nor frequent the amenities offered by the Dome Sports Centre have no real motivation to interact with the Dome regularly. This theme was also presented during the interviews. In addition, it was also noted during the interviews that some residents do interact and participate with the Dome Sports Centre when there are sporting events, conferences and functions that attract residents or, to put it another way, "have a reason to go to the Dome" (Interviewe 2, 2021). The main reasons for interacting with the Dome are presented in Figure 6.2.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Business	2	1.7	1.7	1.7
	Entertainment	8	6.8	6.8	8.5
	Exhibitions	16	13.6	13.6	22.0
	Gym	23	19.5	19.5	41.5
	Not applicable	23	19.5	19.5	61.0
	Sport facilities	46	39.0	39.0	100.0
	Total	118	100.0	100.0	

## Visitation\_Dome

Figure 6.2: Reasons for visiting the Dome Sports Centre

From Figure 6.2, we can see that the main reason for visiting the Dome is to use its sports facilities (39%) and then its gym facilities (19.5%). The third most important reason is to attend exhibitions (events) (13.6%). Of the respondents, 19.5% indicated not applicable, implying they do not interact with the Dome Sports Centre.

The Dome Sports Centre had a neutral influence on the connection between the place attachment felt by the individual and the facility itself but negatively influenced the place attachment between the residents and Swakopmund. Essentially, this result can be explained by the respondents having a neutral attachment to the Dome Sports Centre, meaning they would not be affected if the Dome Sports Centre had to disappear but did think that having the Dome Sports Centre in town diminished their place attachment to Swakopmund. However, just like the Strand Hotel, the residents can include details of the Dome Sports Centre when describing Swakopmund. This may indicate that the residents are not necessarily attached to the Dome Sports Centre but can appreciate what the Dome Sports Centre can contribute to Swakopmund. A similar theme is seen in the place meaning component. The Dome Sports Centre has a neutral influence on the place meaning experienced by the residents even though they could easily recall happy memories. However, during the statistical analysis, the activity, attachment and meaning components were statistically significant in selecting the Dome Sports Centre for the preference of how Swakopmund should develop. These results may indicate that the visual appearance of the Dome Sports Centre may not fit in with the built landscape valued by the respondents. Instead, the Dome's value lies in the activities that the Dome offers, which lead to place attachment and place meaning. Respondent 10 (2021) noted that the Dome offers "multiple functions and multiple activities that one can venture into". In other words, the data suggests that more facilities should offer a variety of activities in which the residents can partake, or at the very least offer the space needed to host events, as suggested by Respondent 1 (2021), who said, "It's an ideal place like people want to come to the coast and host all sorts of activities so it gives an opportunity for that".

Essentially, these results highlight that the Dome Sports Centre increases the attractiveness of Swakopmund to foreign business through its unique visual appeal but, more importantly, through the activities offered at the Dome Sports Centre and the space to host national and international events. In a small town like Swakopmund, having a place like the Dome Sports Centre is a massive advantage because it allows residents to attend events that may not have taken place in Swakopmund otherwise and brings in business to Swakopmund's broader economy.

#### 6.2.3 Platz am Meer

The Platz am Meer mall is in a modern suburb of Swakopmund and therefore has a modern appearance that positively influences the aesthetic component of sense of place. The mall contributes to the image of Swakopmund, increases the visual attractiveness, and has a visual appeal. It does, however, have a neutral influence on the connection between the residents and Swakopmund. This suggests that, although the mall may be visually appealing, it does not increase the connection felt between the respondents and Swakopmund. Due to the modern appearance of the mall, it blends well with its surrounding area and exhibits a continuity in spatial form. Respondent 2 added that the "Platz am Meer is in a very new area, more modern and the houses around it are modern so it all blends into each other. So, its positioning fits" (Respondent 2, 2021). It does, however, have a neutral influence on navigation while exhibiting a positive influence on travel routes, due to the necessity of interacting with the mall. During the interviews, it was noted that there is an increase in traffic around the mall, potentially negatively affecting road quality and creating congestion during peak seasons. The data suggest that the sampled population routinely interacts with the mall even though participation had a negative influence, indicating that they would prefer to do their shopping at a different facility or individual facilities. Nevertheless, the mall had an overall positive impact on the activity component. The main reason for interacting with the mall is undoubtedly shopping (see Figure 6.3).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable	8	6.8	6.8	6.8
	Restaurant	4	3.4	3.4	10.2
	Shopping	97	82.2	82.2	92.4
	Shopping & restaurant	9	7.6	7.6	100.0
	Total	118	100.0	100.0	

## Visitation Platz

Figure 6.3: Reasons for visiting the Platz am Meer mall

From Figure 6.3, we can see that 82.2% of the respondents indicated that shopping is their main reason for visiting the mall. Interacting with the mall's restaurants accounted for 3.4%, and not applicable accounted for 6.8%. Part of the reason for such a high percentage of shopping at the mall could be that some specialised shops are located in the mall and nowhere else in Swakopmund, shops such as the Dischem, Checkers, Edgars and Cape Union Mart. Another reason could be that shopping at the mall is closer and more convenient for the residents who live in the areas surrounding the mall. The Platz am Meer mall also houses several trendy restaurants that residents frequent, adding to the attraction of interacting with the mall.

Along with, negatively influencing the participation variable, the Platz am Meer had an overall neutral influence on the respondents' place attachment. Like the Strand Hotel and the Dome Sports Centre, details about the Platz am Meer can easily be included when describing Swakopmund, increasing its attractiveness to tourists. However, the Platz am Meer had a negative attachment to Swakopmund which may indicate that the mall removes from the place attachment experienced between the respondents and Swakopmund. When considering the place attachment toward the mall itself, the respondents noted a neutral influence through the love and connection indicators suggesting that the respondents are no more attached to the mall when compared to similar facilities. From the place meaning perspective, the mall negatively influenced what Swakopmund meant to the residents. It could be for these reasons that, if the mall were to be demolished, it would not be considered a significant loss to the residents as the meaning ascribed to the mall is neutral. This could be because the mall was no more important than other available shopping facilities. As suggested from the interview with Respondent 10, who said, "The mall is just a supplement, or just a conglomeration of commercial activities, but if it disappears, those services are readily available in town. You can find some of the shops in the suburbs" (Respondent 10, 2021).

To make sense of these results, we can confidently say that the Platz am Meer mall, just like the Dome Sports Centre, contributes to the diversity of the character and image of Swakopmund through its visual appeal and continuity in form. Interestingly, the image and form component made a statistically significant contribution to selecting the Platz am Meer mall as the preferred look during the development of Swakopmund. Along with the image and form component, the activity, attachment and meaning component was also statistically significant in selecting the Platz am Meer to be preserved as Swakopmund grows. This result may indicate that the activities offered at the mall are significant when considering how the town of Swakopmund should develop.

When combining these results, the data suggests that the Platz am Meer provides a functionality not found anywhere else in Swakopmund through its specialised shops, convenience for the residents who live in the surrounding area and a point of social interaction and bonding. However, the significant results from the statistical analysis in the image and form component and the activity, attachment and meaning component pose an interesting question: what should the development of Swakopmund look like? The interview data suggest that Swakopmund should preserve the historic district and modernise the rest of the town through facilities with a high function value that interest the residents and blend into their surrounding landscape, establishing continuity across the urban landscape.

When considering the above results, one can begin to see that the components of sense of place do not respond uniformly to landscape change. One can also start to visualise the interconnectedness of sense of place, and specifically, the components that constitute sense of place selected for this investigation. For these reasons, a diagram of sense of place applicable to this research project was created in the following section.

#### 6.3 Sense-of-place component diagram

Sense of place is a highly complex concept, due to its subjective nature. The nature of one's sense of place is constructed through the interaction between the individual and their physical space, along with their concept of place formed as part of the individual's daily routines. As a result, sense of place is as unique to each person as the physical features that make up the geographic location. Consequently, the components that build an individual's sense of place will be based on how and what the individual values when interacting with their physical space. For this research project, the *place* components of aesthetics, form and activity were added to the *person* components of place attachment and place meaning.

From the data analysis and interpretation, we can confidently say that the findings did support the linkages between the different components of sense of place, as illustrated in Figure 6.4. Figure 6.4 indicates the interconnectedness of sense of place in that each senseof-place component influences the other components but is also influenced by the other components. For example, the Strand Hotel significantly influenced the aesthetics and form components but had a less significant influence on the place attachment and meaning. However, when interviewing the respondents, it was suggested that not only is the image of the Strand Hotel influential but so was the place attachment and meaning. Respondent 14 (2021) said:

"Not only is the building appealing and there are lots of activities to do surrounding it but also the memory of that area. It's one of the oldest parts of Swakopmund. So, growing up, we spent a lot of time on the beach, irrespective of what building was there, but that specific location." This quote suggests that it is not only the facility itself but the area surrounding it, the activities that the individual partakes in, and the meaning ascribed to this interaction that forms part of the individual's sense of place. However, how much the components influence one another will depend purely on the individual, what they value in their person-place bond and how they perceive and respond to the landscape change.

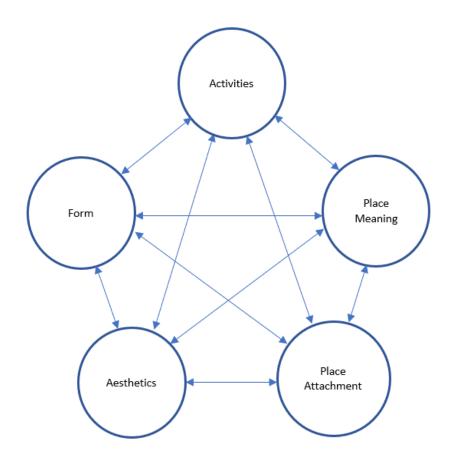


Figure 6.4: Sense of place diagram shows the linkages between the sense-of-place components. Source: author.

Sense of place is delineated through the perceptions and experiences of the individual as they interact with their place through their daily routines and transactions. Therefore, combining the individual's place-bond relationship may be valuable when investigating physical landscape changes in the form of modernising developments within the built environment. The individual's sense of place may likely be affected by these changes. However, each individual may have a different response to the influence of modernising developments on their established sense of place.

## 6.4 Limitation of the study

The overwhelming limitation of the study was the low response rate in which *n*=118 out of the desired population of *n*=381 returned their completed questionnaires. The second major limitation was the skewed respondents. Most respondents were white females aged between 36 and 50 who lived in Swakopmund between 11 and 20 years. These results indicate that the sampled population was relatively young and not representative of Swakopmund's population, limiting this study's generalisability. The descriptive data suggested that all three facilities positively influenced the sense of place of the sampled population. However, the facilities did not have a uniform relationship with the sense-of-place components. Instead, each indicator question that made up the sense-of-place components fluctuated for each facility.

## 6.5 Conclusion

This chapter interpreted the qualitative and quantitative data collected during the study to better understand the sense of place experienced by the residents who interacted with the modernised facilities. The overarching theme is that the modernised facilities positively influenced the individual's sense of place. The data suggest that development in Swakopmund should preserve the historic district and modernise the rest of Swakopmund with facilities that offer a variety of activities of interest for the residents to partake in. The interpretation of the data also highlights the complexity of sense of place studies because there is no definable boundary to sense of place. However, based on the data, several recommendations can be made to the municipality about the development of Swakopmund over the next two decades. The following chapter presents these recommendations along with opportunities for future research.

## Chapter 7: Findings and recommendations

## 7.1 Introduction

This case study has provided novel insights into sense of place within the context of Swakopmund as research of this nature has not yet occurred in this context. More specifically, this case study shows the relationships between modernisation and the respondent's sense of place within the context of Swakopmund. This chapter aims to provide a reasonable conclusion to this research project. The first section will summarise the study and its central argument. After that, the objectives are discussed to show how they were achieved before unpacking the recommendations. The recommendations made from this study will touch on the sense of place theory, local developmental policy, and opportunities for further research.

## 7.2 Summary of the central argument

The central research question for this dissertation was how do the modernised facilities influence the respondent's established sense of place within Swakopmund? In other words, what is the relationship between the modernised facilities and the sense of place of the participants? In answering this question, this research project aimed to present a case study that would build a better understanding of sense of place within the context of Swakopmund. This dissertation achieved this aim through its four objectives: identify and map the selected modernised facilities appropriate to this research project; explore the relationship between the selected modernised facilities and the sense of place of individuals who interact with the facilities; to identify significant aspects of the relationship between the modernised facilities and the individual's sense of place, and use the key aspects of the relationship between the modernised facilities and the individual's sense of place and provide recommendations to Swakopmund's municipality on encouraging sense of place when planning future urban landscape change. The importance of this study lies in its contribution to the sense of place literature and its potential guidance offered for future development in Swakopmund.

The necessity of this research project stems from the continued population growth, the effect on the physical landscape, and the understanding of how the individual's sense of

place responds to these changes. As the population grows, so does the rate of landscape change through modernisation and urban development in which the natural environment turns into an urban landscape (Inglehart, 2001). The result of modernisation on the receiving environment can have dramatic changes on the landscape's character, which in turn, can have dramatic effects on the individual's well-being (Marques *et al.* 2020). One way to investigate this effect is by exploring the sense of place established by the individual through their daily routines and interaction with the landscape. In this regard, sense of place was an insight into the relationship between the developmental paradigm of modernisation and the concept of place, as argued by Jabbari & Hosseinalizadeh (2016). Therefore, the central argument of this research project is that the sense of place of the local context, that is receiving the landscape change, should be considered during the urban development process, and used as a guide to urban development. By understanding this relationship and the power of the place, decision-makers can make more appropriate decisions when planning for their local land use (Sebastien, 2020).

The local context applicable to this research project is that of Swakopmund. Swakopmund has historically been considered a small town with a distinctly German character experienced through the architecture and German-speaking population. Since colonial times, Swakopmund has grown and significantly developed to take on many new identities. Over the last decade, several new urban development projects have taken place, including the Strand Hotel, the Dome Sports Centre, and the Platz am Meer mall, changing the character of Swakopmund's built landscape. These three modernised facilities formed the basis of the investigation for this research project and, in the researcher's opinion, are representative of the urban landscape change in Swakopmund from 2010 to 2020. The motivation to choose these specific facilities was based on the researcher's experience interacting with Swakopmund and the researcher's notion of how Swakopmund's built landscape is developing.

At the same time, the local town council approved a developmental plan for Swakopmund, the Swakopmund Structural Plan 2020 – 2040 (Stubenrauch, 2020). The structural plan acts as a guideline for Swakopmund's urban development and expansion over the next two decades. This research project believes that by understanding how the three recently built modernised facilities influence the established sense of place of the residents who interact with them, one can better understand how the residents' sense of place may respond to future developments planned for Swakopmund, as future developments under the structural plan will undoubtedly change the character of Swakopmund. Furthermore, the researcher of this dissertation argues that future landscape change could be positively received if the local context is considered through understanding the established sense of place of the residential population.

This research project employed a mixed-method research design to survey the qualitative and quantitative attitudes and perceptions towards these facilities to investigate how the selected modernised facilities influence the sense of place of Swakopmund's residential population who interacted with the facilities. In-depth and semi-structured interviews with a sample size (*n*=15) were conducted and thematically analysed through ATLAS.ti. The sampled population (*n*=118) answered an anonymous online questionnaire, and the data obtained were analysed using descriptive and inferential statistics in SPSS. The qualitative interviews provided a rich source of themes that were used to contextualise the findings of the quantitative questionnaire. Due to the low response and skewed sampled population, the results of this analysis were not generalisable to the population of Swakopmund but did indicate some noteworthy trends.

#### 7.3 Objectives

This research project aimed to present a case study that investigated how modernising facilities in the context of Swakopmund influenced the sense of place of the individuals who interacted with these facilities. This research project consisted of four objectives discussed below.

7.3.1 Map the historic spatial development of Swakopmund and map the location of selected modernised facilities appropriate to this research project.

Objective one was achieved by identifying facilities representing modernisation in Swakopmund over the last decade. As several developments have occurred over this period, the selection of the Strand Hotel, the Dome Sports Centre and the Platz am Meer mall was based on the researcher's experience of Swakopmund and their notion of the development progress taking place. To aid this objective, the map in this study was created to represent the spatial development over time and specifically the location of the selected facilities (refer to Figure 4.1). The map showcased the time periods of German colonialism that planted Swakopmund's unique character and identity, the urban sprawl that occurred under the apartheid regime, and the urbanisation that has happened since Namibia's independence. Along with each time period came a unique visual character that has translated into the identity zones of Swakopmund. The beach resort zone includes the historic district, inter alia, the German colonial period but transcends the apartheid period to include the residential zone along the beach. Moving away from the beach-resort zone, the residential suburbs contain modern-looking residential properties that transverse the line between the apartheid and post-independence time periods. Lastly, the light industrial zone is situated between the modernised suburbs and acts as the main economic hub of Swakopmund.

7.3.2 Exploring the respondent's perceptions and attitudes towards the modernised facilities.

Objective two was achieved through the novel data collection instruments developed for this study. A mixed-method design was selected to achieve the aim of this study because of the subjective nature of sense of place. This means that quantitative data alone was not enough to understand the context in which the individual's sense of place responds to landscape change. Therefore, understanding an individual's sense of place is more likely to be achieved through in-depth interviews that allow the individual to explore and explain their sense of place using their own words. The interview guide developed for this study was based on the aim of this research project and the researcher's experience of Swakopmund and gave context to the data obtained from the questionnaire. At the same time, the questionnaire was developed for Swakopmund's context because an existing questionnaire based on the research question could not be found. The purpose of the questionnaire was to survey how the residents responded to the selected facilities, guided through the sense-of-place components under investigation and the researcher's experience of interacting with Swakopmund. The goal of the quantitative research was not to develop a new data-collection instrument but to establish if there was a statistically significant relationship between the sense-of-place components and modernisation in Swakopmund.

7.3.3 Identify significant aspects of the relationship between the respondent's sense of place and the selected modernised facilities.

The identified components of sense of place were analysed for the Strand hotel, Dome Sport Centre and the Platz am Meer waterfront shopping centre. The quantitative data obtained from the survey were analysed through descriptive statistics of frequency to provide some numerical context to the responses of the sampled population. The goal of the descriptive statistics was to establish the modal response to the statements about perceptions and attitudes. Understanding the statistically significant aspects of the relationship between respondents' sense-of-place components required using inferential statistics. The goal of the inferential statistics was to understand which of the sense-ofplace components were significant during the development of Swakopmund and, in doing so, discovered that several components could be combined. Together, the quantitative and qualitative data created a much clearer understanding of sense of place in Swakopmund and how it responds to modernisation.

When considering the Strand Hotel, combining the qualitative and quantitative results suggests that the Strand Hotel's appearance is significant in terms of how Swakopmund should develop. Still, place attachment and meaningful interaction are equally important to the sampled population through social interaction and memory formation when the sampled resident population interacts with the Strand Hotel. These results reiterate the belief that sense of place is strongly influenced by social connection and interaction through social bonding.

For the Dome Sports Centre, on the other hand, the data highlights that the Dome Sports Centre increases the attractiveness of Swakopmund to foreign business through its unique visual appeal but, more importantly, through the activities offered at the Dome Sports Centre and the space to host national and international events. In a small town like Swakopmund, having a place like the Dome Sports Centre is a massive advantage because it allows residents to attend events that may not have taken place in Swakopmund otherwise and bring in business to Swakopmund's broader economy. In other words, the data suggests that more facilities should offer a variety of activities in which the residents can partake, or at the very least offer the space needed to host events that attract the residential population.

Interestingly, the Platz am Meer mall, just like the Dome Sports Centre, contributes to the diversity of the character and image of Swakopmund through its visual appeal and continuity in form. Additionally, the data suggests that the Platz am Meer provides functionality not found anywhere else in Swakopmund through its specialised shops, convenience for the residents who live in the surrounding area and a point of social interaction and bonding. Both of its components, that is image and form, and activity, attachment and meaning, were significant in selecting the Platz am Meer mall for how Swakopmund should develop. When combining these results, an interesting question is posed: what should the development of Swakopmund look like? The interview data suggest that Swakopmund should preserve the historic district and modernise the rest of the town through facilities with a high function value that interest the residents and blend into their surrounding landscape.

7.3.4 Recommendations made to the municipality to promote sense of place during Swakopmund's urban development.

Sense of place was investigated in the context of Swakopmund, and suggestions were made based on the trends available in the data. However, due to the limitations of this research project within the context of the Covid-19 restrictions, the recommendations to Swakopmund's municipality are based on the findings of the data analysis of this study and should not be interpreted as representative of the entire population of Swakopmund.

A clear theme found during this investigation is that urban development cannot be stopped but rather should be directed. The interview data suggest that Swakopmund should preserve the historic district and modernise the rest of the town through facilities with a high function value that interest the residents and blend into their surrounding landscape. Historic landmarks with a German architectural style contribute to the identity and sense of place of Swakopmund. Over 50% of the sampled population indicated that the historical buildings should be conserved, which suggests that there is a strong connection to the German architecture in Swakopmund. Moreover, when asked about the development of Swakopmund, 52.5% of the respondents identified that they would like to see more development that looks like the Strand Hotel (see Figure 4.5 and 5.9). The Strand hotel is a modern building that blends into the historic German building style. Figures 5.3 and 5.9 suggest that continuity in the character of the Germanic urban landscape and historical buildings should be preserved.

During the interviews it was suggested by Respondent 10 who said:

"Let's conserve what is worth conserving and let's keep on developing based on the current need of what people prefer today. So, at the end of the day, everyone is scared that, because you must be able to create choices. We shouldn't just say, let's conserve, or let's build this type of building without creating choices or creating different images. Some people prefer this environment, others prefer a different environment as long as we integrate and promote integrated development. So, it covers the majority population" (Respondent 10, 2021).

From the findings of this investigation, it seems to be the case that future developments such as those under the Swakopmund Structural Plan 2020 – 2040 should consider the visual appearance of buildings, the level of continuity that they share with the surrounding landscape and the activities that they offer, or rather reasons to interact with the developments. However, more research is necessary to confirm if this is indeed the best approach to urban development in the context of Swakopmund. One way to ask this question would be, is there a greater desire among the resident population to maintain the German identity of Swakopmund or develop a new identity through urban design? When considering this section, the following section presents recommendations based on this research project.

# 7.4 Recommendations based on findings of the research for theory and further research.

The recommendations that stem from this research project can essentially be grouped into theory and further research. The theory section looks at the contribution that this research project makes to the discourse of sense of place and urban design by adding the context of Swakopmund. Thereafter, the further research section looks at the opportunities for research endeavours to build on the present study, both within the context of Swakopmund and beyond its context.

## 7.4.1 Theory

This dissertation approached sense of place from the viewpoint of the person-place bond. The goal here was to ask how the person-place bond responds to landscape change. This dissertation also showed which components of sense of place were important for the future development of Swakopmund. The historic buildings reflect the unique character of the town and as they are conserved, the risk of placelessness is mitigated (Kortelainen & Albrecht, 2021; Sanga & Mbisso 2020; Arefi, 1999). It is, however, not only aesthetics and form that determines sense of place but also activities, place meaning, and place attachment, as these components are interlinked (refer to Figure 6.4). Operationalising the individual's sense of place in urban design remains a challenge. However, in the context of this research project, some themes are apparent. Aesthetically appealing urban design with developments that express continuity in the landscape form seems to influence the sense of place positively. Furthermore, urban developments that afford opportunities for the individual to interact and participate in a preferred activity of choice, both individually and in a social setting, positively influence sense of place. Effectively, urban design should create opportunities for individuals to form attachments by establishing meaningful connections through positive visual appeal and continuity in the facilities' landscape and activity. These are the same design principles as were suggested by Scott *et al.* (2002) for creating a sense of place within the design context of Victoria, Australia. Scott et al. (2002) suggest that urban design should create spaces for events and activities to occur that afford a sensory, formal, and symbolic interaction that is culturally relevant, a sequence of agreeable experiences and places with clear conceptual frameworks. Furthermore, Scott

*et al.* (2002) highlight the natural and cultural character of the landscape responds to the community's values, needs, and, lastly, provide opportunities for self-actualisation. When considering the Strand Hotel, the Dome Sports Centre, and the Platz am Meer mall, we can see that these facilities achieve the above design principles in their own way and are aligned with the suggestions made by *Scott et al.* (2002).

#### 7.4.2 Further research

Two clear avenues for further research have emerged from this research project: combining several indicator questions into sense-of-place components. It may be worthwhile to expand on the sense-of-place components by selecting related components such as place dependence and sense of community and applying them to Swakopmund.

Secondly, investigating and clarifying what the desired identity of Swakopmund should be as it develops. This can be achieved by expanding from the three selected facilities to include several other large-scale developments or perhaps one could investigate which buildings in Swakopmund hold the most value for the residents. Additionally, due to the limitations placed on the research within the context of the Covid-19 restrictions, it would be interesting to repeat the research with a more representative sample of the population of Swakopmund and compare the results from this study.

Although it is beyond the scope of this dissertation, an additional point for further study would be to look at the developmental policies in Namibia, the existing legislature, procedures, and best practice, along with levels of decision making to investigate where, and how sense of place could fit into the urban planning industry within the Namibian context.

## 7.5 Conclusion

When reflecting on this research project, it is undeniably present that the global population will continue to climb, and most of this population will be gained in urban areas around the world. The result thereof will be an increase in the demand for living space. The effect of this will be pressure on the natural environment to transform into constructed urban landscapes. This universal phenomenon can be experienced through the developmental paradigm of modernisation that has dominated the urban design and planning industries

over the last several decades. Modernisation is not inherently a bad developmental plan. However, uncontrolled urban development that damages the prevailing character could negatively influence the wellbeing of the individuals who are affected by the landscape change. Although sense of place is not a solution to landscape change, it can provide some understanding of how individuals may respond to urbanisation. By incorporating sense of place into the urban design process, development can occur that encourages and positively influences the sense of place of the individuals affected by the development. As urban areas continue to grow, the question of how residents respond to their urban landscape will become more critical for human wellbeing, and sense of place offers a potential answer to this question.

This dissertation is an attempt to ask and answer the question of how modernisation influences the sense of place of the residents in Swakopmund. More specifically, ask the question of how modernised facilities influence the sense of place of the individuals who interact with the facilities. Swakopmund is considered a small town that is undergoing significant urban development and landscape change and provided a unique opportunity to conduct this case study. To answer the research question, a mixed-method research design was employed based on the theoretical framework grounded in the human geography domain of interpretivism and post-positivism.

Novel insights were generated from this investigation for the context of Swakopmund through the data-capturing instruments developed for this research project. The data obtained from the investigation cast light on the relationship between the modernised facilities and the sense-of-place components selected for this project. The global theme present in the data is that the modernised facilities positively influenced the sense of place of the respondents. However, not all sense-of-place components responded uniformly to the modernised facilities, suggesting that, due to the subjective nature of sense of place, investigations into sense of place should be case-study-specific to understand the nuances of sense of place better. Furthermore, several recommendations were made based on the findings of this investigation that can contribute to sense-of-place studies and the future development of Swakopmund.

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# Appendices

Appendix A: Interview Guide

## Interview guide: sense of place and its response to modern buildings

This study investigates your sense of place and how it is influenced by the modernised facilities selected for this study. Sense of place can be understood as your emotional connection to the place around you that forms through your routines and daily interactions with the surrounding physical space. This interview will explore your attitudes and experiences of the Strand Hotel, the Dome Sports Centre and the Platz am Meer mall.

- 1 Which of the selected facilities do you think fits best into the existing image and character of Swakopmund? Elaborate why you chose this facility.
- 2 Do you enjoy looking at these facilities?
- 3 Do these facilities disrupt the "flow" of Swakopmund's layout/skyline, or do you think this facility blends well with the buildings surrounding it?
- 4 Have you changed your travel routes to include these facilities? Would you say this has been a positive or negative for you?
- 5 Would you say the selected facilities are busy and active?
- 6 What is it about the selected facilities that attracts you to participate in activities and interact and with this facility?
- 7 Which of these facilities do you feel most attached to?
- 8 Do you feel more attached to Swakopmund because of these facilities?
- 9 Do these facilities increase what Swakopmund means to you? If so, how?
- 10 Which of these facilities are most important to you? And if so, why is it important to you?
- 11 Do you think these facility influences your sense of place in a positive or negative way?
- 12 Would you prefer Swakopmund to keep its existing image and character or develop a new identity through modernisation.

## Appendix B: Questionnaire

#### Sense of Place questionnaire

This study investigates your sense of place and how it is influenced by the modernised developments selected for this study. Sense of place can be understood as your emotional connection to the place around you that forms through your routines and daily interactions with the surrounding physical space. The first section deals with demographic information and the second section examines your attitudes and perceptions.

## Section 1: Demographic information

Q1. What is your gender? Mark with "X".									
Male			Fema	Female			Undisclosed		
Q2. Please indicate your age group below. Mark with "X".									
18-35			36 – 50	50		51 – 65	66 <		
Q3. How best would you describe yourself? Mark with "X".									
Coloured			Black			White		Other	
Q4. How lo	Q4. How long have you been living in Swakopmund? Mark with "X".								
0-10		1	L1 – 20			21 – 30		31 years	
years			years			years		and Ionger	
Q5. Please indicate your residential area in the space below.									
Q6. Which building/landmark or physical feature would you like to keep the same as the town Swakopmund grows and changes?									
Q7 Please indicate your main reason for visiting the facilities listed below?									
Facility	1	Reason							
Strand Ho	Strand Hotel								

Platz am Meer mall	
The Dome Sports Centre	

#### Section 2: Likert scale of perceived change

Q8. Please indicate the number in the space provided how you respond to the following statements about the **STRAND HOTEL.** 

(1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree)

8.1 I prefer the way Swakopmund looked like before the Strand Hotel was built.		
8.2 The Strand Hotel makes Swakopmund look better.		
8.3 I enjoy looking at the Strand Hotel.		
8.4 I feel more connected to Swakopmund when I see the Strand Hotel.		
8.5 I think the Strand Hotel disrupts the "flow" of Swakopmund's landscape.		
8.6 I think the Strand Hotel fits well with the area surrounding it.		
8.7 The Strand Hotel makes it easier to find my way around Swakopmund.		
8.8 When I travel around Swakopmund as part of my routine, I regularly include the Strand Hotel in my travel routes.		
8.9 I prefer how active the area surrounding the Strand Hotel has become since the Strand Hotel was built.		
8.10 I regularly interact with the Strand Hotel as part of my routine.		
8.11 I can easily recall a variety of enjoyable activities that I partake in at the Strand Hotel and the area surrounding it.		
8.12 I prefer to partake in my activity of choice at the Strand Hotel instead of other similar places.		
8.13 I feel more attached to Swakopmund because the Strand Hotel was built.		
8.14 When describing Swakopmund, I can easily include details of the Strand Hotel.		

8.15 I really love the Strand Hotel.	
8.16 I have a stronger connection with the Strand Hotel when compared to other similar places.	
8.17 Swakopmund means more to me because the Strand Hotel was built.	
8.18 Life in Swakopmund would feel empty if the Strand Hotel no longer exists.	
8.19 The Strand Hotel is more important to me than other similar places.	
8.20 When thinking about the Strand Hotel, I can easily recall a happy memory.	

## Optional comment:

Q9. Please indicate the number in the space provided how you respond to the following statements about the **DOME SPORTS CENTRE.** 

(1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree)

9.1 I prefer the way Swakopmund looked like before the Dome Sports Centre was built.	
9.2 The Dome Sports Centre makes Swakopmund look better.	
9.3 I enjoy looking at the Dome Sports Centre.	
9.4 I feel more connected to Swakopmund when I see the Dome Sports Centre.	
9.5 I think the Dome Sports Centre disrupts the "flow" of Swakopmund's landscape.	
9.6 I think the Dome Sports Centre fits well with the area surrounding it.	
9.7 The Dome Sports Centre makes it easier to find my way around Swakopmund.	
9.8 When I travel around Swakopmund as part of my routine, I regularly include the Dome Sports Centre in my travel routes.	

9.9 I prefer how active the area surrounding the Dome Sports Centre has become since the Dome Sports Centre was built.	
9.10 I regularly interact with the Dome Sports Centre as part of my routine.	
9.11 I can easily recall a variety of enjoyable activities that I partake in at the Dome Sports Centre and the area surrounding it.	
9.12 I prefer to partake in my activity of choice at the Dome Sports Centre instead of other similar places.	
9.13 I feel more attached to Swakopmund because the Dome Sports Centre was built.	
9.14 When describing Swakopmund, I can easily include details of the Dome Sports Centre.	
9.15 I really love the Dome Sports Centre.	
9.16 I have a stronger connection with the Dome Sports Centre when compared to other similar places.	
9.17 Swakopmund means more to me because the Dome Sports Centre was built.	
9.18 Life in Swakopmund would feel empty if the Dome Sports Centre no longer exists.	
9.19 The Dome Sports Centre is more important to me than other similar places.	

#### Optional comment:\_\_\_\_\_

Q10. Please indicate the number in the space provided how you respond to the following statements about the **PLATZ AM MEER MALL**.

(1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree)

10.1 I prefer the way Swakopmund looked like before the Platz am Meer mall was built.

10.2 The Platz am Meer mall makes Swakopmund look better.	
10.3 I enjoy looking at the Platz am Meer mall.	
10.4 I feel more connected to Swakopmund when I see the Platz am Meer mall.	
10.5 I think the Platz am Meer mall disrupts the "flow" of Swakopmund's landscape.	
10.6 I think the Platz am Meer mall fits well with the area surrounding it.	
10.7 The Platz am Meer mall makes it easier to find my way around Swakopmund.	
10.8 When I travel around Swakopmund as part of my routine, I regularly include the Platz am Meer mall in my travel routes.	
10.9 I prefer how active the area surrounding the Platz am Meer mall has become since the Platz am Meer mall was built.	
10.10 I regularly interact with the Platz am Meer mall as part of my routine.	
10.11 I can easily recall a variety of enjoyable activities that I partake in at the Platz am Meer mall and the area surrounding it.	
10.12 I prefer to partake in my activity of choice at the Platz am Meer mall instead of other similar places.	
10.13 I feel more attached to Swakopmund because the Platz am Meer mall was built.	
10.14 When describing Swakopmund, I can easily include details of the Platz am Meer mall.	
10.15 I really love the Platz am Meer mall.	
10.16 I have a stronger connection with the Platz am Meer mall when compared to other similar places.	
10.17 Swakopmund means more to me because the Platz am Meer mall was built.	
10.18 Life in Swakopmund would feel empty if the Platz am Meer mall no longer exists.	
10.19 The Platz am Meer mall is more important to me than other similar places.	
10.20 When thinking about the Platz am Meer mall, I can easily recall a happy memory.	

Optional comment: \_\_\_\_\_

Q11. Would you prefer to see more buildings that look like the Strand Hotel or the Dome Sports Centre or the Platz am Meer mall as the town of Swakopmund continues to grow and become developed? Please mark with an "X".

Strand Hotel	
Dome Sports Centre	
Platz am Meer mall	

### Appendix C: Exploratory Factor Analysis for Strand Hotel

	Factor	
	1	2
Att_Connection	.904	
Act_Participation	.892	
M_Increase	.877	
Att_Attachment	.812	
Act_Interaction	.776	
M_Importance	.763	
Att_Details	.758	
M_Life	.672	
Att_Love	.611	
Act_Memory	.570	
M_Memory	.484	
I_Attractiveness		.848
F_Flow		.805
I_Appeal		.785
F_Fit		.734
I_Preference		.688

# Pattern Matrix for Strand Hotel<sup>a</sup>

Extraction Method: Principal Axis Factoring.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

#### KMO and Bartlett's Test for Strand Hotel

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.916
Bartlett's Test of Sphericity	Approx. Chi-Square	1385.656
	df	120
	Sig.	<.001

### Appendix D: Exploratory Factor Analysis for the Dome Sports Centre

	Factor	
	1	2
Att_Connection	.993	
M_Importance	.935	
Act_Participation	.910	
M_Increase	.887	
Att_Love	.855	
Att_Attachment	.840	
Act_Interaction	.822	
M_Memory	.735	
M_Life	.694	
Act_Memory	.615	
I_Connection	.486	
Att_Details	.483	
I_Preference		.856
I_Appeal		.835
I_Attractiveness		.774
F_Fit		.737
F_Flow		.631

#### Pattern Matrix for Dome Sports Centre<sup>a</sup>

Extraction Method: Principal Axis Factoring. Rotation Method: Promax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

#### KMO and Bartlett's Test for Dome Sports Centre

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.927
Bartlett's Test of Sphericity	Approx. Chi-Square	1714.161
	df	136
	Sig.	<.001

### Appendix E: Exploratory Factor Analysis for the Platz am Meer mall

### Pattern Matrix for Platz am Meer<sup>a</sup>

	Factor	
	1	2
Act_Interaction	1.048	
F_Travel	.957	
Act_Memory	.732	
Act_Participation	.724	
Act_Preference	.656	
M_Memory	.517	
M_Life	.429	
I_Attractiveness		.891
F_Flow		.812
F_Fit		.805
I_Appeal		.795
I_Connection		.693
I_Preference		.648

Extraction Method: Principal Axis Factoring. Rotation Method: Promax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 3 iterations.

#### KMO and Bartlett's Test for Platz am Meer

Kaiser-Meyer-Olkin Measur	.919	
Bartlett's Test of Sphericity	1357.004	
df		78
	<.001	

Appendix F: Mann-Whitney U Test for Strand Hotel (Factor 1)

## Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Activity_Attachment_Meanin g_SH	118	2.8814	1.04734	1.00	5.00
Strand_Dummy	118	.53	.501	0	1

Ranks							
	Strand_Dummy	N	Mean Rank	Sum of Ranks			
	no	56	53.73	3009.00			
g_SH	yes	62	64.71	4012.00			
	Total	118					

# Test Statistics<sup>a</sup>

	Activity_Attach ment_Meaning _SH
Mann-Whitney U	1413.000
Wilcoxon W	3009.000
Z	-1.823
Asymp. Sig. (2-tailed)	.068

a. Grouping Variable: Strand\_Dummy Appendix G: Mann-Whitney U Test for Strand Hotel (Factor 2)

## **Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum
Image_Form_SH_Median	118	3.8814	.83890	1.00	5.00
Strand_Dummy	118	.53	.501	0	1

Ranks						
	Strand_Dummy	Ν	Mean Rank	Sum of Ranks		
Image_Form_SH_Median	no	56	52.59	2945.00		
	yes	62	65.74	4076.00		
	Total	118				

### Test Statistics<sup>a</sup>

	Image_Form_ SH_Median
Mann-Whitney U	1349.000
Wilcoxon W	2945.000
Z	-2.314
Asymp. Sig. (2-tailed)	.021

a. Grouping Variable: Strand\_Dummy Appendix H: Mann-Whitney U Test for Dome Sports Centre (Factor 1)

	Ν	Mean	Std. Deviation	Minimum	Maximum		
Activity_Attachment_Meanin g_Dome	118	2.9661	1.05759	1.00	5.00		
Dome_Dummy	118	.14	.344	0	1		

### Descriptive Statistics

Ranks							
	Dome_Dummy	N	Mean Rank	Sum of Ranks			
Activity_Attachment_Meanin	no	102	56.73	5786.50			
g_Dome	yes	16	77.16	1234.50			
	Total	118					

## Test Statistics<sup>a</sup>

	Activity_Attach ment_Meaning _Dome
Mann-Whitney U	533.500
Wilcoxon W	5786.500
Z	-2.301
Asymp. Sig. (2-tailed)	.021

a. Grouping Variable: Dome\_Dummy Appendix I: Mann-Whitney U Test for Dome Sports Centre (Factor 2)

# **Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum
Image_Form_Dome	118	3.3729	.93184	1.00	5.00
Dome_Dummy	118	.14	.344	0	1

Ranks								
Dome_Dummy N Mean Rank Sum of Ranks								
Image_Form_Dome	no	102	57.91	5907.00				
	yes	16	69.63	1114.00				
	Total	118						

### Test Statistics<sup>a</sup>

	Image_Form_ Dome
Mann-Whitney U	654.000
Wilcoxon W	5907.000
Z	-1.367
Asymp. Sig. (2-tailed)	.172

a. Grouping Variable: Dome\_Dummy Appendix J: Mann-Whitney U Test for Platz am Meer (Factor 1)

Descriptive Statistics					
	N	Mean	Std. Deviation	Minimum	Maximum
Activity_Meaning_Platz	118	3.1356	1.10875	1.00	5.00
Platz_Dummy	118	.34	.475	0	1

### **Descriptive Statistics**

Ranks        Platz_Dummy      N      Mean Rank      Sum of Ranks        Activity_Meaning_Platz      no      78      50.63      3949.00        ves      40      76.80      3072.00				
	Platz_Dummy	N	Mean Rank	Sum of Ranks
Activity_Meaning_Platz	no	78	50.63	3949.00
	yes	40	76.80	3072.00
	Total	118		

# Test Statistics<sup>a</sup>

	Activity_Meanin g_Platz
Mann-Whitney U	868.000
Wilcoxon W	3949.000
Z	-4.086
Asymp. Sig. (2-tailed)	<.001

a. Grouping Variable: Platz\_Dummy Appendix K: Mann-Whitney U Test for Platz am Meer (Factor 2)

## **Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum
Image_Form_Platz	118	3.0508	1.11591	1.00	5.00
Platz_Dummy	118	.34	.475	0	1

	Ranks			
	Platz_Dummy	N	Mean Rank	Sum of Ranks
Image_Form_Platz	no	78	49.96	3897.00
	yes	40	78.10	3124.00
	Total	118		

# Test Statistics<sup>a</sup>

	Image_Form_ Platz
Mann-Whitney U	816.000
Wilcoxon W	3897.000
Z	-4.321
Asymp. Sig. (2-tailed)	<.001

a. Grouping Variable: Platz\_Dummy

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