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A Social semiotic analysis of healthcare signage at selected public and private hospitals in the Western Cape

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PLAGIARISM DECLARATION

I declare that *'A Social semiotic analysis of healthcare signage at selected public and private hospitals in the Western Cape'* is my own work, that it has not been submitted for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by the complete references.

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KEY WORDS

- Healthcare
- Navigation
- Linguistic landscapes
- Social semiotics
- Signs
- Western Cape
- Placement
- Multilingualism
- Material culture
- Multimodal discourse analysis

ABBREVIATIONS

CBD	Central Business District
ENT	Ear, Nose and Throat
Fig	Figure
LL	Linguistic Landscape
MC	Material Culture
MDA	Multimodal Discourse Analysis
MM	Melomed
NP	National Party
P	Participant
PHC	Primary Healthcare
Pt	Patient
TBH	Tygerberg

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First and foremost I am grateful and want to thank God for his grace and mercy that allowed me to successfully complete this project.

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Ms. Geraldine G.L. Hartman

PREFACE

This research project *"A social semiotic analysis of healthcare signage at selected public and private hospitals in the Western Cape"* was prepared with the guidance of my supervisor Professor Felix Banda as well as my initial co-supervisor Doctor Fiona Ferris to fulfil the conditions of the Master program at the University of the Western Cape.

I was absorbed in researching and writing this thesis upon discovering the distinct differences in terms of my personal experiences navigating through both public and private healthcare institutions within the Western Cape. The significant role signage played in terms of my navigation experiences highlighted the degree of variances in navigating these distinct institutions. Therefore, I wanted to explore the impact said signage had on the individuals traversing through these institutions.

I had a set timeline upon which this project was to be completed but, after much deliberation and meetings between my supervisor and myself, it was decided to extend the duration of my research since I had to pause while waiting for approval from various ethical boards and for permission from the various research sites to collect the much needed data.

Collecting the data at Tygerberg Hospital was a seamless experience since I was somewhat familiar with the layout of the hospital as well as some of the procedures in terms of doctor-patient consultations. Melomed, however, proved to be a bit more overwhelming since I did not know what to expect in terms of hospital procedures or the types of patients, staff or visitors that frequented this hospital.

The research was challenging, but conducting this investigation allowed me to answer the identified questions. Fortunately, Professor Banda was always available with advice and willing to assist whenever I needed guidance. In doing so, this project adds to the existing knowledge by delivering insightful information resulting in a richer more edifying end product.

Sincerely,

Ms. Geraldine G. L. Hartman

05th December 2019

ABSTRACT

The study focuses on the application and use of linguistic landscapes in health institutions. Furthermore, the research is centred on a social semiotic analysis of the healthcare signage at selected public and private hospitals in the Western Cape with comparisons being drawn between Melomed Private Hospital and Tygerberg Academic (Public) Hospital. Access to healthcare facilities in South Africa is a continuing concern in terms of gaining healthcare information and services. Currently, most research in the area of access to healthcare facilities and information focuses on the limitations and challenges of access to the health services and information in rural areas of South Africa. There is limited research that focuses on the influence spatial material in place and linguistic landscapes have on access to hospital facilities within urban areas, in the Western Cape. The research is an explorative and analytic study of the official or formal as well as unofficial or informal signage at a private hospital (Melomed) and a public hospital (Tygerberg academic hospital) in the Western Cape. The research is based on the tenets of social semiotic theory of multimodality and linguistic landscapes and multilingualism theorems. The conceptual framework of the study includes subtopics such as navigation/way-finding, placement of signage, and language diversity and health signage among others. The data for the research project is of a qualitative nature and, is concerned with understanding the process and the social and cultural contexts which underlie the production and consumption of unofficial and informal signage at a private hospital (Melomed) and a public hospital (Tygerberg academic hospital) in the Western Cape Province. Linguistic Landscapes (LL) utilises signs and symbols to communicate messages to the public. Signage are an expected and common feature within both private and public health institutions and are classified in accordance with the message(s) it intends to convey. These signs and symbols are used to communicate messages or directions to the public in the absence of hospital personnel. During the presentation and analysis of the data, the differences and similarities between Melomed private hospital and Tygerberg academic (public) hospital were looked at. The data presented that Tygerberg academic (public) hospital has a vast amount of informal signs constructed in and around its hospital buildings with a mixture of older and new signs displayed, often next to each other. Therefore, it became evident that Tygerberg hospital does not have a uniformed standard when it comes to its LL. In contrast, Melomed private hospital's signs are constructed from

the same grey metallic materials and are displayed with a singular text format. Furthermore, it was discovered that Melomed only utilise one official business language, English, unlike Tygerberg who strives to use the three official languages, English, Afrikaans and IsiXhosa, prevalent in the Western Cape region. Additionally, Tygerberg academic (public) hospital's irregular placement of signage demonstrated to be another complex facet. This complexity was partially attributed to its complex structural layout and building design. Melomed's strategically placed signage, as opposed to Tygerberg, led to the conclusion that the placement of signs, symbols and directories at hospitals can impede or aid the navigation and information provision. The impediment of navigation and information provision can cause visitors, patients and staff extra anxiety which can prolong their arrival at their destination. Moreover, the study concludes that no provisions were made at both Tygerberg and Melomed hospitals to adapt to the recent demographical changes in terms of the influx of migrants and foreign nationals and that the geographical locations of health institutions have a major impact on access to its products and services.

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CHAPTER I

Contextual Overview

1.0 Introduction

The study focuses on the application and use of linguistic landscapes (LL) in healthcare institutions. Furthermore, the core of the research is centred on a social semiotic analysis of the healthcare signage at selected public and private hospitals in the Western Cape with an analysis of data collected from Melomed private hospital and Tygerberg academic (public) hospital. This chapter provides a brief background and significance of the study on linguistic landscapes at the selected research sites in the Western Cape. Moreover, this chapter outlines the foundation of the study with the specific objectives, research questions as well as the chapter outline.

1.1 Background of the study

The area currently known as Bellville was originally founded as the Twelve Mile Stone because it was located 12 miles from the Cape Town City Centre (Reaper, 2014). It lies east of Cape Town within the Cape Peninsula Area and was established by proclamation in 1861; becoming a town in 1940 and a city in 1979. On 18 November 1861 the growing village was named Belleville, in honour of Charles Davidson Bell, Surveyor-General of the Cape from 1848 to 1872 and designer of the Cape first triangular stamps (Reaper, 2014). The railway line from Cape Town reached Belleville on 13 February 1862, and in January 1886 its name was changed to Durban Road, due to the fact that its railway station served the nearby village of Durbanville (Reaper, 2014). In November 1904 this reverted back to Bellville, albeit with a slightly amended spelling (Reaper, 2014).

Contemporary Bellville, however, has expanded in such a way that the declared city is now also a bustling commercial and industrial hub. Top academic facilities, health institutions as well as commercial offices, shopping centres and etcetera can now be located within the Bellville CBD area. Bellville forms part of the greater Cape Town Metropolis, but is located

closer to Cape Town International Airport (Cape Coastal Home, 2019). Bellville station was initially a very popular railway stop between Cape Town and the Boland (Reaper, 2014; Cape Coastal Home, 2019). Nowadays, however, this station is the main 'switching' platform for trains entering and leaving Cape Town with the N1 highway running through Bellville accessing the N2 which is 10 minutes away" (Cape Coastal Home, 2019). In addition, Voortrekker Road, one of the major, busiest main roads in the Western Cape links Bellville to Cape Town's Business District connecting most communities to each other.

Tygerberg academic (public) hospital and Melomed private hospital are two of four health institutions located in the Bellville area. The Karl Bremer (public) hospital first functioned as the academic hospital for the University of Stellenbosch medical school before Tygerberg was declared as the academic hospital housing the medical school (Norval, 1994). Tygerberg hospital was officially opened in 1976 and still remains one of the largest hospital in the Western Cape. As mentioned prior, Tygerberg acts as a teaching hospital in collaboration with the University of Stellenbosch's health science faculty and assists about 10 000 people during a normal working day (Norval, 1994). Tygerberg is known as a tertiary hospital, thus patients need to be referred by a primary or secondary care facility such as a clinic or a doctor. The majority of these referred patients are subsidised patients which means that they are not full-paying patients. They are categorised according to their ability to pay for health services. Therefore, the type of patients that are serviced by Tygerberg hospital are of lower income households.

Mediclinic International Louis Leipoldt and Melomed, on the other hand, are the two private healthcare institutions situated in the Bellville area. Unlike Mediclinic Louis Leipoldt- one of the oldest and best-known private hospitals in the Western Cape- Melomed hospital, distinguished as one of the top hospitals in 2019, is one of the more recent and modern hospitals within the Bellville area. Therefore, Melomed Bellville branch does not possess the surrounding area's and its fellow health institutions' rich history. The patients visiting these private institutions are usually full paying individuals or members of various medical aid schemes. Unlike Tygerberg hospital's lower income patients, Melomed's services are catered towards the middle working and upper class households. Access to Melomed hospital is limited and dependent on the individual's financial status or affordability to pay for the

required products, services and/or medical aid schemes. For example, Melomed private hospital's website state that if one plan's to give birth at Melomed hospital, one should phone the head office to find out about their fees. In addition to the hospital fees, however, the private practises, doctors or physicians will send you bills for their services directly.

Access to healthcare and information in South Africa is a continuing concern in terms of gaining access to healthcare facilities and its information (McLaren, Ardington and Leibrandt, 2013). As evident in many South African contexts, the medical field struggles to lessen (and ultimately remove) the remnants of inequalities linked to the apartheid era. Since the initiation of the new democratic administration in 1994, South African healthcare systems underwent significant changes that ultimately led to major improvements (Gaede and Versteeg, 2011). The aforementioned changes included the instigation of a number of policies and regulations that focus explicitly on redressing the areas most affected by the previous apartheid policies amongst other provisions (Rispeli cited in Padarath, et al., 2016). Such provisions include a new primary healthcare (PHC) approach as well as the hospital revitalisation program (Gaede and Versteeg, 2011). Access to PHC services became one of the focal areas of the healthcare policy in 2003 (Rispeli cited in Padarath, et al., 2016).

Previous research focused on exploring success and constraints in regard to 'rights to access' in terms of acceptable access to healthcare in rural areas, with insufficient focus on urban spaces such as the Western Cape metropolitan areas (Gaede and Versteeg, 2011). In addition, huge health and healthcare inequities continues to linger between the public and private health sectors as well as between urban and rural areas within South Africa (Gaede and Versteeg, 2011). Differences or inequalities between private and public hospitals includes the language policies, designs and materials used to produce signage as well as the actual signage present or absent at the institutions.

The importance of signs in urban spaces, such as those present at hospitals in the Western Cape, is a valuable untapped resource. In their 2003 book *Discourses in place,* Scollon and Scollon reported that the signs we find around us in daily life are extremely abundant though they have rarely been taken up for analysis by linguists and other specialists in language, discourse, and communication. Recently, research on public signage has taken a more active qualitative approach by highlighting the importance of surpassing the linguistic (language)

element of public texts and also focusing on their multimodal and multi-semiotic natures (Zabrodskaja and Milani, 2014).

Nowadays, growing amounts of migrants as well as global citizens travel to seek medical care in countries such as South Africa (Lee, et al., 2014). Thus, it is critically important to make way-finding easier for visitors who are not familiar with the geographical environment as well as the language(s) in an unfamiliar country. Cape Town, like many other urban areas in South Africa is becoming increasingly multilingually and multiculturally diverse due to the influx of migrants who bring with them their own distinct languages and cultures (Stroud and Jegels, 2014). Examples of majority groups of immigrants in Cape Town include but are not limited to Somali nationals, Nigerians and Pakistani. These migrant languages, however, are generally not included on any signs or symbols at hospitals within the Western Cape. Therefore, signage at health institutions (whether public or private hospitals) within the Western Cape, generally do not reflect any recent changes in their demographics, especially in terms of the growing amounts of migrants.

The lack of inclusivity, in regard to minority languages on signs at hospitals within the Western Cape, can be indexical of the fact that these hospitals have not been redesigned for a new and extended multilingual dispensation resulting from increased migration. Elements of language and communication are rarely given more than an obligatory mention when policy makers discuss health planning and management (Antia and Bertin, 2004). This alludes to the possibility that health policy makers may not understand the important role language plays during communication processes.

The World Health Organisation (WHO), describes access to healthcare in terms of finances, population and service coverage (WHO glossary, 1984; Gaede and Versteeg, 2011). Access to the physical infrastructures was one of the areas not considered by the WHO and was therefore largely neglected. This navigation and semiotic landscapes at hospitals has dire implications in terms of access to healthcare facilities or its services and information.

1.2 Problem statement

Currently, most research in the area of access to healthcare facilities and information focus on the limitations and challenges of access to the health services and information in rural areas of South Africa. There is limited research that focuses on the influence spatial material in place and linguistic landscapes have on access to hospital facilities within urban areas, especially in the Western Cape. The emphasis of the previous research was on applying linguistics to aspects such as the content and semiotics of posters in regard to ailments such as HIV, Diabetes, etcetera (Adolphs, et al., 2004). Thus, the focus was mostly on analysing the linguistic content displayed on available posters.

The consumption and production of signage and linguistic landscapes in and around hospitals was not a focal point of previous research. In the Western Cape Province, the application of signs and sign systems at public and private hospitals as well as the influence it has on the multilingual and multicultural population operating with varying literacy competences has not been extensively explored.

This study examines linguistic landscapes in and around private as well as public hospitals in the Western Cape Province. The focus of the study is on exploring the production and consumption of linguistic and other cultural materialities at Tygerberg academic (public) hospital and Melomed (private) hospital.

1.3 Purpose of the study

The explorative study analyses the official/formal as well as unofficial or informal signage at Melomed (private) hospital and Tygerberg academic (public) hospital in the Western Cape. An evaluation is made pertaining to the consumption and production of linguistic landscapes in and around the hospital facilities. In addition, the research explored the influence of the cultural materialities and its effects on navigation at the chosen facilities including its effects on access to these facilities and its information.

1.4 Objectives of the study

The specific objectives of the proposed research project are as follows:

- To explore the semiotic ecology of the linguistic and cultural materials used in way-finding signage at selected hospitals.
- To determine the effectiveness of the multilingual/multicultural and multimodal resources used in the production of signage at selected private and government hospitals.
- To explore the extent the placement of signs, symbols and directories impede or aid navigation and information provision at selected private and government hospitals.
- To investigate to what extent signs and signage reflect recent changes in demographic and migration patterns.
- To explore the geographical placement of the selected hospital facilities as a factor in their accessibility to previously disadvantaged groups in particular.

1.5 Research questions

Correspondingly, the research attempts to answer the following questions:

- What linguistic and cultural materials are used in wayfinding signage at selected hospitals?
- How effective are the multilingual/multicultural and multimodal resources used in the production of signage at selected private and government hospitals?
- How does the placement of signs, symbols and directories at selected private and government hospitals impede or aid navigation and information provision?
- To what extent do the signs and signage reflect recent changes in demographic and migration patterns?

- How does the geographical placement of the selected hospital facilities affect their accessibility to previously disadvantaged groups in particular?

1.6 Significance of the study

The study provides a detailed and comprehensive understanding of healthcare signage (linguistic landscapes) at selected public and private hospitals in the Western Cape since the assumption is that LL is a common and expected feature at healthcare institutions within the Western Cape. Thus, this study is of paramount importance as the investigation and its findings are useful to healthcare practitioners in South Africa as well as various other global stakeholders. In addition, the findings of the study are vital reference material and a yardstick for similar and related future studies by other researchers.

1.7 Outline of the study chapters

Chapter one presents the introduction and background to the study. The South African context as well as historical information on access to healthcare facilities, healthcare information and signage at urban hospitals within the Western Cape are provided. It also presents the problem statement, aims and objectives as well as the research questions.

Chapter two consists of the literature review. This chapter provides a broad view of established research in the field of Linguistic Landscapes. Relevant concepts and definitions such as way-finding, cultural signs and symbols, health literacy and social semiotics within the health sector are provided and discussed in this section.

Chapter three outlines the study's theoretical framework. The theoretical framework contains reviews of literature on modern social semiotics, multimodality and linguistic landscapes and multilingualism.

Chapter four focuses on the research design, methodology and ethical considerations. This section provides the information on the type of data utilised for this project, how the data

were collected as well as the analysis of the data. Moreover, this section discussed the ethical considerations which were adhered to during and after the data collection processes which involved people.

Chapter five presents the data presentation as well as the analysis and findings of data found at the selected health institutions sites in terms of the layout and design of the buildings and signage at these selected sites. It includes looking at geographical placement/spatialisation of hospital facilities and narrations of place. This section also considered the influence and/or the impact geographical locations of the selected hospitals have on access.

Chapter six focuses on the human perspective. It presents the interpretations and findings on the staff, patient and visitors that frequent the selected research sites. It focuses on the material culture (MC) of multilingualism/multiculturalism in the LL of selected private and government hospitals. This chapter looks at the linguistic and cultural materialities of objects, such as art, drawings, and etcetera, reflected in multilingualism.

Chapter seven outlines the conclusions, study limitations and recommendations to the study. The conclusions were drawn from all the sections of the study while the recommendations are targeted at the various healthcare stakeholders in the Western Cape

1.8 Summary

This chapter introduced the background of the study, justification of the study, problem statement, study objective, definition of key terms as well as a brief chapter outline amongst others. The introduced sub-topics helped the further development of the research study by providing a firm foundation for the following chapters.

CHAPTER II

Literature Review

2.0 Introduction

This chapter reviews literature related to the study focus with the objective of providing depth and strength to the research. The literature reviewed in this chapter is meant to outline the conceptual framework, and it includes subtopics such as navigation/way-finding, placement of signage, language diversity and health signage among others.

2.1 Navigation/ way-finding

Way-finding and navigation signage are there to provide the much needed navigation assistance to the travelling or visiting community. Way-finding according to Huelat (2007) is basically the ability to get to point B from point A with minimal anxiety and aggravation. Therefore, it can be defined as knowing where you are in a building or an environment, knowing where your desired location is, and knowing how to get there from your present location (Pati, et al., 2015). Way-finding and navigation is a spatial behaviour in the everyday lives of the people. It can be understood as spatial problem solving (Vaez, et al., 2016). An effective healthcare way-finding system provides direction and empowerment for visitors moving to find their destination in a facility (Huelat, 2007). Way-finding is a system portrayed by graphical as well as physical signage aimed at assisting the users to make sense of where they are and how to locate the place they are looking for (Rodrigues, et al., 2018).

The ease of navigating to a specific part within hospitals is a valuable concern that is often neglected in the design or planning of health facilities (Hasim, Alkaabi and Bharwani, 2014). Rodrigues, Coelho, Manuel and Tavares (2018) postulated that a hospital's design could reduce stress of both patients and staff, increase efficacy of care, improve safety, and consequently improve the health outcomes of patients and overall healthcare quality. Devlin (2014), however, highlighted that the facility planners seldom use a planning process that

includes the creation of effective way-finding systems regardless of the fact that navigation is one of the critical components affecting patients and staff. Walforda, et al. (2011) articulated that, there is a growing concern in the functions of navigation, way-finding and walkability of the built environment with respect to social inclusion, health outcomes and general well-being.

Navigation and way-finding problems are common among travellers or visitors, it is utter disastrous when one is lost or cannot find their way around a building or an area (Rauschert, Sharma, et al. (2002). Basri and Sulaiman (2013) note, the frustration as a result of way-finding difficulties not only bring about a negative thinking of the physical setting; but, it also affects the public perception of the services offered in that setting. Passini (1996) agrees by highlighting that, way-finding difficulties normally lead to negative perceptions of the physical setting of the institution as well as undermining the name of the institution.

Besides accessing the services being offered at a certain setting, the public requires assistance in way-finding and navigation. There should be proper synchronisation of way-finding and navigation signage. Trulove, Sprague, and Colony (2000) stated that, way-finding is navigating from one place to another and is a very essential routine in which people are engaged throughout their lives. Way-finding should be a problem-solving initiative whereby decisions are articulated through the interpretation of a system of signage containing clear paths with verbal, visual and auditory clues. Rodrigues et al. (2018) argued that effective and efficient signage must be considered within the bigger picture of a way-finding system, which means that development and design has to include and explore all way-finding processes as well as taking signs and the different characteristics of the users who visits into account.

However, even though the ability to successfully navigate in health facilities is an important goal for patients, visitors and staff, a number of individuals do not want to be explained how to reach their destination. Instead they want to be shown where to go. Whether it is a person or a comprehensive sign that is showing them does not make a big difference to them as long as they reach their destination successfully (Huelat, 2007). Comprehensive signage systems can link clear communication, way-finding information, easy-to-read graphics as well as hospital branding (Huelat 2007; Hasim, et al., 2014). Additional physical design elements impacting way-finding includes signs and symbols which contains interior elements such as artwork, display boards, architectural features and maps, amongst others (Huelat 2007; Hasim

et al., 2014). Therefore, the physical environment has a vital role to play in the aiding of navigation in healthcare facilities (Pati et al., 2015).

Research by Lee, et al. (2014) indicate that patients often evaluate visits to healthcare institutions, especially public hospitals as stressful, intimidating or unpleasant. One of the reasons for these negative experiences and perceptions of hospital spaces is due to the unfamiliarity of its complex environment or structures as way-finding in hospital facilities can be challenging (Cogwill and Bolek 2003; Lee, et al., 2014; Huelat, 2007). Observations by Cogwill and Bolek (2003) indicated that first time visitors, patients, volunteers or new personnel often have trouble navigating through these spaces. Thus, traversing through unfamiliar healthcare buildings often leads to additional anxiety and frustration for individuals (Lee, et al., 2014; Huelat, 2007). Design of spaces such as hospital buildings, therefore, can assist or even hinder people from successfully navigating through the environment.

2.2 Placement of signs

In multicultural and multilingual contexts of the Western Cape Province, comprising people with different ways of reading and of differentiated literacy levels and practices, the actual design of the spaces, the placement of signs or lack thereof, and the modes used in the signage constitute vital components that influence successful navigation of hospital facilities (Zimny, 2017). The placement and kinds of signs, symbols and directories are thus central to navigation of spaces (Cogwill and Bolek, 2003). Otherwise people may miss them or be totally unaware of what they mean. Scholars have noted that the awareness of what they mean and where signs or images are located in the physical world is fundamental (Scollon and Scollon, 2003; Stroud and Mpendukana 2009; Zabrodskaja and Milani, 2014; Blommaert and Huang 2010). The most common example of these signs is direction indicators. Such signs are informative and insightful as they present the physical environment where they are situated (Rodrigues et al., 2018). Each of them indexes a larger discourse whether it is of a no smoking sign within public restrooms or signage indicating parking regulations on hospital grounds.

The inconsistent placement of signs can be a barrier preventing successful communication between the signs and its consumer. Furthermore, apart from the internal signs, the ones outside of the hospital structure also affect the individual's experiences. Signs and symbols are helpful to those visitors who have limited ability to understand written or spoken language(s) (Lee, et al., 2014). For example, visitors might find it confusing to locate a specific entrance they need to be at because of the lack of signs, inconsistent placement of signs, and/or the semiotic material present or absent on signage amongst other factors.

Thus, people unfamiliar with the surrounding geographical environment and its cultures might find it challenging to locate street signs directing them to the particular hospital they wish to visit due to language choices on signs. Scollon and Scollon (2003) indicated that one of the surest ways to locate ourselves in the world is through the signs we see around us in buildings, the city streets, marking road regulations, labelling consumer products and etcetera. For example, if individuals (unfamiliar with their surroundings) notice a sign that says, 'no parking', they might not know exactly where they are, but they can make an immediate assumption that they are in an English- speaking environment (Scollon and Scollon, 2003). Similarly, if signs at a hospital contain Afrikaans, English and IsiXhosa, the visitors may create an expectation to be assisted in whichever of the three languages most comfortable to them. This multilingual sign can furthermore be indexing a post-apartheid view of the hospital because prior to the official introduction of democracy in 1994, Afrikaans was the dominant language of the government. Thus, including languages other than Afrikaans, can symbolize the openness to the country's cultural diversity as well as the changing political status. Language diversity, for example, can be both a support structure and a barrier preventing successful communication between the hospital signage and the individuals frequenting the space(s) (Antia and Bertin, 2004; Dressler, 2015).

2.3 Language diversity and health signage

One aspect that is often overlooked in terms of language diversity is the type of language utilised on signs. Nash (2016) articulated that, language and linguistic landscapes are indebted to each other. Complex multiple layered messages embedded within signs can be an aspect that hinders visitors' experiences. Language diversity drives applied sociolinguistic

foray into many complex issues on the plate of the contemporary sociolinguist (Nash, 2016). Multiple layered messages can be unclear and confusing adding yet again to the individual's anxiety levels. Moreover, if the messages only include very formal and/or standard versions of languages, it may exclude a significant portion of the population from understanding the suggested meanings on the signage.

Language choices on signs can either index the community within which it is used, or it can symbolize something about the products or health services which have nothing to do with the actual location. Peled (2017) highlighted that language is among the most significant challenges being faced in national health facilities. Therefore, the signage present at health institutions might be inclusive of some languages dominant in the surrounding area, but might exclude minority languages spoken by many of its other visitors. The pivotal role of language in healthcare is linked first and foremost to the fact that any type of health communication necessarily as well as inevitably involves a linguistic system that cannot be reduced to a purely non-linguistic form (Peled, 2017). The most fundamental instigation of healthcare provision in a linguistically distinct society comes from the fact that language is a human commonality that paradoxically manifests itself in a particularistic manner. The lack of inclusivity; in regards to minority languages on signs at hospitals within the Western Cape, can be indexical of the fact that these hospitals have not been redesigned for a new and extended multilingual dispensation resulting from increased migration.

2.4 Language preferences and health literacy

In multilingual countries such as South Africa, language and the accompanying knowledge of culture, have been identified as a barrier preventing patients from accessing quality healthcare facilities, services and information (Claasen, et al., 2017). Thus, authorities found it necessary to include the languages to be utilised on public signs systems within their language policies (Landry and Bourhis, 1997, Cenoz and Gorter, 2009:56). Language alone appears to be a barrier to the attainment of quality healthcare (Claasen et. al, 2017).

Regulations related to language policies go hand in hand with linguistic landscapes for the use of languages in the media, social and economic life as well as other domains (Cenoz and Gorter, 2009). Meuter, et al. (2015), noted that, miscommunication in the healthcare sector

has negative effects on individuals' health statuses. Therefore, the possibility of communication inaccuracies between healthcare practitioners or the health institutions (signs and symbols) when one or both are using a second language, become increasingly likely (Meuter et al., 2015). These language discrepancies may result in increased psychological stress and significant communication errors (medically and otherwise) for already anxious individuals (Meuter et al., 2015).

Language according to Akindele (2011) is a system that provides the structures and stipulates the associations that these structures bear to each other for the purpose of making meaning of signs or sign systems (messages). Akindele (2011) furthermore states that language is just one aspect of meaning making and that other facets include music, painting, and etcetera. The focal area of the communication mechanisms, however, should be on the correct interpretation of the sign systems. Hence, literacy levels are an important aspect for interpretation of semiotics especially since the focus of past research has often been on language barriers and not on signage.

People with low health literacy levels are overwhelmed by healthcare services because their skills and abilities are challenged by the demands and complexity required (Parker and Jacobson, 2012). Therefore, a higher level of health literacy skills is needed to enable the ability to navigate the health facilities and to acquire proper healthcare (Mokwena, 2015).

According to Mokwena (2015), this ability enables people to gain access to hospital facilities and healthcare. It will also enable them to interpret the various elements of health information displayed at health facilities, which will influence their decision-making processes (Mokwena, 2015). Health literacy is essential for successful access to care and use of services, self-care of chronic conditions, and maintenance of health and wellness.

Literacy is a basic skill that enables individuals to communicate with his or her environment by reading and writing (Mokwena, 2015). Thus, health literacy indicates skills which enable a person to not only read and write, but also to interpret health information, including the information displayed on notice boards, directory boards and health related information displayed inside facilities (Mokwena, 2015). People with low health literacy skills on the other hand have more problems navigating the healthcare system and facilities, yet they are the ones who utilise the services more and always have longer stays or visits (Parker and Jacobson, 2012).

In addition to the literacy levels of the viewers or users of the signs and symbols within hospital facilities, the cultural schemata (background knowledge and/or experiences) plays an equally important role in the correct or assumed interpretation of said signs and symbols.

2.5 Cultural navigation of signs and symbols

As previously mentioned, visitors frequenting health facilities often rely on signs and symbols to navigate to specific destinations within hospitals. Signs and symbols, according to Foster (2001, cited in Hassim et al., 2014), are usually placed for rapid communication purposes with the ability to move across age, culture and language barriers. Also, the producers of signs and symbols usually intend for it to be easier to interpret and understood than multilingual texts (Hassim et al, 2014). Thus, individuals from diverse cultural or language backgrounds are more likely, according to Foster (2001, cited in Hassim et.al, 2014) to follow, understand and retain signs and symbols rather than the same information written in various languages on signage.

Signs and symbols are usually more compact and more prominent and noticeable than textual signs (Hassim et.al, 2014). However, not everyone will know that a picture of a question mark within a circle, for example, means information. Thus, certain signs and symbols need some (local) cultural knowledge to be interpreted correctly. Such specialized cultural symbols are not in everyday use and the lack of familiarity and appearance can influence its comprehension. For example, migrant visitors who lack the cultural background knowledge or literacy skills are often too embarrassed to ask questions or directions, so they will endeavour to navigate on their own relying on generic or familiar signs and symbols to guide them (Patti, et al., 2015).

However, it can be a very challenging task to produce ‘generic signs’ because different cultures and/or geographical areas have different ideas of what may be considered a generic sign. The cross “+” symbol for example, may not be recognized as a symbol depicting a hospital or emergency services to migrants who come from a culture where the crescent “ↄ” symbol is more commonly used for that purpose (Hassim et. al, 2014). Therefore, cultural matters can influence or even limit the creation or production of explicit graphics for healthcare services such as mammograms or gynaecological services. In addition to the

choice of symbols utilized on signs, language choices are equally important because not all patients, visitors or staff will be able to interpret all texts if more than one language is used to direct or guide patients to their destinations. The study of these signs and symbols as well as the rules that govern them in cultures throughout the world falls under the semiotic classification (Danesi, 2004; Floyd, 2001, Mertz, 2007).

2.6 Summary

The chapter presented literature related to the research topic, the conceptual framework was outlined in detail in this chapter. Way-finding, language diversity and social semiotics are among some of the conceptual frameworks discussed in this chapter. Reviewed literature was classified according to related conceptual frameworks of the study. The chapter laid the foundation for chapter 3 of the research.

CHAPTER III

Theoretical Framework

3.0 Introduction

The research is based on the tenets of social semiotic approach to multimodality and linguistic landscapes and multilingualism theorems.

3.1 Introduction to social semiotics

Semiotic landscapes at hospitals has dire implications in terms of access to healthcare facilities or its services and information. Semiotics, as said by Backhaus (2007), is the study of how people make meaning through both linguistic and non-linguistic ways. It is a theory concerned with the understanding of how people use signs and symbols to make meaning. The sign comprises any meaningful element interpreted as standing for something other than itself (Backhaus, 2007; Banda and Jimaima, 2015). Sanjinés (2014) states that the system of interaction used to communicate messages is no less important or unexpected than the content of the message self. Thus, the system of signs used is just as important as the intended message. Communication, according to Petrilli (2015), is unavoidably imprecise because no two people's interpretations are based on exactly the same experience. Therefore, the possibility will always be that different recipients or viewers might interpret the same sign differently.

Kress and Van Leeuwen (2006) noted that, with the advent of new information technologies and new media platforms, new considerations for learning in areas that are characterised by new communicative patterns need to be explored. Halliday's (1978) theory that language is not the only semiotic system; and that language and other semiotic systems are products of the constant shaping and reshaping by people realizing their social purposes, is the basis for contemporary social semiotics. Kress (2010) stated that in his conceptualisation of a social semiotic approach to multimodality, that each time a semiotic resource (signs and symbols) is

remade it implies different significations or messages (cited in Banda, Jimaima and Mokwena, 2019). Thus it can be said that each time a sign or symbol is repurposed, it receives new multiple meanings from its viewers which is based on social interpretations or knowledge (Banda, Jimaima and Mokwena, 2019). Language and other social semiotic resources, therefore, are shaped by how people use them to make meaning in terms of the social purposes they are put to (Halliday, 1978). Welby, (cited in Petrilli, 2015) analyses meaning according to three different levels of expression value: "sense," "meaning," and "significance," which are co-present and act together to varying degrees in the existing developments of meaning and understanding among speakers. This means that there is a larger social relationship between meaning and intention or significance of messages (Petrilli, 2015).

Contemporary social semiotic studies suggest that all signs are made in response to a prompt in a specific social environment so that the signs incorporate features of whatever triggered the need to create the sign, or resources brought by the maker of the new sign and of the sign-makers assessment of the environment. In other words, meanings embedded in signs are context specific. For example, the perception of a sign such as '+' depends on various factors such as colour, location, and size in addition to the context (prompt) in which it is utilised. Depending on what prompted the sign (context), the '+' sign can refer to, addition, the ambulance, or a church, amongst other possibilities.

The contexts which influenced the sign maker to create the sign for a specific purpose at a specific time and place, can be cultural, religious, or linguistic, amongst many other possibilities. The meaning or interpretation of the sign thus depends on how the viewer understand its meaning based on background knowledge of socially or culturally constructed information in addition to where the sign is placed. Thus, social semiotically, language must be considered in relation to other communicative systems (Sanjinés, 2014).

Even though semiotics involves the study of signs and symbols as a significant part of communication, it also focuses on non-linguistic sign systems such as the meaning(s) of certain sounds, images, and locations amongst others. Thus, a sign can take the shape of lyrics from music or of an inscribed surface displayed in a public space in order to convey a message of wider concern to a non-specified group of readers, such as the signs next to the road indicating the sale of goods and various services, etcetera (Backhaus, 2007). What I have outlined above links to what Kress (2010) has described as the social semiotic theory to

multimodality. The social semiotic approach will be further developed in the elaboration of the theoretical framework in the next chapter.

3.2 Social semiotic theory of multimodality

The social semiotic theory of multimodality generally looks at communication practices and how people communicate and interact with each other. It refers to the use of two or more modes during communication processes. Murray (2013) describes these multimodal communication practises in terms of the textual, aural, linguistic, spatial and visual modes that is used to compose messages. This concurs with Ledin and Machin's (2019) theory of multimodality that is in all forms of communication and structured on the basis of three types of meanings. These three types of meanings are: the need to communicate ideas and experiences, to form social relationships and identities and to create coherence (Ledin and Machin, 2019). So, if one uses the multimodal theory to analyse a visual sign, the meaning would be derived through things like proximity, angle of interaction and gaze (Ledin and Machin, 2019). Thus, one would look at how the idea or experience communicated would impact or form relationships where the same ideals or views are shared or questioned.

Kress (2010) defines the social semiotic approach to multimodality as a theory which looks at the various different modes that people use to communicate with each other. In particular, multimodality refers to a repertoire of modes, that is, the use and assemblage of multiple semiotic resources for the representation of objects, while mode has been defined as "... a socially shaped and culturally given semiotic resources for making meaning" (Kress 2010: 79). Kress (2010) gives the following as examples: writing, image, layout, music, gesture and soundtrack. Another example given by Ledin and Machin (2019) includes the notion of tradition. Instructors, for example, tend to use various culturally embodied semiotic modes - speech, gestures, gaze and proxemics- when they present scientific content (Moro, Mortimer and Tiberghien, 2019). Thus in order to analyse multimodal displays or practices Moro et al. (2019) integrates social semiotic theory of multimodality which includes cultural or social norms and beliefs as well as theories associated with didactics. The oxford dictionary (2013) defines didactics as a particularly moral instruction alluding once again to the aforementioned social or cultural views.

Kress and Van Leeuwen (2006), in addition, argue that understanding or perception can be influenced by what a given text is written on. Therefore, the material used to construct a sign, such as wood, metal, paper and the colours, types of font used amongst others, are all-important aspects of multimodality. A good example is a 'danger' sign written on a piece of cardboard, might be ignored or not taken as seriously as the same 'danger' sign written on a formal looking design imprinted on a metal substance. Therefore, the design of the sign and the material used to construct the sign both influences how the sign will be consumed.

In past research, written texts were the focal point of sign systems. However, recent studies noted that images could also be an indicator of links or relationships between individuals and places (Kress and Van Leeuwen, 2006). Moreover, in order to interpret texts, signs and symbols correctly, multiple semiotic inputs, such as social, political and cultural backgrounds or information are essential. For example, a picture of Table Mountain on a sign that reads 'Keep Our City Healthy' can evoke strong emotions within the reader of the sign.

3.3 Linguistic landscapes and multilingualism

The study of linguistic landscapes is a relatively new area of language and communication study, which includes aspects from various academic fields such as psychology, anthropology, sociolinguistics, and urban planning (Ben-Rafael, Shohamy and Barni, 2010). According to Cenoz and Gorter (2009), linguistic landscapes are around us all the time but this discipline of LL has primarily been undertaken by linguists and not landscape scholars (Nash, 2016). Linguistic landscapes, according to Ben-Rafael, et al. (2006) as well as Shohamy and Gorter (2008), are perceived as the scene where public space is symbolically constructed. The visibility of languages on objects that mark the public space in a given territory, such as hospitals, is one of the key concepts explored by linguistic landscape studies. Language as it appears in the public space, often referred to as linguistic landscape, has been the object of serious academic study for over a decade, resulting in several singled-authored and edited volumes (Huebner, 2016). Landry and Bourhis (1997) describe linguistic landscapes as the visibility and salience of languages on such public and commercial signs. Furthermore, Ivkovic and Lotherington (2009) state that linguistic landscapes are embedded in the physical geography of the cityscape (urban areas).

Previous researchers such as Bourhis (1992) claims the most basic informational function of linguistic landscapes is that it serves as a distinctive marker of the geographical territory (space) inhabited by a given language community. Similarly, Levinson (1996) argues that linguistic landscapes act as a distinguishing marker of the geographical territory that is inhabited by a specified language community. Shohamy (2006) states that the presence or absence of language(s) in public spaces communicates symbolic messages about the importance, power, significance and relevance of certain languages or the relevance of others. Similarly, Peck and Banda (2014) state that the emplacement of signs is critical to understanding spatial ownership, power relations and interpretation of differences and contradictions in social structures. Thus, space as well as texts (language) are viewed as mobile and are open to constant resemiotization and recontextualization.

Aronin and Ó Laoire's (2012) research conveyed the importance of the English language, through its dominant presence and visibility in linguistic landscapes. Their research emphasized that particular statuses are attached to languages that appear in public spaces (in specific areas) (Aronin and Ó Laoire, 2012). Aronin and Ó Laoire (2012), however, also speak about a new direction of linguistic landscape studies. They report that linguistic landscape research no longer only concerns itself with language in public spaces (Aronin and Ó Laoire, 2012). Nowadays, linguistic landscapes has been investigated using a variety of different approaches, including (but not limited to) sociolinguistics, language policy and discourse analysis (Aronin and Ó Laoire, 2012; Alomoush, 2016).

Multilingualism, from a sociolinguist stance, is a complex semiotic resource, some of which belongs to conventionally defined 'languages' while others belong to another 'language' (Blommaert, 2010: 102). Materialities and spaces are those kinds of other 'languages', which are essential and indispensable parts of the semiotic resources of multilingualism (Aronin, 2015:2). Aronin and Ó Laoire's (2012, 2018) research on materialities states that "[m]aterial culture study is the study of artefacts and objects as well as landscapes, cityscapes, roadscapes, villages, localities, dwellings, private households and collective homes, public spaces and ways of their organisation and use" (Aronin and Ó Laoire, 2012:3). Therefore, according to Aronin and Ó Laoire (2012), material culture (MC) is a vital and unavoidable part of human life. They characterised material culture as "the realm of physical items, produced by humans as well as events and spaces interconnected by and with local and global mentality, culture, tradition and social life (Aronin and Ó Laoire, 2012:3). Therefore, material

culture is one of the core components used to shape behaviour, influence decisions as well as to define culture.

In a multilingual society, such as Cape Town, material culture can be said to be a specific blend of materialities with roots in a variety of cultures which represent a multilingual society (Aronin and Ó Laoire, 2012). In this manner, material culture of multilingualism, "comprises materialities relating to [a] multilingual way of existence" (Aronin and Ó Laoire, 2012:4). Thus, material culture of multilingualism can add to the multilingualism domain that is concerned with the use and sharing of different languages and varieties of those languages (Aronin and Ó Laoire, 2012). In addition, Banda and Jimaima (2015) state that even though some research still uses the famous definition by Landry and Bourhis (1997:25) that, linguistic landscapes speaks of the visibility and salience of languages on such public and commercial signs- as a basis, more recent work has expanded on their description. Thus, Landry and Bourhis's definition can be considered a point of departure for the study of linguistic landscapes.

Contemporary studies are concerned with the semiotic and multimodal rather than the purely linguistic aspects of linguistic landscapes (Jaworski and Thurlow 2010; Stroud and Mpendukana 2009; Banda and Jimaima 2015; Peck and Banda 2014). Blommaert and Maly (2014) reported that linguistic landscapes compel sociolinguists to pay more attention to the different shapes and forms of literacy displayed in public spaces. However, it should not be assumed that all the receivers of the signs can interpret or understand the sign systems, the semiotics and/ or the language(s) used as intended by the maker (Leeman and Modan, 2010). Consumer subjectivities need to be taken into account in analysing linguistic landscapes (Peck and Banda 2014; Leeman and Modan 2010). In this regard, Stroud and Mpendukana (2009) suggest a material ethnographic approach to linguistic landscapes to account for both the production of the signage as well as the reception of the messages.

Shohamy and Gorter's research (2009) was one of the first to explore the notion of including other semiotic resources in the construction of linguistic landscapes (cited in Banda and Jimaima, 2015). They argued that linguistic landscapes are found everywhere and includes language used in a community—the heard and spoken word, as well as the represented and displayed. Thus, they relate linguistic landscapes to multimodal texts that are displayed in public spaces. Stroud and Jegels (2014) also report that recent work (Mallinowski 2009,

Scollon and Scollon 2003) has explored diversities in the semiotic production and reading of space and place.

Linguistic landscapes incorporates the diverse range of languages utilised within speech communities and other noticeable semiotic material on public signage and in the environment (Hewitt-Bradshaw, 2014). The study of linguistic landscapes allows us to explore patterns, representing different ways in which diverse individuals as well as groups perceive the complexity of semiotic signs and symbols (Ben-Rafael et al, 2006). Therefore, the intersection between language, semiotics and space is fundamental when exploring linguistic landscapes.

3.4 Summary

This section's main purpose was to give and in-depth analysis of the theoretical frameworks influencing the research study. The research is influenced and centred on the tenants of two theorems namely, the social semiotic theory of multimodality and linguistic landscapes and multilingualism theorems. The social semiotic theory of multimodality generally looks at communication practices and how people communicate and interact with each other. It refers to the use of two or more modes during communication processes. While linguistic landscapes is a relatively new area of language and communication study, which includes aspects from various academic fields such as psychology, anthropology and sociolinguistics, amongst others.

CHAPTER IV

Research Methodology

4.0 Introduction

The following sections focus on the research design and methodology utilised for the proposed research project. The collection of the data, the methods that were utilised to collect the data, the criteria for the sampling population as well as the analytical tools are also examined within this chapter. In addition, this section discusses and presents limitations experienced as well as the ethical considerations, which were adhered to during and after the data collection processes.

4.1 Research design

The data for this research project is of a qualitative nature. "Qualitative research, as a research methodology, is concerned with understanding the process and the social and cultural contexts which underlie various behavioural patterns and is mostly concerned with the 'why' questions of research" (Maree, 2007:51). Leedy (1993) articulates that, the qualitative research design allows one to attain real and valid data from a rational standpoint as the approach is inductive. The qualitative research design is vital and of paramount importance to this study as it allows for an in-depth analysis.

The researcher's desire to do an in-depth analysis of healthcare signages influenced the choice of the research design used in the study. Secondly the desire to also document prominence of linguistic elements in relationship to understanding recurring thematic frameworks played a pivotal role in the selection of the qualitative approach as a research design used in this study. Qualitative data collection is dependent on the interpretation, therefore, a qualitative method was found most suitable because the individual perceptions and experiences of the participants are mandatory in understanding and decoding collected information (Alhojailan, 2012).

The research design also included the research paradigm, which in the context of this research is interpretivism world perspective. Neuman (2013) defines the interpretivism world perspective as a research paradigm aimed at comprehending individuals. The interpretivism world perspective is also known as the phenomenological approach. Yanow and Schwartz-Shea (2015) highlighted that research is empowered to a gander at the world through encounters and observations of the members' foundation and perspective. Qualitative data gathering techniques are employed in interpretivism research paradigm, it is from this background that the interpretivism research paradigm enabled the researcher to have a profound comprehensive understanding of various healthcare signages used at selected public and private hospitals in the Western Cape (South Africa).

4.2 Sampling method

The sampling techniques for the project was the purposeful random sampling as well as the convenience sampling technique. Elmusharaf (2012) describes purposive sampling (judgmental) as when the researcher tries to obtain a sample that appears to him/her as being representative of the population. However, even though the researcher has an idea of selecting participants that are representative of the population at large, it still looks at a random population sample (Blackstone, 2017). This strategy uses small sample sizes, which are picked randomly because it does not regard any programmed outcome (Blackstone, 2017). The convenience sampling technique refers to a group of individuals believed to be representative of the population from which it is selected, but the group is chosen because it is close at hand rather than being randomly selected (Elmusharaf, 2012). This method is also known as haphazard sampling, but it is the most useful in exploratory research (Blackstone, 2017).

4.3 Data collection procedures

The first of the three data collection methods that was utilised in the research project is the walking method. Lee (2004 cited in Stroud and Jegels, 2014) states that walking is an active

mode of perceiving the urban environment. Walking methods allows insights into how the participants actively construct the significance of the place as they navigate and move through the space(s). It also illustrates the performance, disputes and elaboration of signage discourses within local performativity of place (Stroud and Jegels, 2014). Thus, by walking, the researcher was immersed in the surroundings that allowed for the acquisition of a kinaesthetic (physical) experience, which can create a sense of feeling for the space and the spatial qualities (Tuan 1977 cited in Stroud and Jegels, 2014).

The two types of walking methods focused on is Stroud and Jegels' (2014) methodology of narrated walking and commented walking. The researcher requested one participant from each research site to participate, utilising the walking method. Where possible the researcher requested the caretaker or assigned guide (with permission from the hospital management or administration) to walk with the researcher while collecting the needed data. Thus, the assigned caretaker or assigned guide was interviewed utilising the walking method.

Narrated walking, according Stroud and Jegels (2014), allows the researcher to monitor the performing of discourses of place as they progress over time and across landscapes through the viewpoints and the stances of narrating walkers (participants). Therefore, the researcher's focus is on the performativity of the various discourses of place through the participants' lenses.

The commented walking technique, according to Winkler, involves the production of participants' stories and its associated reflections when walking in a place (2002 cited in Stroud and Jegels, 2014). Thus, participants are required to guide the researcher around the various areas and to characterize each space from the point of view of what one should know about a particular place or area (Stroud and Jegels, 2014). The formation of the stories, therefore, is produced as they walk in the actual spaces. Similar principles were followed when collecting data while driving. Either the researcher stopped to implement the commented walking or the narrated walking techniques; or they drive as the narrations are conveyed.

The second data collection method is the use of a camera to take photos of the landscapes in and around the research sites. The photos of the actual landscapes are vital to the proposed research. The researcher took as many photos as possible during this stage of the data collection process which included photos of signs and symbols utilised or ignored by visitors

and patients as they navigate their way either to or through the selected hospital facilities. Thus, the number of images is not less than 300 per research site.

The data set consisted of 1200 images taken at the selected research sites. For that reason, the types of signs focused on inside as well as outside of the facilities included directories, information boards, both formal and informal signage as well as other unique and interesting landscapes noticed by the researcher or pointed out by the participants. Therefore, a set out channel of communication was put in place and followed, in order to collect the image data. Permission was obtained from the hospitals' management before images could be captured, to safeguard the privacy rights of its visitors.

The third method of data collection used was the one-on-one interviews with selected participants to explore the meanings they attach to certain (shown) signage at the research sites. Participants comprised 4 visitors and 1 staff member per research site. The 20 participants were invited to share their experiences and thoughts in regards to their commute to the selected research sites as well as what signs and symbols they used (if any) to aid their navigation to the selected hospitals.

Interviews were done in accordance with the aforementioned techniques. The interviews were done on the same day(s) the pictures were taken. Therefore, as the researcher captured the images on camera, the participants were interviewed in regards to those captured pictures. Unofficial signs might not be present at the location images were captured if the researcher planned to return to the site on additional days for interviews in regards to the surrounding semiotic materials and landscapes.

4.4 Multimodal discourse analysis

Following recent studies in LL (Stroud and Mpendukana 2009; Stroud and Jegels 2014; Banda and Jimaima 2015; Peck and Banda 2014; Blommaert and Maly 2014; Nig, 2019; Pratiwy and Wulan, 2018) the study used multimodal discourse analysis focusing on the different modes and semiotic resources used in the construction of meanings through the signs in place. Data analysis, according to Hatch (2002), is a systematic search for meaning. The processing system includes the organizing and interrogating of data in ways that allows

the researcher to see patterns, identify themes, discover relationships, develop explanations, make interpretations, mount critiques, or to generate theories (Hatch, 2002). A traditional approach to MDA, according to Nig (2019) conventionally conceptualizes investigations into language beyond a sentential level in the grammatical hierarchy and is predominantly concerned with interactions between language and context. Therefore, it requires the researcher to engage critically with the collected data because the text comprising MDA can consist of complex resources of meanings (Pratiwy and Wulan, 2018).

The evaluation, categorisation as well as interpretation amongst other components, of ideas and patterns are discovered through critical engagement with multimodal data. In the social semiotic approach used in the study, understanding of meanings embedded in the signage, for example, entails understanding that individuals, their social backgrounds and how the signs in place are (re-)shaped in social environments they live (Banda, Jimaima and Mokwena 2019).

This means understanding that signs are socio-culturally available resources (Kress, 2010). For example, the relationships between the objects in the LL and their meanings in narrations of place are a function of the current and past social, cultural, scientific, ecological and political contexts (Banda and Jimaima 2015). Successful communication in multi-ethnic and multi-regional contexts requires careful assemblages of graphic and multimodal display and other paraphernalia to produce multi-local, multi-ethnic and translocal/regional identities (Jimaima and Banda, 2019:16). Meaning thus arises out of the interest of the makers of signs, the semiotic material used in the production of the signage as well as the social and cultural beliefs attached to the signs (Kress, 2010; Banda and Jimaima 2015). Thus, signs are created or produced within social interaction or social settings which then become part of the semiotic resources of a culture (Kress, 2010). Furthermore, according to Kress (2010), signs exist in all modes, and all modes need to be considered for their role in assigning of meaning to signs and symbols in social contexts. However, Pratiwy and Wulan (2018), argue that most studies in MDA focus on the visual images guided by visual grammar, without sufficient attention being paid to verbal text and sound. Therefore, the emphasis should be equally placed on sound as in the case of visual designs.

The data for the research project is of a multimodal nature. Therefore, multimodal data analysis tools were utilised to evaluate the data. A social semiotic approach to multimodal discourse analysis entails multimodal social semiotic data analysis tools. The social semiotic approach to multimodal discourse analysis relates social semiotic analysis of socially situated

sign-making and processes instead of the analysis of immobile sign systems (Lemke, 1988; Thibault, 1991, Iedema, 2003; Kress 2010; Banda and Jimaima 2015; Peck and Banda 2014). This is because as Kress (2010) argues, the foundation of signs and their meaning-making capacities lies in social interactions. This means that meaning arises from social interactions within social environments, and that the social can be converted into the source or the origin of meanings (Kress 2010). Therefore, the analysis will focus on the social semiotics of the different modes used in the different signs, and how they are interactively used in narratives of place for different meanings.

4.5 Ethical considerations

Firstly, no minors were involved during the data collection process, thus all participants were 18 years or older. Before interviews commenced, consent forms were provided and explained to all possible participants. Rid, Emmanuel and Wendler (2014) noted that every one of the members of the study voluntarily participated subsequent to being educated about the study. Kosinski, et al. (2015) articulated that, study participants have the privilege to haul themselves out from the study as well as the privilege not to take an interest in the study. The data collection (interviews) can start as soon as the consent forms are signed by the volunteers. All participant identities and personal information was kept private and only the researcher and immediate supervisors has access to the original recorded data and information. During the transcription phase, pseudonyms were allocated to each interviewee to ensure privacy. Jake, Sam, Jenny and Peter are pseudonyms linked to the Tygerberg hospital staff. Whereas, Sarah, Xara, Paul, John, Martha, Fairou, Fathma and Jada were applied to conceal the identities of Tygerberg hospital patients and visitors. Furthermore, Gina, Grant and Ahmed were the aliases used for the Melomed hospital patients who volunteered to partake in the study. In addition, all participants were informed that they are free to withdraw from the study at any time without any questions or repercussions for them.

Secondly, the collection of signage at the research sites did not require consent forms because it did not deal with any people. The researcher obtained formal permission from the management teams at the various facilities and ensure that no people were captured on camera during the data collection process. If, however, individuals are captured on camera,

the images were blurred so that viewers of the images will not be able to recognise the individuals. The participated were notified that their privacy would be guaranteed and were additionally educated on the potential hazard and advantages of taking an interest.

4.6 Summary

This section of the study gave an in-depth presentation of the methodological techniques and procedures used by the research in carrying out the study. The section explored the research methodology, sampling method, data gathering procedures and the data analysis methods used by the researcher. The research focused on a social semiotic analysis of healthcare signages at selected public and private hospitals in the Western Cape (South Africa). The ethical considerations followed and implemented during the course of the study to ensure safety of the study participants were presented in detail.

CHAPTER V

Building and Signage Placement and Construction

5.0 Introduction

Linguistic Landscapes (LL) utilises signs and symbols to communicate messages to the public. Signage used in LL are classified in accordance with the message(s) it intends to convey. The classification of the signage can be in any of the following forms. It can be formulated as regulatory-, warning- or even mandatory signs. Signage is an expected and common feature within both private and public health institutions. These signs and symbols are used to communicate messages or directions to the public in the absence of hospital personnel. During the presentation and analysis of the data, comparisons are drawn between Melomed (private) hospital and Tygerberg academic (public) hospital.

5.1 Research site observations

5.1.1 Tygerberg academic (public) hospital

Tygerberg academic hospital, founded in 1976, is a public health institution that is situated in Parow, an area in the Western Cape adjacent to the Central Business District (CBD), Bellville. During the apartheid regime, neighbourhoods surrounding this hospital was dominantly inhabited by "white" middle class South Africans since all entry of Africans into the Parow and surrounding areas such as Goodwood were restricted in 1939. The non-whites ('coloureds', indians and 'africans') were confined to their segregated cities (Oldfield, 2002). This segregation was accelerated in 1948 when the National Party (NP) seized power and began to vigorously employ the policy of racial segregation (Oldfield, 2002).

Tygerberg academic (public) hospital (figure 5.1) is still perceived by many to be a relic of the old apartheid design (Lewis, 2009). This link to the Apartheid regime was one of many reasons why Professor Household stated, in the Annual 2010 report that, Tygerberg is in need

of reconstruction and upgrading because the building's design still reflects the Apartheid history of South Africa.

The hospital, split down in the middle, has two halves which is the West Avenue and the East 'Avenue.

Figures 5.1: Ariel view of Tygerberg academic (public) hospital

During the apartheid era, the west side (figures 5.3) of the hospital was formerly used by 'whites' only and the east side (figures 5.2) was reserved for non-white patients (Lewis, 2009). Relics or evidence of this division is still present as you walk through the hospital corridors. The hospital building still consists of the West side and the East side which comprises the wards and the consultation rooms.

Figures 5.2: East side directory signs at Tygerberg academic (public) hospital

The difference now is that the East side (figure 5.2) of the hospital displays updated and modern direction signs whereas the signage pointing towards the West side (figures 5.3) still consists of older black and white signage as evident below.

Figures 5.3: West side directory signs at Tygerberg academic (public) hospital

According to Professor Craig Household, Tygerberg is the largest hospital within the Western Cape with 10 floor levels and about 1500 beds (Lewis, 2009; Annual Report, 2010). Furthermore, Professor Household stated that over 3, 6 million people received healthcare from Tygerberg academic (public) hospital, either directly or via its secondary hospitals during the 2010 period. However, to become a patient, a person must be referred by a primary or secondary healthcare facility. Therefore, all patients attending this hospital are seen on appointment basis only.

The hospital interior reflects a disadvantaged image which can be partially attributed to limited financial input. The bathrooms are not in a good condition, with entrance door-windows that are cracked, broken doors, toilets that do not have covers, taps that sometimes do not work properly and no toilet paper provided in some bathrooms. The repurposed paper signs in figure 5.4 are examples of notices posted on the locked doors of fully functioning toilets. Therefore, patients and visitors do not have free access to utilise the operational toilets. Instead, they need to collect keys from the respective reception personnel.

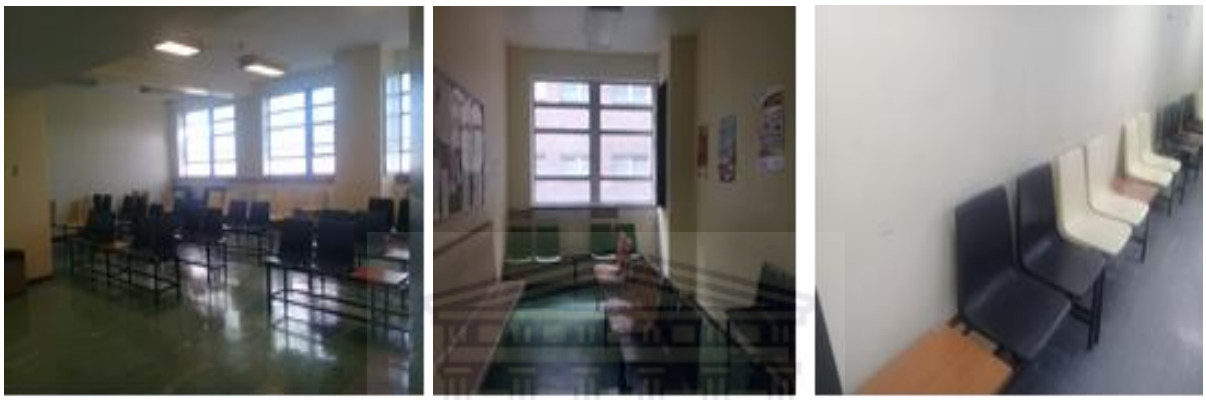
Figures 5.4: Notices to collect patient toilet keys at Tygerberg academic (public) hospital

Each section (floor) has numerous specialists and the waiting areas consists of multiple plastic chairs where patients sit in rows to wait for their names to be called (Figure 5.5). When staff members were questioned about the type of chairs that are in the waiting areas, they mentioned it was plastic-fiber chairs. This was interesting because one could clearly see that it is a hard plastic, yet they wanted to make it seem as if the chairs were of a better quality than what it really were. Fiberglass chairs are generally expensive and of higher quality than plastic chairs. In addition, having fiber chairs would suggest a sense of permanency whereas plastic is of a lower quality and could be seen as a more temporary state. The staff members wanted the chairs to be fancier than what they are because they might have wanted the researcher to have a better opinion about them or their place of work. An admin staff member at Tygerberg mentioned how "he feels embarrassed sometimes" when he tells people he works at Tygerberg hospital because he knows "the hospital's maintenance record is not good". Therefore, the lack of pride might have been one of the reasons behind the need to upgrade the idea of the manufacturing materials used to create the waiting room chairs.

From there, they are required to move to their specialist waiting area. The reception or waiting areas each have their own protocols as well as unique ways of decorating or arranging both their formal and informal notices.

Data collected also revealed that there's limited natural light coming through windows inside waiting rooms at Tygerberg hospital. Whether it is a patient or visitor waiting, the waiting room's design and lighting is important for enhancing their sense of security and reducing

frustration. Natural light, according to Kim (2005), is an important aspect since it was found to assist in patient recovery and also in reducing waiting room stress. Therefore, a waiting room's design, furniture and its light affects individuals because, as mentioned before, it can create a sense that an individual is safe and well looked after because daylight makes people feel more at ease (Clapton, 2018). Due to this lack of natural light, authorities provided extra lighting systems for the waiting rooms. Thus, they are aware of the limited light streaming into rooms as indicated in Figures 5.5 below.



Figures 5.5: Waiting areas at Tygerberg academic (public) hospital

Upon visiting the hospital it was discovered that some clinics, on various floors, have their own 'tuck shop' or snacks that are being sold. For example; the notices on the Ear, Nose and Throat (ENT) department's passageway wall (figures 5.6), indicate the availability of tea, coffee and muffins, whereas the signs in the children's allergy clinic section states they sell 'droë wors'.

Figures 5.6: Notices of available food and drinks to buy in ENT department at Tygerberg Hospital

A range of vendors and shops are provided across Tygerberg hospital's entrances, (figures 5.7), some organised by the hospital staff and/or management and others by independent individuals. In addition to the shops, there are also fruit and vegetable hawkers on the outside front of the pharmacy entrance as well as vending machines located inside at various areas on the ground floor. The inside vendors are in the form of trolley shops that are made available throughout the hospital and others are located (unofficially) in some of the specialist waiting rooms. The ENT department for example, sells muffins and tea whereas the paediatrics sells droë wors. These monies or profits made in the ENT department go towards the staff's petty cash to be used for specific purposes at a later stage. One individual walking around selling sweets and chocolates in the hospital stated that he makes enough money to buy food and other necessities for his family and that "Tygerberg has a lot of people every day that comes and sits almost an entire day waiting to be helped". This is good for his business because "when people are bored they tend to eat and that is when they buy his stock".

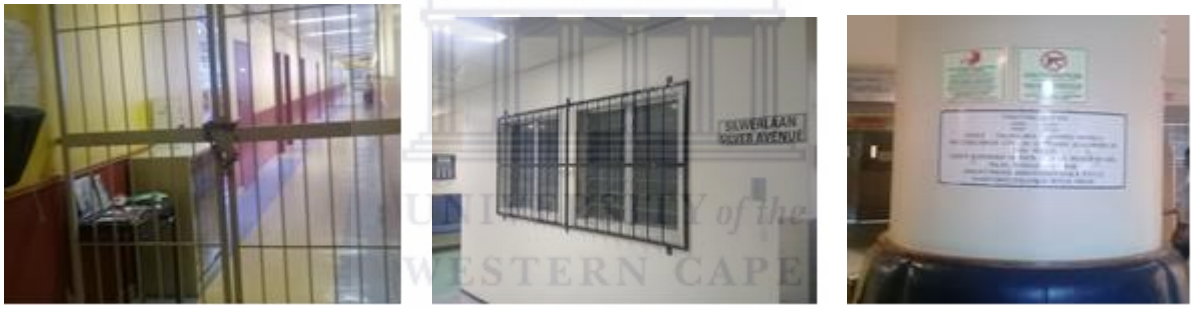
One of the reasons behind all the shops at Tygerberg is due to the large number of visitors and patients that frequent the hospital daily. The shops at Tygerberg are not high-end shops and can be classified as tuck shops that sell mostly home-made foods and drinks. Therefore, they cater for the lower income visitors and patients throughout the day.

Figures 5.7: Shops at Tygerberg academic (public) hospital entrances

There are numerous methods to reach the hospital with public transport. The Tygerberg train station is a few minutes away, thus patients and visitors can walk to the hospital from the train station. If not, there are minibus taxis available at the train station, for a reasonable fee,

that drop commuters at the hospitals. In addition, there are numerous other taxi and bus routes to Tygerberg hospital as well as back to various areas. The hospital grounds have several demarcated parking spaces for taxis, busses, patients, visitors as well as for the staff. Similar to the hospital building entrances, all entrances to the hospital grounds are guarded by security officers who stop exiting vehicles to perform random security checks.

In the past, hospital security has been questioned, but currently it is evidently being taken very seriously (Lewis, 2009). All entrances into the hospital buildings have security stations with scanners for bags and personal items to run through as well as metal detectors. Security cameras, security guards as well as signage (stating no weapons are allowed) are visible all over the hospital. In addition, the majority of the consultation offices and rooms on the lower levels of the hospital have security gates preventing unauthorised entry. Furthermore, all vehicles exiting the hospital premises can be subjected to random security checks as they leave.



Figures 5.8: Security Signage at Tygerberg academic (public) hospital

5.1.2. Melomed private hospital

The Melomed Bellville branch can be located on the corner of Voortrekker road and AJ West Street in close proximity to the Central Business District (CBD) area. Voortrekker road is considered one of the main roads since it is a lengthy road that connects Bellville through to most of the active Cape Flats area's busy "business" roads. There are also numerous minibus taxis and busses as well as private vehicles that make use of this road to access various goods and services. For example, if a person in Maitland needs to travel to Melomed Hospital with public transport, he or she will get into a taxi on Voortrekker road that runs from Maitland and get off further down in front of the Melomed building in Bellville.

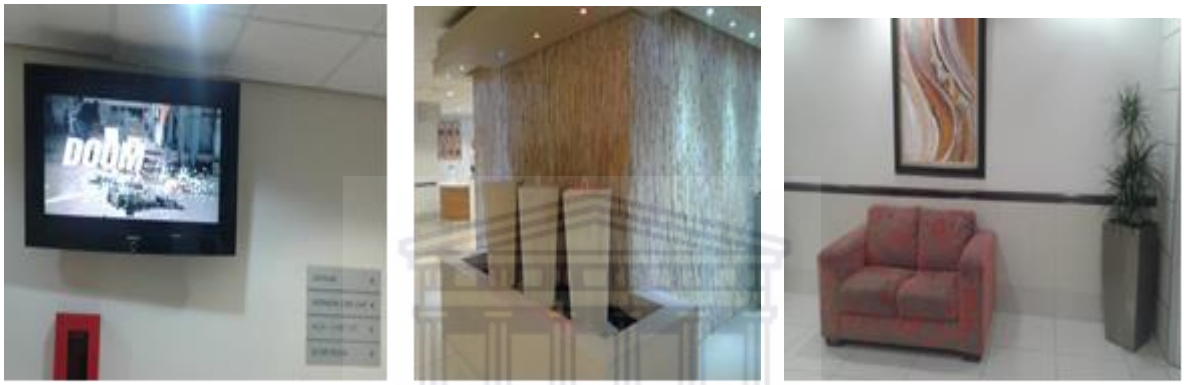
According to the Melomed private hospitals' website, the Bellville branch contains 123 patient beds, a 24 hour emergency unit and a 24 hour ambulance service that is based at the hospital premises. Furthermore, it states that this is a fairly new established hospital, thus it includes state of the art equipment and services such as a High care unit, Intensive care unit as well as ultra-modern theatres and is the first hospital in South Africa to have full digital x-ray systems.

Melomed private medical facility is one of many healthcare facilities that forms part of the Melomed private hospitals cluster. This cluster is a wholly black owned group that developed and opened Melomed facilities within the Cape Flats areas of the Western Cape. The Melomed Private group manages branches within Bellville, Gatesville, Mitchells Plain, Athlone as well as Tokai amongst others. As mentioned previously, this hospital group is fairly new compared to Tygerberg academic (public) hospital, thus it did not experience the apartheid governance structure and its transformative policies after the first democratic election in 1995. Therefore, unlike Tygerberg academic public) hospital, its brief history is not clouded with South Africa's unique racial past.

The main hospital reception areas, first point of contact, hosts a security desk where one needs to declare the reason for visiting before the security verifies which floor one needs to report to. The elevator is next to the security desk, thus he or she cannot enter the hospital building without first passing the security desks. If he or she is uncertain of his or her destination the security will phone to the appropriate offices to get the needed information and to verify appointments before allowing access in the building.

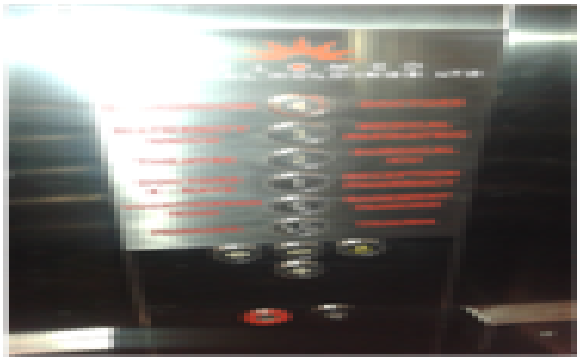
Figures 5.9: Security Desk at Melomed Entrances

The hospital reception or administration areas have been designed to feature the very latest in technology and aesthetic appeal with flat screen television- notice boards and water fountain features being displayed within the waiting areas. These floors contain a waiting area (figures 5.10) with comfortable sofas and chairs, a water display (fountain), as well as a comfortable in-house coffee shop where you can sit down and consume the offered food and beverages on sale. The reception area also has numerous counters at a central location with dedicated staff to attend to your questions and queries in a patient, friendly and helpful manner.



Figures 5.10: Waiting areas at Melomed Hospital

The hospital is visibly clean and seems to be hygienic, with state of the art facilities in all spacious clean and working condition bathrooms. The hospital itself is not overwhelmed with notices against walls and no visible bottom-up (informal) signs are posted anywhere in the hospital passages. The, English only, directory signs are displayed in the foyer as you enter the building at the security desk, the elevator has a directory board (figure 5.11) instead of a floor number panel inside where floor selections are usually made. Instead of selecting and pressing a floor number; patients, visitors and staff must press if they want to go to the doctor's offices, parking area, etcetera. If for example, the 'theatre' or 'reception' button was pressed and selected, the doors will open on the floor where the theatres or reception areas are located. Once the elevator doors open, a more extensive notice board will be positioned on the wall next to the opened elevator door.



Figures 5.11: Selection panel inside elevators at Melomed Hospital

The hospital has limited demarcated underground parking spaces (figures 5.12) for its visitors and its staff respectively that is controlled by the hospital's security officers. Once these parking spaces are filled the security will direct you to alternative spaces.

Figure 5.12: Demarcated Parking areas for Melomed Doctors, Patients and Visitors

The security at, in and around the hospital is visible, but not overwhelming to make you feel threatened, unwelcome or unsafe. The atmosphere is quiet and organised and no medical staff members were seen just standing around talking to each other. In fact on the day the research team visited the hospital, no medical staff (doctors) were visible in the passageways or around the visible sections within the hospital building. All the doctor or specialists have their private suites, which are decorated in a similar comfortable and clearly stylish manner (figure 5.13). The suites contains, couches, chairs, art work displays, plants, tables with reading materials, etcetera. There is also a clear sense of uniformity. All offices look the same. The signs and directories also look the same and there are no informal signs visible within the hospital.

Figure 5.13: Doctors and Specialist Private Suites at Melomed Hospital

5.2 Navigation and way-finding

Trulove, Sprague and Colony (2000) characterised the term way-finding as traveling or exploring that starts with one spot (A) going on to the next spot (B), but also as an essential movement that individuals connect for the rest of their lives. Essentially, they characterise way-finding as a critical thinking action in which choices are made through the elucidation of arrangements of navigational highlights that will get them from spot A to their destination at Spot B. Generally, it is believed that decent way-finding frameworks goes past the sign itself. It includes how the sign communicates or affects its viewer, its background as well as the viewer's own way-finding background. These frameworks, usually, works in conjunction with other physical aspects, which can include symbols, sound, pictures, amongst other direction indicators. Therefore, Trulove, Sprague and Colony (2000) argue that way-finding foundations should contain clear indicators with visual (arrows), verbal (description) and/ or sound-related pieces of information in order to be optimally effective.

As mentioned prior, navigation or way-finding as well as the signage used in support of it, are expected and important features within hospital domains to direct patients, staff as well as visitors to certain spaces and prevent unauthorised entry into other restricted or dangerous areas. It is worthwhile to examine way-finding and navigation signs and symbol that are utilised at two distinct public (Tygerberg) and private (Melomed) hospitals. These two health institutions have two very distinct sign systems implemented at their facilities.

An improved navigational configuration within hospitals can increase the services delivered and received, it also aids in the diminishing of worry and stress linked to confusion and getting lost; it improves security and it can also increase adequacy of information.

5.3 Construction and arrangement of signs

It was found that the signage at Melomed private hospital are consolidated into one unified professional design. All the noticeboards throughout the hospital space share the same characteristics. Whether it is the general notice boards or the notices at the various doctors or specialist offices, the design and layout share the same basics; grey metallic background with black texts in the same font type (figure 5.14).

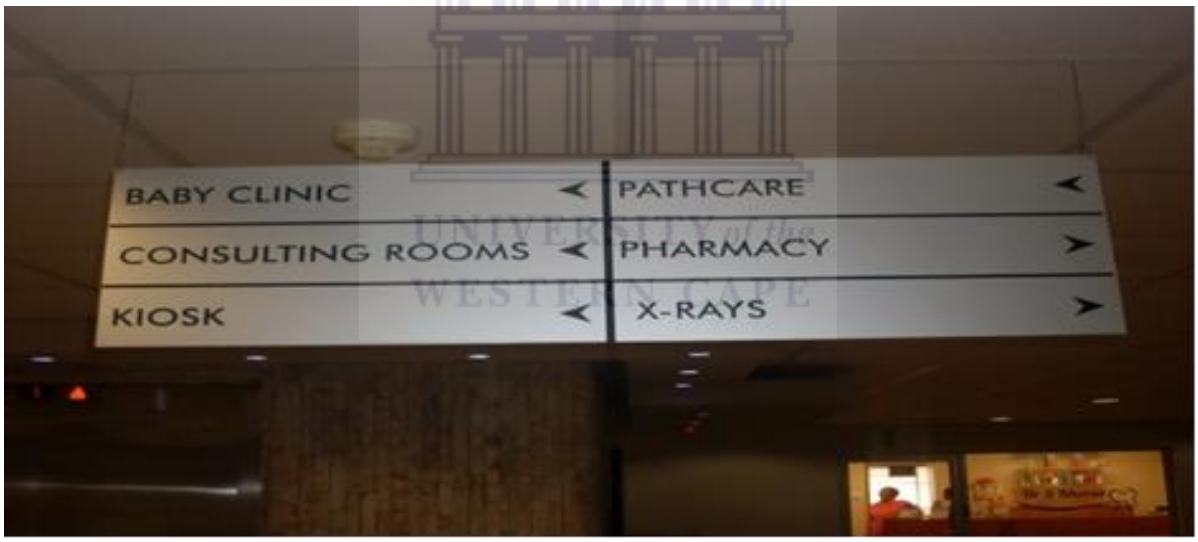


Figure 5.14: Directory Board at Melomed Private Hospital

The only minor differences is inside the various suites (waiting areas) of the various specialists or doctors (figures 5.15). The basic layout of furniture and wall decorations were all the same. All the suites have couches, chairs, coffee tables with reading materials, floors and paintings against the walls in the waiting rooms. The differences are in the designs of the couches and the types of art being displayed on the walls. No informal signage were present in any of the waiting rooms. Also, due to our cultural and background knowledge, the

paediatrician suite is easily identifiable by the pink and blue footprints on the glass door and the 'Winnie the Pooh' children's painting hanging in the waiting room (figure 5.15). Therefore, even though each suite was decorated with different furniture, it still followed a uniformed guideline of expectant placement of furniture.

Figures 5.15: Specialist Suites at Melomed Private Hospital

At Tygerberg Hospital, however, way-finding signage and symbols does not share a uniformed front. Tygerberg Hospital has a combination of old worn out signs (Figure 5.16) and newer modern signs (Figure 5.2) with various designs, composition materials, languages and colour systems. In addition to the combination of old and new signs, it was found that older signs remained on display alongside the newer modern signs (See figure 5.26). One more interesting concept noted at Tygerberg hospital was that several navigational signs are done at departmental level and do not follow a unified basic or primary layout or design style. This means that each department has its own way of constructing and displaying signage. In several cases, it was discovered that Tygerberg departmental signs are constructed from bond paper which are haphazardly placed on the walls, doors or windows (Figure 5.16 and Figures 5.17).

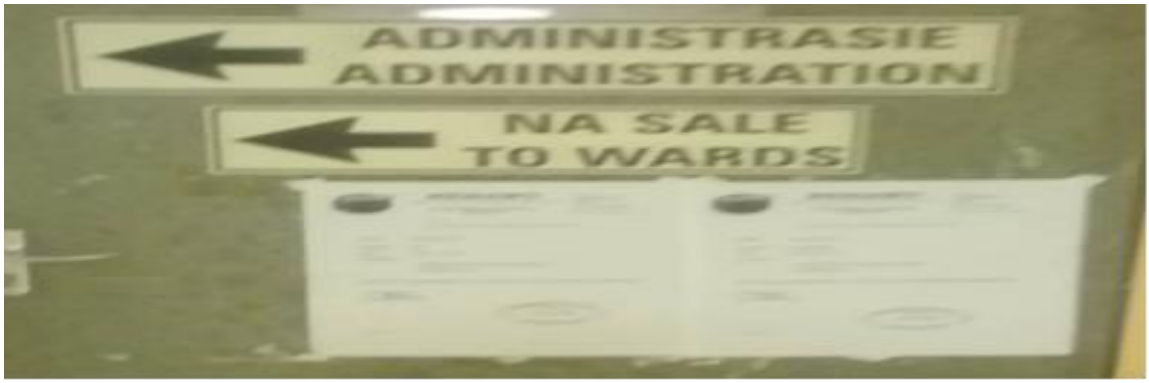


Figure 5.16: Wayfinding Signage on a door at Tygerberg academic (public) hospital

As mentioned, each department or floor has control on how to manage the signage in their own respective department levels. Figure 5.16 displays the wayfinding sign or navigational instrument that directs us to "Administration", to "wards", amongst others. This sign infers that if an individual needs to visit the accounts department or the pharmacy, for example, the individual will have to look elsewhere for the navigational signage pointing in that direction. In addition, the signage is placed on a door of a room that becomes confusing, as the purpose of the room is also not indicated or apparent. The aforementioned, therefore, leads to time consumption as well as frustrating the public accessing the health facilities due to the lack of information provided.

Figure 5.17: Wayfinding Signage on a door at Tygerberg academic (public) hospital

Figure 5.17 Offers information about two hospital departments, but the signage itself does not have direction arrows and the information printed on bond paper shows poor levels of linguistics. This is another indication of the signage allowed on a departmental level. Direction arrows is important as it has an informative effect on the public or the visitors. As highlighted earlier on in the discussion, written directory information should be accompanied by arrows to have a clear and concise communication effect. Figure 5.17 is not clearly communicating its intended message as one is left to come up with a lot of conclusions. One can be deceived (from a layman perspective) to believe that the signage is informing them that they need to make a line as the reception queue will start from the sign on the wall or that the urology department will only be in the allocated room on the days presented on the wall.

In addition, a picture and warning photo-notice of a wanted suspect is pasted partially on the urology room's notice, which can indicate a dangerous disposition to those wanting to visit urology. While in actual fact the signage is informing the generality of the public as well as visitors that they need to proceed to the demarcated areas, which is present on that section of the hospital grounds, to receive the needed health services. Such a signage makes navigation as well as the procurement of information (such as the dangerous person lurking around) a difficult and complicated exercise.

During observations, the researcher spoke to individuals visiting the facility. It was found that the widely held opinion of first time visitors is that they did not find the directory signs helpful. It was reported that the signs are not consistent which leads to the notion that "at the end of the day [they] still have to bother people or the security to ask them to help find [their] way" (Observed participant). Also, "if you are anything like me, I will walk around until I find a place because I do not trust to just walk up to strangers to ask" (Observed participant). These comments allude to the notion that even though Tygerberg academic hospital has directories and signs in place to direct people, the inconsistent design and placement of these signs cause further anxiety in first time visitors.

Figure 5.18: Notices of emergency procedures and hygiene placed on the notice board at Tygerberg Hospital

Also, Tygerberg hospital is still utilising bond paper notices (figure 5.18) on walls to communicate the emergency procedures. This can be classified as a risk because these bond papers can detach from the walls easily leaving the emergency procedures and information lost to the public. Therefore, the placement and design of signage are a unit that must be considered as a package deal. If not designed appropriately, in terms of colour, shape, material, etcetera, the intended meaning might be lost.

5.4 Placement of signage

The Health Facility Briefing System has it that entry points to the facility should be clearly identified from all major transport or circulation modes for instance roadways, bus stops, vehicle parking (figure 5.19 and 5.20). The exterior signage should be clearly visible from a distance and understandable with icons, universal symbols and/or cues for orientation. Boundaries between public and private areas should be well marked or implied and clearly distinguished.

Figure 5.19: Outside Signage at Melomed

Figure 5.20: Outside Signage at Tygerberg academic (public) hospital

Signage should be flexible, expandable, adaptable and easy to maintain. It should be consistent with other patient communications and support print, web, and electronic media. It is recommended that external directional signs have large letters on a contrasting background colour. External signs should be constructed of steel or aluminium if possible and be weatherproof. This is illustrated in figure 5.21 below.

Figure 5.21: Directions displayed outside the premises of Melomed Private Hospital

Arguably, the findings indicate that individuals regard having the capacity to approach staff for directions as a negative experience because some staff members are only knowledgeable about their own workspaces and its immediate surroundings. Rechel, et al. (2009) state that even if staff are knowledgeable and trained on how to give proper directions, if components like signage or tourist spots are not all structured, constant or actualised, the staff will keep on experiencing issues in giving viable directions. Consequently, if the physical components of the way-finding framework (figures 5.19, 5.20 and 5.21) are not proficient, the route troubles will proceed, and the clients will keep on losing their direction. It was found that even though the flags (figure 5.20) signify the location of Tygerberg academic (public) hospital to oncoming traffic, it is not a direction indicator for those inside hospital grounds.

To conquer or counter such expenses and effects the signage frameworks should be working as close units with different highlights of the way-finding framework, for example, the engineering, milestones, and so forth. At the point when it is inadequately consolidated, there will be real route issues, which will result in negative ramifications for the foundation itself. For example, once clients arrive at Tygerberg hospital they rely on additional signposts outside the hospital buildings to direct them to the correct areas they wish to visit. Passini (1996) called attention to the notion that the simplicity of flow inside (and outside) a structure and the time spared by not counselling confounding data, shows that the freedom from those tedious courses given by staff, are issues of structure effectiveness and have positive money related effects on the institution itself.

One must admire the placement of the signage at Melomed private hospital as compared to that of Tygerberg public hospital. Those signs are strategically positioned and organised to

attract the attention of the approaching public and visitors (figures 5.1 9and 5.21). Signage is certainly by all account not the only component that ought to be considered in internal way-finding. It has been demonstrated that it can diminish troubles by counteracting client disarray and dissatisfaction, lessen time spent by staff in giving ways, decrease the pressure related to way-finding errands inside as well as on route, and thusly lessen company costs (Carpman and Grant, 1993). The placement of signage and its consistency plays a huge role in terms of way-finding. At Melomed hospital way-finding signage are either placed on one noticeboard against a wall or it hangs from the ceiling. If not on a directory board against the wall or hanging from the ceiling, you will find signs containing additional pertinent information, in front at the bottom of reception desks within the various doctors or specialists suites only.

Information such as dates that can change at any time. Therefore, the informal signage posted inside suites, contains temporary important information only. All way-finding signage outside of these suites are combined and displayed on one type of notice board design. Therefore, you will not find informal signage posted on walls, doors or windows. Chambers and Bowman (2011) maintains that a great part of the accessible writing indicates that a productive spatial format and a viable signage design can affect impressions of patients concerning the general administration or services, since patients have more prominent access to data and assume greater liabilities for their wellbeing. Thus, according to Carpman and Grant (1993), patients' requests to take an interest in their own medical encounters develop from their aforementioned impressions. Various researchers agree that planning steady human service conditions can also aid in shortening the recuperation periods as well as elevate the mental conditions of staff, patients and visitors.

Therefore, the perception patients, visitors and staff receive from the placement and design of signage has an indirect effect on the wellbeing of the individuals. The placement of the signage is important because spatial designers can assist by considering the way clients communicate with the setting, which will require and promote a form of client association with the environment. Therefore, other than the social insurance, consistent way-finding signage can assist in the adequate usage of limited time, administration constraints and thus lowering anxiety levels within patients due to the creation of less confusion. The placement and construction of signage at Melomed hospital is a clear example of the positive results of consistent placement and design of signs and symbols. At Melomed hospital, navigation and

way-finding signage clearly gives locations and/or directions to locations of the services depicted on it.

In addition, before you reach the inside of the administration or doctor's floors. A map or directory within the elevators itself guides you on where to go. Figure 5.22 displays the selection panel within the elevator showing you each floor of the building accessible by the individual staff, patients and visitors. This strategic placement of directories further prevent first time patients, staff and visitors from getting lost and further decreases or at least not adding to any anxiety experienced.

Figure 5.22: Selection Panel inside elevators at Melomed Private Hospital

Placement of signage has proved to be of paramount importance in as much as the discipline of linguistic landscaping is concerned. A sign showing where the bin is as well as communicating the message that no litter should be placed on the windowsill is creating a communication barrier because the approaching public or visitor cannot easily access such a notice. Rightfully placed signage, placed where the public can easily see it, are more effective and communicates with the public in a more proper and effective way. Partially, as a result of such placement as depicted in figure 5.23 litter can be found in unwanted spaces.

Figure 5.23: Signage of bin point placed on the window at Tygerberg Hospital

The hospital authorities should therefore make it a priority that signs are easily accessed by placing them where they can be clearly seen as well as where they can draw the attention of the public. A danger warning sign , figure 5.24, placed at the doors of rooms with hospital chemical and/or electrical power control centres, among others, prohibit the public from entering such areas as entering such places will endanger their lives. Placing certain appropriate and visible signage on the doors and walls creates awareness to the public as well as attract attention; hence the choice of where and how to place a signage should be wisely articulated.

Figure 5.24: Danger warning signage placed at the door of a power control room at Melomed Hospital

A yellow triangle is an insignia of warning; hence the signage in figure 5.24 is communicating a warning message to the public; that they should be careful of the risk of an electric shock as they enter such areas. The signage is rightfully placed and is visible to the public hence effectively communicating a message to the intended target. The public is quickly made aware of the environment they are in as a result of where the signage is placed as well as his colour and design. In this case we are aware and expect that behind the closed doors is an electrical control room for the hospital hence caution should be applied.

Unlike placing the signage on the overhead, placing the signage on the walls or the doors as well as right at the entry points has proved to be effective. Placement of signage should be helpful to the general public accessing the services of the hospitals.

Figure 5.25: Fire response point placed in the hospital corridor at Melomed Hospital

The fire response point, figure 5.25, is placed in the hospital corridor for easy access in case a fire as well as communicating with the public that this is where the fire extinguishing equipment is being housed. One ought to imagine what would happen in case of a fire outbreak if such a signage was placed in the backyard of the hospital directing people to the emergency fire equipment instead of indicating the equipment is here. Such signs should also be accompanied by verbal messages to make communication effective because at times the general public accessing the services of the hospital is unaware of the message being communicated by such placements.

Melomed's signs are in contrast to the practices at Tygerberg hospital; where each department has its own way of creating and displaying signage. Consistency effectively help patients to locate desired services in the shortest amount of time as well as showing higher levels of professionalism. However, the design and layout of the Tygerberg hospital building itself, proves to make it a bit more difficult to have central points to display directory signs and symbols. For example, each floor or specialist department has more than 2 entrances or exists with more than one set of elevators and access controlled gates. Therefore, if a set of signs directed a patient to go right and the access gates are closed that patient would be frustrated and a bit lost because now he or she would not know the alternative route to get from A to B. In addition, too many signs in one area (figure 5.26) can be just as confusing as no sign at all.

Figure 5.26: Directory Signs at Tygerberg academic (public) hospital

Figure 5.26 contains signage that points towards two exists and elevators in opposing directions, towards a nurses station as well as towards a discharge transit lounge in the same direction as well as two differently constructed and placed directory boards guiding people towards the same wards. The picture itself is very confusing because the signs are constructed of different materials, various colours, designs, sizes and fonts. Also, the placement of the signs provides a condensed overpopulated corner. In addition to the irregular placement of signs, it is placed next to an unmarked door that can cause more confusion as the purpose of the room is not stated as it only contains a number 8 on the door.

5.5 Ultramodern signage versus traditional signage

Figure 5.27: Directory Board at Melomed Private Hospital Reception/ Entrance

The signage at Melomed Private Hospital are attractive and well-crafted to such an extent that the visitors and patients are impressed before even having access to any of the services offered at the hospital (Chambers and Bowman, 2011). The first point of entry into the hospital displays the emblem and a directory board (Figure 5.27). The directory board contains the health institutions emblem in colour as well as displaying all the offices in the building, floor numbers, room numbers and doctors' initials and surnames with a description of their specialty or services offered. Apart from displaying the needed information, this also reflects the commitment of the individuals mentioned on the notices. The names on the notice boards reflect some sort of permanency which in turn can relief some of the anxiety levels within patients because often, at public hospitals such as Tygerberg, patients are unsure whether or not they will see the same doctor consecutively since they cannot choose which doctor to consult. Patients or visitors of Tygerberg academic hospital do not make that decision.

According to visitors at Melomed, the "ultramodern nature of the hospital shows their seriousness as well as portraying the idea that the hospital services are keeping up with the evolution of technology and new breakthroughs within the medical field" (Patient). Because "surely if they put this much effort into the building looking swanky than they must certainly also put effort into the quality of the services they must provide" (Patient). The spatial design can thus be described as a display of efficient resources mobilised towards infrastructural

development. The administration, to this effect, is concerned with first impressions that the visitors or patients obtain before accessing their services. This is partially due to the notion that people often remember how something made them feel instead of what it said as well as the saying " first impressions lasts" (DePaulo & Friedman, 1998). Thus the way we say or perceive something makes people feel a certain way.

Conversely, Tygerberg has more entry and exit points than Melomed Private Hospital because it is a bigger building with more visitors and patients frequenting the institution on a daily basis. Contrary to Melomed, the notice boards evident when entering Tygerberg Hospital (Figures 5.28 and 5.29) do not display all the services offered at the hospital or all the room numbers or doctor information. This lack of information can be because Tygerberg is a public hospital, thus the doctors working at this health institution do not have their own private practices and rotate or change regularly. This also alludes to the notion that the doctors and/or service providers' change or rotate more than those at a private institution therefore they do not have to display any signs of loyalty towards the patients or institution itself.

Figure 5.28: Directory Board at one of Tygerberg Public Hospital's Entrances

Figure 5:29: Directory Board at one of Tygerberg Public Hospital's Entrances

The differences in the signage as well as the types of signs utilised speaks volumes. Figures 5.28 and 5.29 are two examples of the types of signs you immediately notice when entering the hospital. As mentioned previously, the informal bond papers that are pasted on walls, doors and windows are also evident upon entering the hospital. These bond paper signs can easily be altered or destroyed thus loosing significance as well as its purpose. The traditional signage utilised at Tygerberg gives an opposing image as to the ones utilised at Melomed. Some visitors that spoke to the researchers, judged the services offered based on the signage displayed within the hospital as well as the maintenance of the structure itself.

Whilst walking around and conversing with patients and visitors it was found that some visitors associated the black and white noticeboards with the hospital's link to the apartheid era. One visitor, an elderly 'coloured' gentleman stated that " os kan mos sien die wittes wil nog altyd gesien wies" (we can see that the whites still want to be seen). Upon further discussion it was found that the gentleman associates the standard of care and service delivery with the hospital's past association with the apartheid regime. This statement shows that the older generation has not forgotten the hospital's origins and that the colours of signage can evoke strong emotions (good or bad) within its viewer. The colour black is usually depicted as a negative, dark colour and can be associated with the country's history. However, it depends on an individual's culture and background since everyone's interpretation of it was different. Patients who originate from other countries or provinces might interpret colours differently to the initial ideas behind it.

For example, a Pakistani young lady replied that the noticeboard "reflects the inability of the hospital to keep up with its maintenance because it is clearly struggling with finances and it is

best to use money for important things such as medicine than to make the passageways look nice". This clearly contradicts the response of a local person who stated that "we are not important enough, was die nou n wit hospital da sal jy nie sulke stukkende goed gekry it nie" (if this was a white hospital you would not have found such broken things). These two opposing responses came as responses to the researcher asking the participants what they thought of the noticeboard in figure 5.29. Therefore, it is safe to say that the new trend of using a neutral silver or metallic backgrounds seems to be a much safer option than other solid colours. The foreign visitor acknowledged the lack of funding whilst the local visitor linked it to the institution's role in the country's history.

Signs should be neutral, clear, concise and structured and situated with the goal that they can be effectively observed in order to guarantee signage clarity, neutral text styles, tones (light or dark) and a clear message that most people will be able to decode and understand. Boonyachut, Sunyavivat and Boonyachut (2013) as well as Mollerup (2009) state that typography has the most effect on client perception of bearings. They further go on to say that the content and size will fluctuate as indicated by the needed textual style and textual styles with more extensive letter dividing will almost certainly utilise smaller content sizes while consolidated text styles require bigger sizes.

5.6 Historical significance and governmental influences

Melomed hospital's linguistic landscapes are very modern and contrast with Tygerberg hospital. This could be due to the fact that Melomed is a private sector hospital that does not rely on government funding. Moreover, Melomed is not government dependant and its managerial team can initiate policies and procedures aimed at improving unique services without the limitations and influence of government and its political structures. In addition to the limited governmental influence on hospital policies and procedures, Melomed does not have a rich history in terms of South Africa's unique past since it is a relatively young institution compared to relics such as Tygerberg academic hospital.

Tygerberg hospital is still linked to its colonial past as well as governmental influence which can attribute to the slow evolution of signage systems since there are limited funding and sources attributed or invested to such needed changes. Thus, Tygerberg academic hospital is

perceived by many to be a remnant of the old apartheid design (Lewis, 2009). The hospital, as mentioned before, still has the two halves which is the West Avenue and the East Avenue, created during the apartheid days to separate the various races. During the apartheid regime, the west side of the hospital was formerly used by "whites" only and the east side was reserved for non-white patients (Lewis, 2009).

It has proven difficult to move people's perception away from its origins, especially older patients who lived through the apartheid regime. One patient commented that Tygerberg is "still the same, but this time the colours are just reversed when it comes to who must get the better service". This patient (Older 'coloured' female) commented on the question about how the hospital changed from its establishment until its current state. She agreed with the previous notion that apartheid tendencies are still evident within the hospital building as well as its services, but that the hospital rules and regulations changed for the better.

This particular patient remembers the hospital since she was one of the "fortunate few" to be able to live in a day and age where one does not have to lie or fake serious illness to get tended to at this hospital. She remembers that they were only ever assisted by people of colour and that they were not allowed to walk around or use facilities in the other "kant" (side). Therefore, it is clear that Tygerberg contains a rich history amongst the locals some appreciated and others thankfully renegotiated and changed.

5.7 Language and diversity

Language is an important factor in communication hence most companies having existing language policies in place. The language policy considers the medical terms as well as choice of languages to be utilised at hospitals in Western Cape, which is influenced by the geographical location of the hospital as well as the target populations. Language choices on signs can either index the community within which it is used, or it can symbolise something about the products or health services which has nothing to do with the actual location. Navigation and way-finding are in most cases hindered by the choice of language and medical terminologies found on the signs, some members of the public as well as visitors are not familiar with such terminologies.

Medical terms influenced by local languages seem to be a common feature at local hospitals such as Melomed and Tygerberg alike. Signage containing complex terminologies as such figure 5.30 can therefore be confusing to patients and visitors who do not understand medical jargon. To make navigation and way-finding easier at Western Cape hospitals, the respective authorities have used various languages ranging from Afrikaans to English. Informative and clear names should be utilised to make names or directions simpler to articulate and recollect.

Rousek and Hallbeck (2011) guarantee that the language utilised should be effectively reasonable, and long sentences, abbreviations, or troublesome colloquial words should be kept away from. Thus, if colloquial jargon is utilised on signage, only a limited number of individuals will be able to understand the message(s) being conveyed as displayed by the image (figure 5.30) below. Complex embedded messages within signs can be a hindrance to the public and visitors seeking assistance at the hospital. One aspect that is often overlooked in terms of language diversity is the type of language utilised on signs.

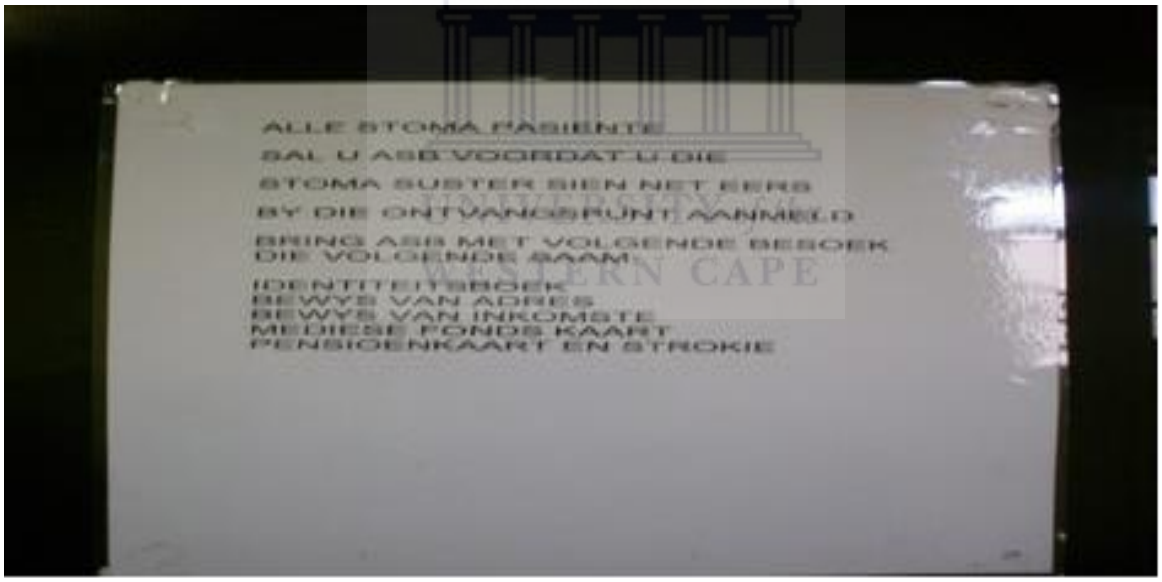


Figure 5.30: Informal signage with complicated language at Tygerberg Public Hospital.

South Africa is home to a melting pot of cultures and their respective indigenous languages. The languages mostly spoken in Cape Town are Afrikaans English and isiXhosa with English often used as the lingua franca. Most of the people in and around Cape Town has a fair knowledge of the English language and they tend to converse utilising both the informal and formal varieties of said languages. This being assumed, one has to take into consideration that

Afrikaans was the language of the government during the apartheid era thus some people still have negative connotations tied to this language. This is particularly true of individuals who are not innate speakers of the language or those that lived through the apartheid era and its legacy. Apart from the medical jargon utilised, the message in figure 5.30 is entirely in Afrikaans.

Afrikaans is one of the national languages, but only a limited amount of people are proficient in it. Therefore, by displaying a message in Afrikaans, only a limited population group is targeted. At Tygerberg public hospital authorities used laminated bond paper with complex and dynamic language which is complicated as depicted in figure 5.30. Also, they took time and effort to laminate the paper which assigns a sense of importance to the message they are trying to convey even though the message can only be decoded by the limited number of people who are proficient in the Afrikaans language.

5.8 Summary

Linguistic landscapes utilises signs and symbols to communicate messages to the public. Signage used in linguistics landscapes are classified in accordance with the message(s) it intends to convey. The classification of the signage can be in any of the following forms. It can be formulated as regulatory-, warning- or even mandatory signs. Signage are an expected and common feature within both private and public health institutions. The section presented an in-depth analysis of pictorial data gathered during the course of the study, the gathered data were categorised into sub-thematic and conceptual areas.

Chapter VI

The Human Perspective: Staff, Patient and Visitor's interpretation of the Signage

6.0 Introduction

Chapter six presents the hospital staff, patients and visitors' perspectives and interpretations of healthcare signage at the selected research sites. These aforementioned groups have different views and opinions based and influenced by their levels of education, understanding, culture as well as background knowledge or worldviews.

6.1 Building design

Building design refers to the provision of all information necessary for the construction of a building (Merrit and Rickett, 2001). The information must meet the owner's requirements and also satisfy the public health and safety requirements (Merrit and Rickett, 2001). Basically, it refers to the fundamental architectural, engineering and technical (amongst other) applications to the design of the building. However, it was found that buildings and cities can affect our mood and well-being and that specialised cells in the hippocampi region of our brains are attuned to the geometry and arrangement of the spaces we inhabit. Therefore, according to Grieson and Moultrie (2011), when buildings are poorly designed, they leave a lasting legacy for the next generation that extends adverse social, economic and environmental impacts. This proved to be true in terms of the lasting impact the purpose of the Tygerberg hospital design has on its current users.

The effect Tygerberg hospital's design has on its visitors and patients, thus, allude to the notion that the nature and state of hospital buildings perform a pivotal role in as much as communicating a message with regards to the services offered at the health institution. During the observations, the researcher came to the realisation that the buildings at Tygerberg public hospital were in a deplorable state while those at Melomed private hospital portrayed a totally different picture altogether. The staff members at Tygerberg public hospital also

shared different sentiments as with the staff at Melomed private hospital. According to staff at Tygerberg the design and internal areas of the health institution still depicts and resemble the "old era" as there seem to be no significant and noticeable changes in terms of upgrading and renovating the hospital structures.

> According to an admin staff member (Jack) at Tygerberg, "it is clear that the building was constructed for a specific purpose to keep the 'whites' separate from the rest". Jack further goes on to say that Tygerberg basically "has two buildings inside the one structure. If it were just one big building then it would have been easier to navigate. Staff members that has been working [t]here for over twenty years still gets lost because like myself they come to work and only goes to their specified work area. They do not venture around thus do not know the layout of the building itself"

His colleague (Sam) made a joke and said "judging by the state of the infrastructure, th[at] place could qualify to be a historical monument". They therefore, acknowledge the fact that Tygerberg hospital has a rich history that still has a major impact on the community at large. They also mentioned the various colour lanes (red-, blue-, green-, gold lane/ avenue) that runs through and across the hospital. According to both Jack and Sam, the different colour lanes were supposed to be a form of direction indicator. For example, if one needed to be in a specific area, hypothetically you could tell that person to follow the blue lane until the end and he or she will reach the destination. However, in reality that is not the case because even those lanes have inconsistent designs. One passage, according to Jack, looks different from various points of views. Thus if you are at the east end you would not know you are standing in the same lane because the west side entrance looks totally different "and to make it even more confusing, different specialist offices would be situated on the same floor down the same passage". For example, "you would walk down the lupus section of the hospital, if you continue you will walk past the gynaecological section ending or rather mixing with the gastroenterology department" (Jack).

Another concept that baffles the participant staff members is the passages around the hospitals that are unused. When walking down some corridors one can see that certain sections of the hospital are not used. Chairs, beds, amongst other unused equipment stand around in those passageways. As the researcher walked around the hospital with the participant, it was noted that some lifts in those areas are locked and also appear unused. Jack also shared with the researcher that he was invited to the nurses' quarters (Dias) and discovered that there are direct passageways from inside the hospital building that connects

directly with the nurses' quarters, but only a limited number of people make use or are aware that those passageways exists. He, himself, had no knowledge of those "secret" passageways. This adds to the notion that Tygerberg academic hospital is a maze. When it comes to the layout, the staff does not know how to navigate spaces that are not directly linked to their own work requirements.

Data gathered revealed that one is well convinced of the nature and type of services as well as products on offer at Tygerberg, but that getting to those services or products can create anxiety with patients and visitors. Sam (a staff member) mentioned that even though it is not always the case "without being told one can easily guess that the services offered are of lower standards then [those of] at private hospitals".

This does concur to statements made by Melomed patients when asked about their first impressions of the hospital building. Visitors and patients stated that they know the services are of a high quality because "surely it must be up to date with technology because if you pay so much attention to a building than the doctors must also pay attention to update themselves with new technology and procedures". Similarly, Tygerberg patients and visitors use the same argument but instead of an optimistic assessment, their views are not always positive. Without having interacted with any doctors or staff at the distinct hospitals, visitors and patients already formed an opinion based on the condition, design and décor of the physical appearances of buildings.

Visitors and patients commented that if they had money, Tygerberg would not have been their first choice. Sarah (a patient) mentioned that it has nothing to do with the standard or quality of services she receives from the doctors and specialists, but she simply does not like the "vuil" *(dirty)* nature of the building. According to Sarah, the service received "is sometimes on the same level" as the ones she receives from a private hospital in the Western Cape. In fact she was even seen by the same private doctor at Tygerberg academic (public) hospital. What she cannot fathom is that Tygerberg has great staff, but the building and especially the bathrooms are a disgrace. Therefore, once again, the condition of buildings, the layout or design as well as the cleanliness all plays a similar or even bigger role than the actual services rendered.

6.2 Geographical placement

Although the building design as well as the internal areas of Tygerberg leaves a lot to be desired, the placement or physical location of the institution seemed to invoke a more favourable opinion amongst its visitors. In as much as public health services are cheaper and affordable, people, according to the data gathered, are now resorting to private health services due to various reasons ranging from poor service delivery attributed to poor infrastructure as well as inadequate resources to lack of government and stakeholders support through health subsidisation, but also because of easier physical access to the facilities itself.

Murmson (2008) defines geographical placement or location as referring to the position on the earth. Therefore, it can refer to the physical locations of the hospital facilities within the Western Cape. Both Melomed private hospital and Tygerberg academic (public) hospital are located close to the CBD areas of Bellville. Melomed, however, was constructed next to one of the busiest main roads, Voortrekker road in the Western Cape Province. Voortrekker road, according to Fiewon (2016) "has the potential to significantly change the spatial form of Cape Town. It has all the right ingredients which includes a well-functioning public transport system, higher order social facilities, and lots of open space to build new housing projects." Thus Melomed private hospital is said to be located in one of the prime locations in Cape Town. Not only is it situated closed to highly populated business areas, the transport network allows people to freely travel on this route. "Sometimes it is not just because of the services offered. It is so much cheaper and more convenient to travel to Melomed than to the other private institution for me" (Patient Xara). Xara mentioned that because she travels with her children to the hospital, taking one direct minibus taxi or bus from her home in Woodstock allows her a sense of calm. The public transport drops her in front of the hospital, thus she gets out of the bus or taxi and walks into the hospital building.

Tygerberg is also just one or sometimes two taxis away, but the taxis travelling to Tygerberg hospital has peak and off-peak hours.

> Paul stated that "besides the fact that you have to be at Tygerberg very early if you want to make it home before 15h00 in the afternoon, you have to travel early because after 07h00 in the morning you have to sometimes wait for hours to get a taxi from Halt Road to Tygerberg. Most of the Tygerberg taxis pick up the regular working clientele and patients before seven because they know patients need to report early. After the peak run, those taxis prefer to work on the Bellville to Tygerberg routes".

John and Martha mentioned that they could only get a bus to Tygerberg hospital at 06h05 or at 7h25 from their location to Tygerberg in the morning and that there are no busses that can return them home. Once they completed what they need to do at Tygerberg they then need to take two taxis home or walk to the shopping centre complex (Parow Centre) and travel with one taxi from there.

> Yisses somtyds dan raak ek so vies as ek dink ek moet Tygerberg toe want ek weet die dokters kom eers pass nine but ek moet al six o clock bus vat anders moet ek loop van Sanlam af tot daar. Ek kanie altyd afford om twee taxis te vat nie en ai jy weet hoe ganit nou lately met die robberies ini taxis ook *(Yisses, sometimes then I get so upset when I have to think that I have to go to Tygerberg because I know the doctors only come after nine and I have to take a bus at six o clock or else I have to walk from Sanlam until there. I can't always afford to take two taxis and ai you know how it goes lately with the robberies in the taxis)* (Martha).

Even though John and Martha very strongly declared their unhappiness with their traveling system to Tygerberg academic (public) hospital, they also mentioned that they are happier with the services they received from Tygerberg since the doctors at a private health facility within the Western Cape did not satisfy their medical needs and cost them a lot of money. Tygerberg, according to them, assisted them by managing their situation in such a respectful manner that they do not actually mind the uncomfortableness of the travelling and the presentation of the hospital building. They do concur though that Tygerberg can be a maze at times.

6.3 Signage as form of navigational aid

A navigational aid is any sort of marker which assists individuals in navigation. According to the United States Coast Guard Light list (1945), "a navigational aid is any external device specifically intended to assist navigators in determining their position or safe course, or to warn them of danger or obstructions to navigation". Similarly, way-finding refers to the traversing of a safe course from a point of origin or departure (A) to a destination (B) with the help of signs and symbols who perform as an individual's navigational aids. However, many patients used the word "maze" to describe their experiences navigating through Tygerberg hospital.

Primarily, the data revealed that way-finding at Tygerberg academic hospital is of a complicated and sometimes stressful nature. The first staff-participant at Tygerberg hospital was a female security officer, Jenny, who resides in the Cape Flats area in the Western Cape. She is a native Kaaps (Informal Afrikaans) speaker and has been working at Tygerberg academic hospital for more than two years. As photographic data were being collected at Tygerberg hospital, the researcher was approached by Jenny to verify clearance documents since it is not allowed to take pictures or videos within the hospital buildings. Jenny asked the researcher to walk with her to the administration building in order to verify the needed documents. As we walked through the hospital, Jenny partook in an informal interview conversation. Therefore, the *commented walking* interview technique was utilised. Jenny revealed how difficult it is to navigate through the building. She shared that because the hospital building has numerous entrances and exits, different routes can lead you to the same destination. Therefore, "if you wanted to go to the admin building you can go down the passage, but on the way you will discover various direction boards pointing you to various other ways to get there". This, according to one of the general workers, Peter, is why people always get lost and angry. He further went on to say that because the hospital does not have one central information area than can direct you to one specific pathway or route, individuals tend to create a negative perception or attitude about the services they still need to receive. At this point, new patients or visitors either ask for directions or try to find their required destination on their own.

A doctor at Tygerberg academic hospital commented that the issue of way-finding at the hospital is backward and confusing because the signage that is supposed to direct and assist individuals are not even of a good standard and most of them are damaged. It was found during the photographic collection process that some signs are damaged or fell from their original placement and left where they fell since they can still be viewed. These signs are either placed on the floor or they were discarded without being replaced. As we traversed through the hospital on our way to the administration wing, Jenny used certain 'shortcuts' which I was incapable of retracing on my unaccompanied journey back to our original meeting place because of the absence of said navigational tools. Jenny also mentioned that the hospital is divided into a west side and an east side, and you as a patient, staff or visitor has access through both of those sides. Therefore, if you are not familiar with the hospital and are told to go to A3 on the east side, you will not know where to go because there are no specific boards telling you that this is the east side and this is the west side. She shared with

me that A3 refers to the third floor sections marked A just like C9, for example, would refer to the Ninth floor section C. However, new or first time patients are required to open their folders on the ground floor before they have to navigate to their specialists' floor without having the prior knowledge about floor and sections.

Both Jenny and Peter shared that when they started their careers at Tygerberg academic hospital. They constantly got lost because the navigational aids in terms of directory boards only provide floor and specialist information. For example, Ear, Nose and Throat floor 5, but it also does not state all the specialists or offices situated on that same floor or level. Jenny like most of her colleagues had to familiarise herself with the building and as time progressed she figured out on her own how to navigate her way to where she wanted or needed to be.

Jenny stated that there is no progress in as much as way-finding/navigation signage, since she started her job at the institution. The older ragged signs are still in the hospital and the new ones are just being placed next to or over the older signs. Sometimes it is confusing because the information on the newer and older signs is not always the same. For example, the black and white directory boards next to the lifts are divided into Afrikaans on one side and English on the other side. However, they do not have the exact same information on it. She shared that she still gets confused and sometimes forgets how to direct someone when they ask her for directions because "the hospital building is just too big and confusing at times".

The case is different at Melomed private hospital where way-finding /navigational signage are ultramodern. Staff at the hospital walk head over shoulders and appreciate the works being done by the hospital administration in as much as upgrading the standards of the hospital. Melomed has a uniformed and consistent way of allocating their navigational aids (signs and symbols). Thus, if one has to go to the paediatric unit, you can simply follow the streamlined directions.

In addition to the ultramodern signage at Melomed, "we do not have to look or search where to go. All you do is get in the lift and press 'doctors', 'theatre', etcetera, and the doors will open there for you (Gina). Gina also mentioned that she liked the idea that all the specialist and doctor suites (offices) are all in one corridor. If you followed the directory boards and are still not sure where to go, that you can simply just walk down the passage and look at the inscriptions on the suite doors". The suite number, doctors name and credentials as well as the specialty areas are all stated on the doors. The layout is of such a nature that you cannot get lost. "Once I missed the office door and I just walked back down the passage and found

the correct suite within five minutes" (Grant). The patient experiences at Melomed clearly contradict those at Tygerberg hospital.

Way-finding/navigation healthcare signage should be informative, accessible and easy to understand. Visiting patients at Tygerberg academic hospital and Melomed private hospitals acknowledge the existence of such signage at the two respective health institutions. Visiting patients at Tygerberg public hospital highlighted that navigating at the hospital leaves a lot to be desired as it is still too traditional and at times misleading, while visiting patients at Melomed private hospital share different sentiments as they stated that the signage are quite helpful. At Melomed private hospital navigation signage are visible hence easily accessible to the visiting public, noted one visiting patient. Visiting patients at Tygerberg public hospital were found telling a totally different story as the interviewed patients articulated that, yes navigation signage are there but re-routed on bond paper which at times is torn. In addition, they found multiple signs directing different routes to same destination which they found confusing and angered some of the visitors.

Navigational signage for the visitors, just like for the patients, should be informative, accessible and easily understood. If navigation is misleading and not accessible the visitors to the healthcare institution will find it difficult to access services at these institutions. It is in this regards that the visitors' perspective revealed that they normally get lost or fail to relate to the hospital environmental set up. Way-finding at the selected private hospital is more informative and ultramodern unlike that of the selected public hospital in Western Cape.

6.4 Manufacturing and positioning of signs

The manufacturing and arrangement of healthcare signage at the selected public and private hospital in Western Cape calls for concern. The staff members at Melomed private hospital applaud the construction and arrangement of healthcare signage at their hospital which they say are attractive and communicate a positive message to the visiting public with regards to the type of service offered at the hospital. The hospital signage are constructed using hanging and wall plaques which are made visible to the visiting public therefore making navigation and accessing services at the hospital easy. The case however seem to be different at Tygerberg academic hospital which is a government funded and managed institution, which

is clearly lagging behind. A blind eye is being cast on the construction and arrangement of healthcare signage at the public hospital. As opposed to Melomed, Tygerberg academic hospital's administration does not seem to be concerned with the construction and arrangement of signage. Tygerberg academic hospital makes use of repurposed or sublimated bond paper as healthcare signage, and these are haphazardly arranged and placed. The institution does not seem to have a policy in place that governs the construction and placement of signs in and around the hospital. The staff that were spoken to do not have much information in regards to policies and they shared that they do what they have to in order to get the message across. Sometimes "dan moet ons die pasiente inlig oor certain procedures dan plak ons n typed notice op die muur. Dit het maar nog altyd gewerk want dit is altyd tydelike kennisgewings" *(we have to inform patients about certain procedures than we paste typed notices on the wall. This always worked because it is always temporary announcements)*

Patients are not well informed about the construction and arrangement of healthcare signage as there are more concerned with accessing healthcare services from the selected healthcare institution. The little knowledge patients have pointed to the notion that, construction and arrangement of healthcare signage should be strategic and aimed at helping the visiting public. Patients' perspectives to this effect revealed that the healthcare service providers should invest more into the construction and arrangement of signage at the selected healthcare institutions in Western Cape.

Visitors to the selected healthcare institutions seem to share the same sentiments with the patients in this regard. To the visitors their major concern is accessing services offered at the selected hospitals as they noted that construction and arrangement of signs is a baby for the administration to carry. The visiting public however acknowledge the importance of construction and arrangement of healthcare signage at the selected healthcare facilities in Western Cape, but for them it is not a personal concern. They are more concerned about it affecting the required services.

6.5 Cultural parameters

Aronin, Hornsby and, Kiliańska-Przybyło (2018) argue that the scope of material culture includes how objects or intentions can be related to identity, minority languages, immigration and cultural differences. Therefore, languages and/or images used on particular signage 'are suggestive" and can implicitly reveal preconceived assumptions in regards to local cultural norms or expectations. Danesi and Santeramo (1999) agree that signs and symbols refer to their objects. Therefore, the signs and symbols that directs the visitors, patients and staff must have a clear and particular meaning attached to it that convey the appropriate messages to its viewer. The clear or particular message that the viewer will receive from said signs or symbols depends on various facets including, but not limited to, ideologies, beliefs, socio-cultural backgrounds, language practices and so forth. Thus a person's worldview as well as his/her nationality will have a huge impact on how signage will be interpreted. For example, if a white star is seen on a blue background, a Somali national might associate it with the Somali state flag instead of thinking about the starts in the sky painted on a wall to make the environment seem more child friendly. Thus, it is safe to say that individuals must at least have some knowledge of the local culture in order to interpret the signs and symbols utilized at the various health facilities correctly. Language used on signage and/or noticeboards has the power exclude or silence certain cultures while empowering or enriching other cultures.

Both Melomed and Tygerberg hospitals are located near the business district in Bellville, which are home to many migrants. Fairou (a Somali National) residing in the Bellville area, mentioned that it is very difficult for them to talk to the people at hospitals and other places because she feels that people "look at [them] negatively". She is not too familiar with the Cape Town culture and sometimes the staff talks to her in a language that she does not understand or expect her to know things that are culturally specific. For example, a foreign national was asked by a nurse to please keep her child with her. She made remarks that she needs to take care of her child and not let the child wander everywhere. These statements were confusing for Fathma (female visitor) because where she came from children are free to wander and wherever they go; people will be kind and direct them back to where the parent is. "If the child gets hurt they will appease the child just like I would be nice to any other child. We raise our children together, but the nurse made me so confused and I did not know what I did wrong". In another incident Fairou (female patient) and her daughter made use of

the dental facilities at Tygerberg hospital and the dentist made remarks of her lack of understanding in Afrikaans. She did not know what the dentist was saying but because her daughter was familiar with the Afrikaans language understood and told her at home. This made her sad but because she knows that there is "no Somali representation" at the hospital. When asked to clarify what she meant, she commented that if the hospital had Somali staff working there even if it was just one person in the department, it would seem more welcoming and it would make her feel more at ease because they would know her culture. She further went on to say that they are only allowed to see lady doctors and sometimes people do not understand the importance of this small act. Jada (her daughter) said it would be so much easier if Cape Town would accept that they are here and make a place for them. They further alluded to their situation being like the past apartheid because they are feeling unwanted and ridiculed by staff and other patients.

This behavior is not just limited to Tygerberg hospital. Melomed hospital faces a similar situation. One Congolese national (Ahmed) mentioned that when they visit this facility (Melomed) people look at them funny as if they do not belong here. They work hard and have the money to pay for the services, but "people just tend to look at how one's accent is". Also, "I was sitting in the hospital corridor waiting for my daughter's medication at the dispensary when I spoke to her about our animal spirit. The lady opposite me looked at me funny and actually moved a few seats away. Some families like mine adopt or take on an animal spirit that has been revealed to us as a type of guardian spirit to represent our family". Ahmed felt the need to explain the mystical powers associated with his family's animal spirit to his daughter and was judged by fellow patients. It just so happens that his daughter saw the familiar Winnie the Pooh painting in the pediatric suite and questioned her father about the significance of the bear. To explain this he, Ahmed, had to speak to her in his home language in order to explain better but also because some terms do not have an English word to explain it. This example points to the prior mentioned notion that signs and symbols can be interpreted differently depending on the viewer's worldview. The Winnie the Pooh painting could have been placed in the office to make it appear more child-friendly, but for the Congolese nationals it became a representation of material culture attached to the belief of spirit animals. Therefore, not only did the daughter question the presence of the animal in a hospital but also the father had to divert to his home language and shared culture in order to express himself comfortably to her.

6.6 Language diversity and material culture

In as much as the construction and arrangement of healthcare signage is important as an aid to service providing at the selected hospitals in Western Cape, it is of paramount importance also take note of the language used on the signages. The relationship between material culture and language diversity (multilingualism) has not received much attention, but the effect it has on the patients, visitors and staff at the various health institutions cannot be denied (Aronin, Hornsby and Kiliańska-Przybyło, 2018). Material culture, to a certain degree, is in itself a discourse of a distinct class which can communicate values, assumptions and ideas through material items. Therefore, material culture can be indexical of assumed belief systems, cultural norms or even language choices that are utilised or disregarded at places such as health institutions.

Data gathered from the staff members at the two selected hospitals in Western Cape revealed that language diversity is a cross cutting issue at both public and private hospitals. Medical terminologies apply to all healthcare institutions irrespective of whether they are government or privately sustained. In addition, language diversity, according to gathered data, is influenced by the local areas in which the hospitals are situated. Therefore, it can be said that the scope of material culture overlaps with the LL even though the material culture of multilingualism is much broader because it is not limited to public spaces and can include objects such as exhibitions, souvenirs, customs, public displays or cultural communicative norms and regulations (Aronin, Hornsby and Kiliańska-Przybyło, 2018).

Communication is vital at all social levels hence the need for serious considerations. Gathered data revealed that, language diversity plays a pivotal role in as much as communication at hospitals is concerned. The visiting patients noted that some medical terminologies are at times confusing so are some of the languages used on healthcare signages. Some of the patients who I spoke with during the course of the study noted that language diversity, sometimes, allows them to understand what the signages are communicating as it is written in a language they can understand. Signs, according to Banda, Jimaima and Mokwena (2019) are an expression of the sign maker in order to realise meaning. These signs are "usually culturally available semiotic resources which have been shaped by practice of members of social groups and their cultures" (Banda, Jimaima and Mokwena, 2019: 77).

According to Saussure (1998), language is the social manifestation of speech. This coincides with the social sciences' reference to relationships between artifacts (including language choices) and the social relationships when discussing material culture (Aronin, Hornsby and Kiliańska-Przybyło 2018). Linguistic signs are by nature linear because they represent a span in a single dimension. Thus it can be said that signs are linear because they are based on singular cultures or cultural expressions. Thus linguistic sings may be, to a varying extent, be changeable or unchangeable depending on its viewer and their cultural experiences (Saussure, cited in Richter, 1998). Accurate consistent and systematic collection of data on patient race, ethnicity and primary language is a key component of efforts to reduce health disparities (Wilson-Stronks and Galvez, 2007).

For example, upon speaking with a Somali national at Tygerberg hospital, it was shared that although it is evident that she does not speak any of the local informal vernaculars or standard languages, some staff members still converse with them in their own language, and get upset, even angry at them when they do not react or respond the way the staff expect them to. Due to the language barrier, in this instance, the patient was unable to tell the medical staff their problem and the nurse was unable to direct the patient properly.

Aronin, Hornsby and Kiliańska-Przybyło (2018) argues that the scope of material culture includes how ideas and goals or intentions can be related to identity, minority languages, immigration and cultural differences. Therefore, languages and/or images used on particular signage 'are suggestive" and can implicitly reveal preconceived assumptions in regards to local cultural norms or expectations. The actual communication, linguistic interaction, observed between the staff and patients also revealed the aforementioned preconceived assumption and expectations. One patient even made a comment stating that she is too old to learn their language because everywhere she goes someone knows how to speak Afrikaans or English anyway. Although true in this particular patient's experiences, it cannot be said of most of the immigrants utilizing those same services because not everyone has the same capacity or willingness to learn or experience new languages.

The data disclosed that sometimes foreign nationals do not feel comfortable at health institutions because of the lack of respect, not being acknowledged for who they are and also because their language use (mother tongue) is not taken into consideration. Both Melomed private hospital and Tygerberg academic (public) hospital are situated in Cape Town, a diverse, multi-cultural, multi-ethnic and multi-lingual society. Melomed is closer and easier

accessible from the Bellville CBD side, thus if people can afford it, they make use of the private facilities at this institution. Yet, signage at Melomed hospital are only available in the English language. Most of their signage are generic direction indicators, but some medical terms are forms of jargon for people with limited English.

The aforementioned diversity factors are not well-represented or reflected on signage in terms of language choices and/or cultural indicators. With the unswerving influx of migrants in the Western Cape, it is inevitable that they will be making use of the hospitals in the area closest to them. Yet, there are no Somali language signs or brochures, for example, visible at either of the research sites. According to Leeman and Modan (2010:191), a "language's status as a readily identifiable index of ethnicity and cultural authenticity casts it as a selling vehicle par excellence" (cited in Jimaima and Banda, 2019). Therefore, the use of diverse languages, whether formal or informal varieties, are valued based on their representation of different ethnic groups and cultural qualities as well as regional affinities. This lack of language diversity might be one of the contributing factors as to why migrants felt uncomfortable communicating with staff at these institutions. A native Afrikaans speaking patient at Melomed shared that she does not understand English very well and sometimes struggles to explain herself, but because it is a private institution she just "makes do" because it is better than sitting and waiting hours at Tygerberg. Banda, Jimaima and Mokwena (2019) revealed that local people do not necessarily "read" and recognise the signs the way foreigners would. This could be because locals have background knowledge and experiences that create an expectancy of what is supposed or expected to happen in certain scenarios that are taken for granted since that same knowledge eludes foreign nationals. For example, unless you have prior experience or knowledge, foreign nationals would not know that South Africans have many different greeting styles and tend to mix language or cultural or even religious indicators when communicating with others. For example, a receptionist might greet a person saying "Molo, the doctor will be with you gou gou". A mixture of formal and informal languages, but also three distinct language varieties utilised in the same expression. The foreign national might expect to be assisted right away whereas the local person would know that the informal use of the words'gou gou' means one has to wait.

The findings suggest that systems for the provision of language services in hospitals across the country are still a work-in-progress. There are, however, investments in the creation of perceptions which aim at creating universality by choosing semiotic resources that underpin national inclusion and collective sensibilities and accessibilities (Jimaima and Banda, 2019).

These resources can include pamphlets or information signage printed in multiple languages or the use of translators.

Both hospitals in this project had mechanisms for identifying the linguistic needs of patients and written policies but many did not provide ongoing access and did not assesses the competent bilingual abilities of the staff or the inclusion of staff familiar with foreign cultures and languages.

6.7 Literacy levels

Traditionally, most dictionaries defined literacy as the ability to read and write. However, the contemporary view of literature is broader since it also considers an individual's perception, interpretation, understanding and knowledge in specific areas. This proves to be true for patients and visitors of the chosen medical institutions within the Western Cape since some of them commented on the complicated languages being used on posters. Ahmed, for example, mentioned that he is not familiar with words such as "kiosk" and "suite". He pointed to these random words on a few notices as he walked to his destination. Similarly, Sarah pointed to words such as "stoma" and "endocrinology" at Tygerberg hospital. However, even they did not understand the words they "knew" what they meant. Sarah for example did not understand what the word endocrinology meant but she could explain to me what the department was about in her own words. She, therefore, understood what services were being offered in the department and also why one would need them, not knowing that she is basically explaining the meaning of the word anyways.

Physical design elements impacting way-finding includes signs and symbols which contains interior elements such as artwork, display boards, architectural features and maps, amongst others (Huelat 2007; Hasim et al. 2014). Therefore, the physical environment has a vital role to play in the aiding of navigation in healthcare facilities (Pati, et al., 2015). Literacy levels can be hindered or influenced by language diversity irrespective of the fact that one is well educated and can read and write. The study respondents noted that one is most likely not going to be able to understand some of the languages used in healthcare signages because of the complex jargons.

Literacy levels influences linguistic landscapes in that patients and visitors might not be in a position to interpret the surrounding LL due to the complexity and dynamics of the language(s) used on it. Sometimes, according to the data, patients are unable to interpret the complexity of the words, text on a poster, but they understand pictures or colors associated with the intention behind the construction of a signpost. In such situations, they will forgo asking for assistance and try to figure out their designated route on their own

6.8 Summary

Chapter six of the study presented findings and analysis of the human perspectives with regards to the discipline of linguistic landscapes, focusing particularly of healthcare signage. The human perspective was categorised into staff perspectives, patients' perspectives and visitors' perspectives. The considered study population aired out their perspectives which were useful and important to the study.

CHAPTER VII

Conclusions, Limitations and Recommendations

7.0 Introduction

Conclusions, limitations and recommendations to the study are outlined in this section. Limitations are influences during the research process that cannot be predicted or controlled. This chapter presents the limitations that influenced the methodology, findings and conclusions that were beyond the researcher's control. The conclusions, however, are drawn from all the sections of the study while the recommendations are targeted at the various healthcare stakeholders in the Western Cape.

7.1 Research intention outcomes

The following section summarises the concluding remarks in terms of the research objectives and their questions.

7.1.1. Intention 1

To explore the semiotic ecology of the linguistic and cultural materials used in way-finding signage at selected hospitals.

The results show that Tygerberg academic (public) hospital's visitors, patients and staff strongly rely on the directories and additional sign systems to navigate through and around the hospital. Moreover, it was discovered that Tygerberg has a vast percentage of informal signs constructed from plain bond (white A4) papers. It has a mixture of the old black text on white background signs, the newer black text on metallic background signs as well as numerous other signs constructed from different materials and in different colours. In addition to the aforementioned signs, Tygerberg still has the older Afrikaans and English black background with white text noticeboards that have not been maintained, on display.

The older black text on white signs can be found next to the newer grey metallic signs, yellow background on black and the newer blue border, black writing on metallic background signs. Therefore, it was concluded that signs at Tygerberg hospital do not have a uniformed standard. One of the reasons for the diverse construction materials as well as the design and layouts is that navigational or notification signs (amongst other types) are done at departmental level.

In contrast to Tygerberg academic (public) hospital, signs at Melomed private hospital share the same characteristics as they are constructed from the same materials and utilise the same font types and sizes of text on all their directory and notification signboards throughout the hospital. All the Melomed signs are constructed from a grey metallic material with black text on it. The only informal signages in the hospital were inside the respective specialist suites and they only contained typed out temporary messages, unlike the written out signs in some of Tygerberg hospital's passageways.

Therefore, it can be concluded that the linguistic and cultural materials used in wayfinding at the selected public and private hospital is largely dependent on the implementation of the hospital rules and regulations. For example, Tygerberg has a very relaxed approach in terms of its signage. Compared to Melomed, Tygerberg does not seem to have strict, rigorous policies and guidelines in place to govern the construction and/or placement of its directories or displays within and around the hospital. It is clear that Melomed hospital is firm and place great emphasis on the enforcement of the hospital's reputation and the way patients, visitors and staff view the hospital. Therefore, the hospital creates a homely feeling in terms of the design and construction of their various signs.

7.1.2. Intention 2

To determine the effectiveness of the multilingual/multicultural and multimodal resources used in the production of signage at selected private and government hospitals.

Apart from the construction material utilised to manufacture the much-needed navigational instruments at the various health institutions, the language(s) utilised or not utilised also plays a pivotal role in navigational experiences.

The findings reveal that Melomed private hospital only utilises one official business language, English, on its directory boards, whereas Tygerberg academic (public) hospital utilises two sometimes three of the South African official languages on its signage. These languages are Afrikaans, English and isiXhosa. However, even though English is the only language officially used at Melomed hospital, the staff and security still assisted individuals in their mother tongues, whenever possible. The only people who could not be assisted in their mother tongues were the foreign patients and visitors. The staff members at Melomed hospital understood that not all local patients and visitors understood the languages portrayed on the directory boards and therefore mixed local vernacular during communication events.

Similar to the staff at Melomed, Tygerberg staff also communicated to patients and visitors in diverse languages. However, the staff at Tygerberg utilised their own mother tongues first to assess whether or not the patient or visitor had some understanding of the language. This resulted in the patient or visitor to feel inferior or unable to express themselves correctly, but on the other hand it also enabled individuals to talk more freely.

Therefore, it can be concluded that the effectiveness of the multilingual/multicultural and multimodal resources used in the production of signage at selected private and government hospitals largely depends on how they are implemented, but also on who the target audiences are for those type of signage. For example, Melomed did not see the need for multilingual signage and wanted all its patients to be serviced in the one official language only. Yet, their staff still tried their best to communicate in a language comfortable to the visitor or patient.

Tygerberg, on the other hand, recognises the positive effect of the multilingual nature of their signs, albeit limited, had on the patient experience. The staff, who mostly spoke an informal variety of Afrikaans and English when observed during the data collection stage, felt more comfortable communicating with the staff in their own language varieties. The aforementioned, was also portrayed in the informal departmental signs. If the producer of the sign was an avid Afrikaans speaker then the sign was constructed in Afrikaans.

7.1.3. Intention 3

To explore the extent the placement of signs, symbols and directories impede or aid navigation and information provision at selected private and government hospitals.

As mentioned prior, the production and construction of signage are just as important as the language(s) used. However, findings show that in addition to the aforesaid, the placement of said signs are another important variable that must be taken into consideration. Most patients appreciated the consistency of the signage at Melomed hospital in comparison to the responses received from the visitors, patients and staff members at Tygerberg. The data indicates that the strategically organised and positioned signs attract the attention of approaching public and visitors easier than the ones that are haphazardly place. At Melomed signs were placed immediately outside of the elevators as well as near entrances to the lifts and doors. In addition, signs were also hanged at eye level from the ceiling in a consistent and similar manner.

This however, was not possible at Tygerberg hospital because of the complex layout and building design. The findings show that Tygerberg academic (public) hospital catered to such a large population of patients that it consists of 10 floors. This resulted in the hospital building having numerous entrances and exits with confusing interconnecting passageways that can lead to the same destination. Therefore, it can be a daunting task to try and create a system where all signs and directories are consistently placed and indicating single directions because each destination, like the pharmacy, has numerous lifts and passageways that can lead the patients, staff and visitors to it by following more than one route.

Therefore, it can be concluded that the placement of signs, symbols and directories at selected private and government hospitals can impede or aid the navigation and information provision. The impediment of navigation and information provision can cause visitors, patients and staff extra anxiety which can prolong their arrival at their destination. This in turn can cause them a prolonged stay at the institution since Tygerberg works on a first come first serve basis, but it also can have a negative effect on the staff as they will have to wait until the patient and or visitor arrives before they can start their duties. Therefore, the placement of signs, symbols and directories can create a ripple effect that affects all the parties involved directly.

7.1.4. Intention 4

To investigate to what extent signs and signage reflect recent changes in demographic and migration patterns.

The data revealed that foreign nationals do not feel comfortable at hospital intuitions because of what they termed "lack of respect," not being acknowledged for who they are and also because their language use is not taken into consideration. Even though it is evident that there is an abundant foreign population that frequent both Tygerberg and Melomed alike, no provision was made to incorporate their languages or cultures into the distinct health institutions policies and procedures. When data were collected and observations concluded, no foreign personnel were noticed, no foreign languages were included on any signs and symbols or brochures in either hospital. Therefore, it can be concluded that even though the managerial teams at both the government and the private institution are aware of the influx of migrants and the recent changes in the demographics surrounding the geographical areas of the hospitals, no provisions were made to adapt to these aforementioned changes.

7.1.5. Intention 5

To explore the geographical placement of the selected hospital facilities as a factor in their accessibility to previously disadvantaged groups in particular.

Both Melomed and Tygerberg hospitals are located close to the central business district areas of Bellville. These areas are constantly busy and have a fairly reliable public transport system. Melomed is located directly next to one of the busiest roads in Cape Town whereas one needs to take a form of transportation to Tygerberg hospital if one does not want to take a risk walking.

Tygerberg is located directly next to an area that was previously demarcated as a 'white' area during the apartheid regime, thus it is a bit more complicated to travel to Tygerberg than to Melomed from previous 'coloured' or 'black' neighbourhoods such as Elsies River or Langa. As mentioned before, Tygerberg is just one or sometimes two taxis or busses away, but these public transport systems to Tygerberg hospital have peak and off-peak hours. Thus, if one, misses a taxi or bus during the peak hours the journey to Tygerberg becomes longer and much more complicated and sometimes frustrating. In addition, to the longer journey it can also be expensive to travel during off-peak hours.

Travelling to Melomed, a fairly new hospital, is a bit easier in terms of time and finances since it is located directly next to one of the main roads. Therefore, one can take a direct taxi to Bellville and just get off in front of Melomed ready to enter the building if one desires to do so.

Therefore, it can be concluded that the geographical placement of the selected hospital facilities affect their accessibility and that it is more complicated and expensive to travel to Tygerberg from previously disadvantaged areas. However, if one travels with his or her own personal transport, the travelling to and from these facilities presents similar complications as well as conveniences.

7.2 Limitations

Although a variety of linguistic theories was utilised, this research project did not cover all the LL interpretations and understandings. Furthermore, the limited literature available in terms of recent studies carried out on the subject matter made it difficult to analyse certain data sets. The fundamental intention of the study is centred on a social semiotic analysis of healthcare signage at selected public and private hospitals within the Western Cape, South Africa. A Comparison was drawn between Melomed private hospital and Tygerberg Academic hospital, hence limiting the research to only two case studies.

Initially, two private hospitals (N1 City and Melomed) and two public hospitals (Tygerberg academic hospital and Karl Bremer) were considered for this research project. However, N1 city hospital-management did not consent to take part in the research project and Karl Bremer (government hospital) had an online application webpage that took several months to respond to the request to conduct research at their health institution. In addition to the delayed online approval, the administration staff at the hospital was not available to give the approval. They needed to assign a staff member to walk around the hospital with me during the collection stage, but did not have someone available. Due to the element that the research focussed on two research sites or case studies, the research findings were difficult to generalise.

Time was another key factor that influenced the research study. The researcher had to balance the research study, work and other personal commitments in addition to waiting on approval from the various hospital ethics boards.

Last, but not least, Melomed hospital gave approval for photographs to be taken in and around the hospital, but the private suites or offices could not be entered for data collection. It was also requested that the patients, staff and visitors not be disturbed. Therefore, I could not conduct formal sound recorded interviews with individuals. I could only manage to speak to a few individuals casually. After our conversations, the information had to be written down from memory. The lack of sound recordings forced me to take physical notes with pen on paper which limited the data scope once again. It was time-consuming and many interview markers such as body language, facial expressions, and so forth, were lost because I could not remember everything as I wrote down participant responses.

These unintended limitations caused this project to deviate from the original intended timeframe and data scope.

7.3 Recommendations

Healthcare stakeholders such as the Ministry of Health should invest and channel resources towards improving healthcare signages at public hospitals rather than casting a blind eye on this. The private sector should also endeavour to partner with the local government to improve the outlook of public health facilities such that they can have the same standards as those found in private healthcare institutions. Decentralisation of some of the government owned institutions can attract attention from potential players who can come on board and improve the depreciating healthcare signage standards at selected public hospitals in Western Cape.

De Beer and Chipps (2014) argue that a healthcare system that is staffed by a culturally competent workforce can provide a higher quality of care to diverse population groups. Therefore, if individuals familiar with the migrant cultures and language(s) were employed as staff members, they will be able to connect more with the migrant population than someone unfamiliar with their language and culture. Those staff members will be able to notice cultural cues and act or assist accordingly.

7.4 Conclusion

In conclusion, this proposed research project contributes to the body of knowledge in regards to social semiotics as well as linguistic landscapes. The study has policy implication for building designs, navigation designs of health facilities, for access to health facilities as well as access to its services and information. This research does contribute to health sector policy planning regarding the ever-changing population demographics in the Western Cape Province and South Africa.

Limitations to the study ranged from financial, demographic and physical barriers among others. Study limitations do have a direct impact on the outcomes of the research study hence it had to be addressed during the course of the study.

Recommendations to the study were drawn under this section of the study bringing the research study to rest. The recommendations outlined were targeted at the various concerned healthcare stakeholders ranging from the government of South Africa to the private sector.

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