AN EXPLORATORY STUDY OF RATIONALES INFLUENCING ROADS AND ROUTE CHOICES OF PRIVATE CAR OWNERS: CASE STUDY: BISLEY PIETERMARITZBURG

MZWANDILE MAKHOBA

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**University of Kwa-Zulu Natal, Faculty of Humanities, Development, and Social Sciences,
PIETERMARITZBURG Campus**

Supervised by BINIAM MISGUN AND SIMON BURTON

Declaration

I, Mzwandile Makhoba, hereby declare that the work submitted is entirely my own unless so indicated in the text and that no part of this work has been submitted for a degree at any other University.

Signature ……………………………..

Date …………………………………

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Abstract

Roads are a significant element of modernity. They are not only sites that facilitate mobility and fluidity needed for modern capitalist economy but also spaces which signify the social relations formed within the system. This conceptualization of the road is central to the project at hand. The aim of this research is to unpack factors influencing route choices of private car owners in the Bisley area in Pietermaritzburg in terms of their primary activities (going to work, shopping etc.) and what socio-political contents inform and frame these rationales. Additionally, this research explores the extent to which crime influences spatial consumption and mobility patterns.

The research made use of qualitative approach that sought to interrogate the contexts within which what is considered rational choices are made and provide insight into how private car owners in Bisley area contextualize their decision. In-depth interviews with individuals (owners of private car) from various households in Bisley were conducted. The findings reveal that drivers use routes that provide them with the maximum positive outcomes, and consider their options within multiple factors as they arise out of the conditions on each road and each trip. The study also found variations in terms of the mode of rationality used in situational contexts and their multiplicity. For example, morning traffic prompted the drivers to use instrumental rationality; whereas travel during other parts of the day was not restricted to this form of rationality. The findings of study also in some ways support already existing view that there is a link between spatial consumption and perceptions of crime; however, this requires further interrogation of this theme with systematic data collection appropriate to it. Most importantly consideration of safety on the road definitely shapes decisions of the research participants on which roads and routes to frequent, and at which time of the day.

Furthermore, the study through the tracing of participants' movements using maps shows the ways in which class and race feature on the roads of the country. The study argues that class rather than race is re-spatialized in post-apartheid South Africa. This was attributed to recent socio-political and economic dynamic developments taking place in South Africa, where the black majority is becoming more affluent.

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CHAPTER ONE: THE BISLEY CASE STUDY

'If you want a description of our age, here is one: the civilization of means without ends.' - Richard Livingstone.

INTRODUCTION

Thacker wrote, 'Movement between and across various spaces is a key feature of modernism and modernity, and one significant way of interpreting this motif of a modernity of flux is via the emergence of modern systems of transport such as the motor car, electric train or bus' (2006:117). Roads, therefore, are significant since they are a setting in which this mobility, which fuels modernity, occurs. In fact infrastructural investment made by the South African government with respects to the FIFA Confederations Cup[1] and FIFA World Cup have illustrated how significant roads are in facilitating fluidity, which is an essential necessity for modernisation to take place. Traffic flow, therefore, is a crucial variable or indicator in the transport system. Smooth and free flowing traffic characterized by minimal road accidents, car theft or hi-jacking and well-constructed roads are non-debatable essentials for this pulse of modernity. Bisley and the rest of the Msunduzi Municipality are bound to such processes and modernizing pressure.

While an understanding, or even achievement, of these projects can only be achieved with asking different sets of questions, my interest here is an interrogation or exploration of these impulses which are interwoven with the underlying social dynamics. More specifically, I seek to explore the social aspects of driving patterns. In this sense, this research explores drivers' choices of routes (in terms of the frequent driving expedition they undertake, such as going to work, school, shopping etc.),their rationales for choosing

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[1] The FIFA Confederations Cup is a football tournament featuring the continental champions, host nation and world champions. FIFA uses it to test the country's readiness to host the FIFA World Cup, which follows the year after. The FIFA World Cup is the second biggest sporting event after the Olympics and generates revenues worth billions of dollars.

such routes, and as what socio-political contents inform and frame these rationales. Inhabiting a car permits multiple socialities of family life and community, leisure, and the sheer pleasure of movement. Therefore, it is within this context that the dynamics of consumption of physical and social spaces are explored. These are constituted by factors and rationales as to how and why people choose to consume spaces (such as shopping and recreation). Beyond probing the issues raised above, this research also explores issues of safety during mobility and attempts to offer insight into the perception of drivers around these issues. This chapter begins by articulating the significance or value of the research, and then proceeds to raise the broader issues (the influence of the perception of crime in framing decisions and how the Bisley context serves a fertile ground in exploring the issues of the research). Finally, it outlines the composition for the rest of the dissertation.

SIGNIFICANCE OF THE RESEARCH

The probing of factors influencing route choices of private car owners serves two important functions in the study. Firstly, since roads are conceptualized as settings that drive fluidity needed for modernity, the explorations of factors influencing the route choices of drivers, serves the purposes of assessing the capacity of the roads in the Bisley and surrounding areas for facilitating this needed fluidity, as well as understanding the formation of traffic and traffic flow. Hence institutions, such as the National Department of Transport and the Msunduzi Municipality, who are tasked with maintaining this fluidity (through upkeep of law, maintaining the state of roads, ensuring traffic flow etc) benefit from the study. Secondly, roads host a range of social and economic activities; they are as such cultural and political spaces. Their consumption, appropriation, use, misuse or aversion by the inhabitants tells a story about the state of society, its organization, configuration and its members' engagement. These are transfused with a range of social issues such as crime, as well as the racial and class structure of society. In other words, any exploration of driving patterns of drivers in the Bisley area has to be located in these social contexts. Arguably, the focus on mobility patterns and its implications on human livelihood are important areas of focus for any society.

'Automobility[2] is one of the principal socio-technical institutions through which modernity is organized' (Bohn *et al*, 2006:1); therefore, sociology as the study of human behavior and institutions affecting livelihoods of society, has a responsibility as a scientific and academic study in unpacking the working and consequences of such mobility.

Fyvbjerg (2001: 9) highlights the need to help restore social sciences to its classical position as a practical and intellectual activity aimed at clarifying the problems, risks and possibilities we face as humans and societies, and at contributing to social and political praxis. This can only be achieved through the social sciences pursuing research problems which are of significance and relevance to human livelihood. The following research aims to fulfill this. Modern society as observed by Livingstone (1956:9) has become a civilization of means without ends. 'Social thinkers as diverse as Max Weber, Michel Foucault and Jurgen Habermas have pointed out that for more than two centuries value rationality has increasingly given way to instrumental rationality' (Fyvbjerg, 2001: 53). In other words, the probing of drivers' mobility patterns cannot be reduced to a process of solely understanding this phenomena but needs to expand to a process that will be of benefit and value to the society concerned. Through the adoption of the principles of the phronetic model[3] or principles, the following research hopes to create a balance between these forms of rationality.

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[2] As its name implies, according to Bohn et.al (2006), automobility can be understood as a patterned system which is predicated in the most fundamental sense on a combination of notions of autonomy and mobility. Autonomy and mobility are to be understood in terms of this system as both values in themselves, but also conjoined - one expresses and achieves autonomy when mobile. Similarly, true mobility can only be achieve autonomously - the distinction between moving and being moved, a passive and decidedly dependent (as opposed to autonomous state).

[3] A phronetic model or phronesis is an Aristotelian concept translating practical wisdom or prudence. In Aristotle's words, 'phronesis is a true state, reasoned, and capable of action with regards to things that are good or bad for man' (Fyvbjerg: 2001:2). Phronesis goes beyond both analytical, scientific knowledge (episteme) and technical knowledge and involves judgment and decisions made in the manner of a virtuoso social and political actor.

PERCEPTIONS OF CRIME AND DIFFERENTIATED RACIALIZED CONCEPTION OF SPACES

Beyond exploring how utility and socio-political contents frame decisions with regards to choices of roads, this study also explores the role of the perception of crime (and how race, class and gender stereotypes are reproduced in the contexts of crime) in influencing choices of roads. Perhaps due to South Africa's history of apartheid and racial practices, crime in the post-apartheid era has become a racially rooted phenomenon. A survey done nationally by Harris and Radelli (2007) suggests that the racialization of spaces in the country could be attributed to the existing perception of crime. As discussed above, the perception of crime and danger informs stereotypes. Stereotype-making and perceptions, which are highly racialized, class-based and gendered, in turn continue to shape patterns of relations and interactions. The interest of this research therefore has been to unpack and examine two patterns observed from the outset. One, the impact perception of crime has in determining consumption of roads and other spaces associated with them. For the purpose of this research, nonetheless, it was first deemed necessary to assess individual car owners' qualification of their decision as to why they choose or frequent certain roads, for other factors such as cost-saving to emerge. Two, the ways in which race, class and gender stereotypes are reproduced within the context of crime and their subsequent impact in use of public roads and social spaces. One should note here that racialized use of public roads and spaces has a tendency to feed into the cycle of racializing social and political life. The same can also be said of gender and class. The question is: how are these forms of social and spatial segregations informally perpetuated? Or is this what some have identified as 're-racialization of spaces? Thus, the ways in which such processes shape preferred traffic routes, volume and density of traffic in certain roads of the city as well as how racialized spaces are reproduced has remained central to this research. I proceed to outline the objectives of the study and the key questions arising from these objectives.

OBJECTIVES

Our conceptualization of roads as pathways that facilitate fluidity as well as consumable spaces in which a range of activities can occur lead us to explore the following objectives:

- To look at private car owners in the Bisley Area and their driving habits (i.e. in terms of their choices of routes)
- To explore how these rationales influence or affect consumption of spaces by these private car owners
- To explore whether the perception of crime has any influence in route selection

RESEARCH CONTEXT AND SETTING: THE CASE FOR BISLEY

Context is a crucial element in the social sciences. Here I follow Babbie and Mouton's assertion that, 'If one understands events against the background of the whole contexts and how such a context confers meaning to the events concerned, then one can truly claim to understand events' (Babbie and Mouton 2006:270). The aim of the following section is to contextualize the research area under study by demonstrating how the setting or context under study allows for the exploration of the research objectives. In doing this, I detail some of the reasons that motivated my decision to choose Bisley as an area of study. This is accompanied with a description and an analysis of the spatial layout of the area and the socio-political issues experienced in the research setting.

Bisley is a suburb situated 5km west of the Pietermaritzburg Central Business District (CBD).Over the last 15 years or so it has undergone a massive change. It has been transformed from being a racially homogenous area to a multi-racial suburb. The Group areas act has a lot to do with the historical development of Bisley as an exclusively white suburb. The controversial Group Areas Act of 1950 paved the way for formal and legal conditions for exclusive racial spaces enforceable by the South African state, for the large part, skewed to work for and defend white socio-political and economic interests in the country. According to this act, racial groups were assigned to different residential and business sections. An effect of the law was to exclude non-whites from living in the most developed areas in the country. For example, areas in and around cities and CBDs were

reserved for the white population. On June 5, 1991, the Act was formally removed and the country began, slowly, to see moving-in of the non-white population into the previously white areas. Bisley, as a historically white suburb, is formed under these conditions of apartheid's separate and racialized urban development and spatial planning. Although it is still a predominantly white, middle class, suburb, a number of non-white middle class families have moved in. The birth pains of Desmond Tutu's rainbow nation had now begun to be felt and consequently this has created a new set of social conditions. People of both black and white racial groups are now engaging in or experiencing new ways of relating to one another and sharing spaces, which also entails forms of social contact, relation and intimacy. Therefore, my interest in this research has been exploring and understanding the ways in which racial and class dynamics frame mobility patterns and consumption of spaces. For example, in post-apartheid South Africa, to what extent can mobility patterns of private car owners be attributed to the re-racialization of space? In terms of consumption of public spaces, has class overwritten race as a factor in the consumption of spaces or are these two variables at an intersection in post-apartheid South Africa?

SPATIAL LAYOUT AND ITS CONSEQUENCES

The spatial layout of the Bisley area was the second reason why Bisley was chosen as the area for the research. The road layout in the Bisley and surrounding areas presents a good medium for flexibility. This can be attributed to its road arrangement. The map below (Fig. 1) demonstrates that there is a great connectivity in terms of routes and therefore one can use more than one route to get to a destination. Fig 1 has only highlighted the main roads in the Bisley and the surrounding areas and uses the Bisley area as a starting point. The logic for this is that depending on where one is located in Bisley, all of the smaller roads are directly connected to these major roads. These major roads connect Bisley with neighboring suburbs, townships and the central business district. Ritchie Road (not appearing on the map) directly connects Bisley with Oribi Road which links to Oribi and Pelham. Oribi Road also directly connects to King Edward Avenue (a road in

the Scottsville Area), consequently connecting Pelham and Scotsville. Alexandra Road also serves as link to connecting Bisley with Pelham and Scottsville.

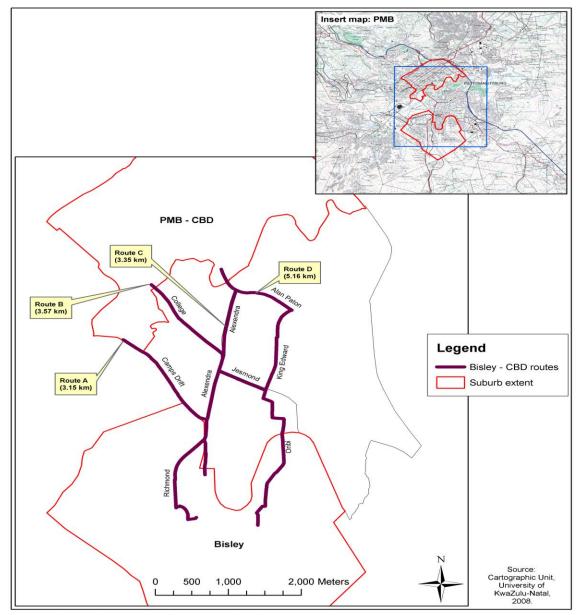**Fig. 1:Bisley and Surrounding Area Road Map**

The spatial layout observed in Fig1 shows that there are four routes which are directly connected with the CBD. I have not made any prior assumption regarding whether Bisley residents use the CBD or not. But the point that is demonstrated by this example is the spatial flexibility of the area in terms of mobility. Roads, in terms of the spatial layout

especially, to significant social and economic significant areas allow for a usage of more than one route. Roads in the Bisley Area also facilitate the movement of goods and people. Movement, or mobility, as highlighted in previous sections of this chapter, is a crucial aspect of modernity. Through the public transport system (i.e. taxis) as well as individual automobiles, roads in the Bisley and surrounding areas serve as mediums for modernity's labour force to conduct its daily movements such as shopping and working. In the midst of these choices, it would be interesting to explore how various forms of rationales influence traffic flow. For example, in terms of choices individuals make, a quicker route is preferred over a longer route, but this has to be negotiated with another concern, which is the size of the traffic – how busy routes are. Therefore, the spatial layout of roads in Bisley and surrounding areas, due to their potential in facilitating fluidity and mobility provide an adequate fertile ground for the exploration of mobility patterns of private car owners.

Bisley, and the surrounding areas, also hosts a number of social and economic spaces which, in my opinion, offers a considerable amount of opportunity for social and economic interactions. For example, as a commercial space, Alan Paton Avenue hosts the 50 Durban Road Mall. The 50 Durban Road Mall found in the Scottsville Area is accessible for private car owners (and their families) through the connection of Alexandra Road and Alan Paton Avenue or through Oribi and King Edward Road. The mall hosts a number of South Africa's largest food franchises such as Spur, Debonairs and Wimpy. The mall also hosts South Africa's largest supermarket chain i.e. Checkers. There is also no shortage of popular recreational sites as it also hosts Get Lost (bar and Ten Pin Bowling site), as well as The Bell pub. Oribi Road hosts the popular Pelham Stores and a bottle store. Alexandra Road hosts a greengrocer store and a mall which hosts one of the country's major supermarket chains i.e. Spar. Considering some of the economic spaces mentioned above and others that are also directly accessible like the Hayfields Mall, Markro located in Camps Drift and the CBD it would be of interest to the above mentioned research to explore preferences of members of different classes in choosing economic spaces and the reasons for doing so other than the cost factor. The areas highlighted above create a perfect platform for the exploration of racial and class dynamics as members consume these spaces. For example, how have these forms of

contact in public spaces and on roads helped in understanding other social groups and contributing to nation building and reconciliation?

Taking the above into consideration, the key questions of this research can be summarized into the following points:

- What logical assumptions influence private car owners' decisions when choosing a route?
- What are the ways in which travel for drivers could be better improved in the Bisley Area?
- How do route choice decisions shape consumption of spaces and social interaction? What role do they have in a re-spatialization of race and class?
- What role does perception of crime play in shaping the decisions of private car owners in choosing routes?
- To what extent do sociological variables such as race, class and gender inform some of the perceptions of crime for private car owners?

STRUCTURE OF THE DISSERTATION

This chapter has explored what motivated this research and its objectives. It also highlighted the focus of this study. The intention of this dissertation is to add to the limited South African literature on this topic and at the same time demonstrate the implications of fluidity in the modern society in which we live.

Chapter Two reviews the literature around the topic. It has two main sections. The first section focuses on the automobile's ability to permit mobility and create the social in the process. The second section illustrates how the process of driving literally offers choices in terms of route usage by focusing on the body of literature and studies highlighting the various factors influencing route choices. The sub-sections in the second section of chapter Two are also dedicated to demonstrating how race and class contribute to the spatial consumption in South Africa.

Chapter Three presents the conceptual and theoretical framework for the study. This chapter consists of 8 sections. The first two sections make a case for rational choice theory by using Max Weber's action theoretic model. The third, fourth and fifth sections present rational choice theory in terms of its historical background and interpretations (internalist and externalist arguments). The sixth section outlines the limitations of rational choice theory. The seventh section which consists of two subsections presents and uses epistemological perspectives to argue for the appropriate type of rational choice theory to be used in this study. Finally the eighth section presents the appropriate type of rational choice theory for this study.

Chapter Four deals with methodological issues, and it has three sections. The first section discusses the 'verstehen' approach and qualitative paradigm which shaped this research. The second section outlines the actual process and methods used in this research. The sub-sections, firstly, discuss the ways access was negotiated and challenges faced in this regard. Secondly, it deals with the data collection tools, and interviews. Thirdly, it discusses how the data was analysed, and, fourthly, it raises the ethical issues and concerns that preceded and emerged while undertaking this research. The last section addresses the limitations of this study.

Chapter Five provides participant factors influencing route choice. It has three sections. The first section assesses participants' driving patterns while accessing work areas. This section highlights the work areas of participants, the most popular routes as well as factors informing and framing decisions in choosing these roads. The second section explores driving patterns of participants while accessing shopping areas. This section also highlights these shopping areas, provide details the popular routes in terms of accessing these shopping areas and provide factors informing and framing decisions in terms of choosing these roads. Finally, the third section provides a conclusion for the chapter by tying up the arguments brought forward in this chapter.

Chapter Six unpacks the social content of driving patterns. In this chapter through two sections, an argument is made about the increasing influence of class in spatial consumption in post-apartheid South Africa. The first section of this chapter explores

whether the decision to consume certain roads facilitates a re-spatialization of either class or race in post-apartheid South Africa. The second section explores the extent to which the perceptions of crime (or feelings about safety) on the roads of Bisley and surrounding areas frame route decisions. In addition, this section also assesses to what extent these perceptions of crime are racialized, class based and gendered.

The final chapter presents the conclusion. This chapter summarises the factors informing and framing route choice decisions of private car owners in the Bisley area. This chapter also provides closure on the race-class argument with respect to the consumption of spaces in Bisley and the surrounding areas.

CHAPTER TWO: DRIVING THE SOCIAL

'For move you must! T'is now the rage, the law and fashion of our age.' -

(Samuel Taylor Coleridge, quoted in Buzzard 1993:84)

INTRODUCTION

The aim of this chapter is to assess the various ways of conceptualizing how and why people make choices regarding vehicle route usage, and consider their appropriateness to my research. The study of how people make decisions is not unique to sociology, but this study interpenetrates into fields such as engineering and psychology. This chapter briefly highlights some of the approaches used in those fields and then critically assesses how they can effectively be used in theoretically framing this study. The focus of my study is exploring how decisions to make use of certain routes and roads can be conceptualized as spatial consumption, as well as a field of social relations. As I will show shortly, this, in some ways, distinguishes this study from the genres mentioned above.

As highlighted in the first chapter, roads host a range of social and economic activities; they are as much cultural and political spaces. Their consumption, appropriation, and use or non-use tells us about the state of the society, its operations, power and social relations. Hypothetically speaking, specific forms of social and power relations and organization of society are facilitated with the inhabitation of the automobile as a particular technology for mobility. This chapter will also pay brief attention to the ramifications of human beings consuming the automobile. Although not a central concern of this research, the impact of the automobile to permit multiple socialities cannot be overlooked. I have gone as far as to label the heading of the first section as 'the prosthetics of kinetics' to illustrate how the car has become an extra body part to facilitate interaction in modernity. 'Automobility can thus be seen as a Frankenstein-monster, extending the individual into realms of freedom and flexibility whereby one's time in the car can be positively viewed, but also in structuring and constraining the 'users' of cars to live their lives in very particular time-compressed ways' (Urry 2003: 7).

The title of this chapter 'driving the social' comes from this significance in the social process of automobility and movements.

Having considered the body of work and literature for the topic, this chapter proceeds to outline the theoretical formulations guiding this research. This chapter is divided into two sections. The first section focuses on the auto mobility's ability to permit mobility and create the social in the process. The second section illustrates how the process of driving literally offers choices in terms of route usage by focusing on the body of literature and studies highlighting the various factors influencing route choices.

THE PROSTHETICS OF KINETICS

Due to the fact that inhabiting the car permits mobility, thereby granting multiple socialities and spatialities, of family life, community and leisure accessible, the consumption of the automobile has now become a matter of interest for sociologists. According to Urry (2003), sociology has ignored the key significance of automobility, which reconfigures civil society, involving distinct ways of dwelling, travelling and socializing in, and through, an automobilised time-space. As Urry (2003) suggests, much of what people now think of as 'social life' could not be undertaken without the flexibilities of the car and its availability 24 hours a day. As Pearce (1999) puts it: 'They are what Shove terms another of 'the convenience devices' of contemporary society, devices that make complex, harried patterns of social life just about possible, at least of course for those with cars' (Pearce quoted in Urry 2003). This, according to Urry (2003), is made possible by the fact that it is possible to leave late by car, miss connections and travel in "time-less" fashion. Urry (2003) therefore concludes that automobility facilitates people into an intense flexibility. This argument holds a huge amount of credibility when one considers the spatial organization of modern society. Movement or mobility has become a necessity for making modernity tick and people move.

Taking this a step up, Featherstone et al (2004) argue that the social sciences have heavily ignored the specific characters of domination excised by the automobile which have been

as powerful as television or the computer normally viewed as constitutive of global culture. For Featherstone *et al* (2004), two significant sociological ramifications of the automobile are worth noting. First, the automobile, being the dominant culture that organizes and legitimates socialities across different genders, classes, ages and so on that sustains major discourses of what constitutes the good life and what is necessary for an appropriate citizenship of mobility; and that provides potent literary and artistic images and symbols. These include E. M. Forster's evocation in Howard's End of how cars generate a 'sense of flux' (1931: 191), and J. G. Ballard's Crash which uses the car 'as a total metaphor for man's life in modern society' (1995: 6; see also Graves-Brown 1997). Second, the predominant global form of quasi-private mobility that subordinates other public mobilities of walking, cycling, travelling by rail and so on, reorganizes how people negotiate the opportunities for, and constraints upon, work, family life, leisure and pleasure.

The experience of driving, identified by the quiet pleasures of the open road, speed, power and personal control offers those in control of automobiles the privilege of covering distance, managing time and maintaining certain forms of individuation. According to Garling *et al* (2001), choices of travel mode are frequently related to choices of purpose, destination and departure time. Drivers' rationales in terms of route choice vary depending on context. In the following section, I consider how conceptually, and in practice, these rationales can be understood.

ROUTES AND THE LIBERAL DISPOSITION OF CHOICE

Bierlaire & Frejinger (2007: 3) note: 'The problem of route choice is critical in many contexts, for example in intelligent transport systems, GPS navigation and transportation planning.' Understanding of route choice has been used by these mentioned fields to understand the formation of traffic and traffic flow. Choice can be conceptualized as a mental process in which the merits of multiple options are considered, and a decision is made in terms of selection. This is an everyday practice for the participants in this study. Many studies indicate that there are numerous factors that determine the particular

decision concerning choice of route selection. A study done by Stark et al (2006), for example, suggests that maximum positive outcomes seem to be the main rationale guiding private car owners in terms of making decisions regarding their route choices. Stark *et al* (2006) conducted over 80 route choices experiments with 48 participants, in each scenario paired either into groups of two or groups of four, in which a route choice game was played. Participants were presented with routes from which to choose, in order get to a destination and this was accompanied by a context dependent situation. For example, in one situation two routes namely Route A and Route B were presented. Route A represented a freeway and Route B represented a side route. Situational dependent scenarios were then presented for both routes and points were allocated for the route chosen. Payoff functions were then defined for the various situational scenarios and the drivers with every choice made were scored in points. The maximum positive outcomes chosen by participants were linked to choosing routes which were cost-saving (consequently resulting in less fuel consumption) and avoiding traffic congestion. This suggested that to a certain extent, forms of rational calculation is involved in the decision making process of choosing a route.

Another study done by Golledge and Stimson (1997) indicates that minimizing generalized cost, time or distance may not be the sole influence of individuals' route choices, and specific types of path selection criteria may include using routes with fewest obstacles (e.g., stop lights), avoiding congestion, minimizing the number of roads, restricting to a known area or corridor, maximizing aesthetics (comfort), and avoiding unsafe areas. Other decisions that impact on travel behaviour relate to choices such as residential and employment location and other amenities, along with socioeconomic status and stages in life. Coordinating schedules with other household members and acquaintances increases the complexity of this decision-making process (Doherty and Miller 2002).

It is worth mentioning that the advancement of modern technology in parts of Western Europe and America has resulted in the creation of a tool that frames or facilitates decision making with regards to route choice. One such tool, recently developed, is the

Advanced Traveller Information System (ATIS). The goal of this technology is to provide drivers with accurate real-time information, reduce uncertainty in travel time, increase travel times-savings and enable drivers to choose routes efficiently (Ben-Eila *et al* 2007:4). Ben-Eila *et al* (2007) conducted an experimental study of route choices by investigating the combined effects of information and experience in route decisions in a simulated environment whereby the participants relied on a description of travel time variability and at the same time relied on personal experience through feedback. The experiment consisted of a simple two route network, one route on average faster than the other with three traffic scenarios representing different travel time ranges. Respondents were divided into two groups: with real-time information and without. Both groups received feedback information of their actual travel time. During the experiment, participants chose repeatedly between the routes in various scenarios. The results showed that the effect of information was positive and more evident when participants lacked long-term experience on the distributions of travel times. Furthermore, information seemed to increase initial risk seeking behavior, reduce initial exploration and contribute to subject risk-attitudes differences. According to Ben-Eila *et al* (2007) these findings have implications for cost-effective ATIS design especially in the conditions characterized by non-recurrent congestion. Based on this data the researchers estimate an advanced discrete choice model to capture the combined effects of information and experience in route choice decisions. Granted that this technology does not aid or further our understanding of how drivers make decisions with regard to route choice, but it is worth mentioning as a useful tool that assists with traffic modelling.

Papinski *et al* (2009) highlight that route choice decisions are also made while en-route which involves information processing and learning. Adapting to en-route congestion (non-recurring or recurring congestion) is a common example of how people change their planned routes. This flexibility and fluidity can be regarded as rational. Papinski *et al* (2009) further highlight that risk-taking behaviour and departure times are studied to understand the willingness to make changes regarding route selection (e.g., lane and route switching behaviour). In addition, as Polydoropoulou *et al* (1996) note, drivers are more likely to switch routes when they know in advance of the trip that a route will make them

arrive late. Abedel-Ayt *et al* (1993) also note another variable shaping route choice and risk taking; they point out gender and age as factors determining the willingness to take risks in relation to travel time and route choice. Data by Abedel-Ayt *et al* (1993) also suggests that drivers prefer travel time instead of distance measures to make their decisions. Thirty-one individuals from Ontario, Canada, participated in answering survey questions and the collection of person-based GPS data. Results indicated a preference to minimize travel time as stated by participants in deciding what route to travel. Participants also affirmed a desire to minimize the number of stop lights/signs, as well as, avoid congestion and maximize route directness. A comparison between planned and observed routes reveals that about one-fifth of participants deviated from their planned route. This study demonstrates the need for qualitative and quantitative survey methods for exploring planned and observed route choice (Papinski *et al* 2008).

CONTEXT SPECIFIC S.A. CASES: THE INFLUENCE OF SOCIO-POLITICAL DYNAMICS IN INFORMING ROUTE CHOICE

Although one can acknowledge that the factors highlighted in the studies (discussed in the previous section) about various factors framing decisions on choices of roads, can be applicable to the South African drivers, one can also argue that there are context specific scenarios that are unique to South Africa. It is worth noting that there is very limited South African literature on this topic. Certain variables, however, have been highlighted to influence mobility patterns or spatial consumption. For example, the concerning issue of how variables such as race and class can frame spatial consumption, the effect of one of South Africa's most used transportation system (i.e. kombis) is a factor in the choice of roads and the high frequency of pedestrian crossing among others. The following short section will bring these South African context related issues to the fore and illustrate how they could affect decisions regarding the choosing of roads.

INTERSECTION OF RACE AND CLASS IN THE CONSUMPTION OF SPACES

Foster (1997:9) argues for a shift away from how we commonly treat values. He argues for a movement away from the notion of values as predominant ideas, structural phenomena, to a notion of values as embodied and spatialized manifestations, expressed

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in the material and discursive spaces between embodied beings. In this section, I would like to argue that the way individuals conceptualize the notion of race and space within the South African context is compatible with this view. Foster (1997:9) argues further that many linguistic terms characteristic of racialized thinking or racism are also spatial terms; examples include segregation, zoning, locations, distancing, exclusion, marginalization and, quintessentially, the term 'apartheid'. These, therefore, indicate that within the South African context the expression of race or racialization is less in the mind and more in the realm of spatialized social distance. One interesting study that captures this is a study done by Tredoux and Finchilescu (2007). Tredoux and Finchilescu (2007) investigate the degree of inter-racial mixing among students at a university. They found that:

- Informal segregation between race groups is very much the norm. The different groups tend to sit together during lectures, in the residence cafeterias, in the leisure spaces.
- Beyond just sitting together, spaces become racialized and come to be seen as 'belonging' to specific groups. Certain tables in the cafeterias are known as 'white' tables, and certain areas in the open space on university campus come to be perceived to be the domain of different groups.
- The segregation is not total. In all the spaces observed there were mixed race groups. However there were relatively few of these.
- When the space boundaries were disrupted through the members of another group entering the space, this resulted in an early departure of the original race group or the space being avoided.

Durheim and Dixon's (2005) study on racial interaction on the beaches of Scottburgh highlights the idea that segregation is a natural tendency, an outcome of a basic psychological desire to be with one's own cultural group. Their study also reveals racial stereotypes such as 'black people being filthy' or 'black people being dangerous' as another influential factor for segregation. The in-depth interviews of this study revealed security factors (i.e. the potential danger of black people) as the ultimate reason for

segregation in the beaches. What is clear from the findings of the above studies is the relationship between racial dynamics and spatial and social forms. In fact, the studies of Durheim and Dixon (2005) and Tredoux and Fincheliscu (2007) give us insight, with respect to the South African context, into the relationship dynamics and spatial and social forms. This is crucial, since one of the central claims of this research is the notion that roads in Pietermaritzburg and the surrounding areas are not conceptualized solely as pathways, but are seen as spaces which are consumed for social, political and recreational activities. Hence the choosing of a road consequently results in choosing of a space. Therefore, with respect to the findings of the above studies, the critical questions to ponder are, for example, how much of a role has contact in public spaces played in terms of dismantling racial prejudice and stereotypes? Has it further legitimized the stereotypes or has it given racial groups a new perspective on the practices of other race groups?

Further, and more importantly, can race be considered as a variable in framing spatial choices of private car owners? The element of class also cannot be ignored. Within the South African context, at least, the element of class dynamics is also occupying a significant position in understanding social relations and (de)segregation, particularly considering the intersection of class and race. Since the early 1990s South African society has seen political change and transformation, of which the prominent ones are the dismantling of formal apartheid and the formation of a new political landscape and the shifting of political power to a black majority. Here we also note the specific policies geared towards redressing the past marginalization, as conferred by BEE and Affirmative Action which have been instrumental in giving the previously economically disadvantaged 'blacks' an opportunity to move up the socio-economic ladder. Consequently this has meant that in terms of spatial consumption, the intersection of race and class has become an important observable element. Spaces in the CBD (whether it be economic or recreational) in Pietermaritzburg for example are preferential choices for Blacks, Indians and Coloureds.

PERCEIVED LAWLESSNESS AND CHAOTIC MOVEMENT

Roads with a notorious reputation for frequent pedestrian crossings are likely to affect decisions of private car owners in terms of route choice. Frequent and random pedestrian crossings are an area of major concern on South African roads. 'Pedestrian fatalities account for a large proportion (i.e.45%) of deaths in South African roads' (Albers *et al* 2010: 1). According to Ribbens (2010:7), pedestrian crossing accounts for the majority of these fatalities. At this stage I could not secure current pedestrian fatalities data for Bisley and surrounding areas, I felt, however, that it would be worth exploring from the participants' perspective if there are roads where this is a major concern.

Bisley, and its surrounding areas, hosts a number of roads that are predominantly taxi routes. One of the responses I expected to receive from participants in this study was their reluctance to be on the same roads as taxi drivers. This is due to the fact that in the South African context taxi drivers have developed a notorious reputation for lawlessness and chaotic movement on the road. According to Bailey (2009), of the 36 daily deaths on South Africa's roads, on average three are killed in taxi-related incidents - translating into 1095 deaths every year. 'A study recently done by the Automobile Association of South Africa recorded an annual total of 70 000 minibus taxi crashes which indicates that taxis in SA amount for double the rate of crashes than all other passenger vehicles' (Allopi and Govender,2007:1). Bailey (2009) suggests that frequent complaints constantly received by road traffic authorities about the driving of mini-bus taxis include driving on the verge or in the emergency lane, cutting in at intersections and jumping red traffic lights. South African taxi drivers showed largely fatalistic attitudes and expressed a high degree of risk-taking behaviours. The high number of taxi-related accidents (deaths) occurring during Easter as well as over the Festive Period also further enhances the negative reputation South African taxi drivers hold. Therefore in terms of decision making road consumption, the perceived presence of taxis, especially during early hours of the morning or in the early hours of the evening, is expected to be an influential factor in the decision making process of drivers to be interviewed in the study in question. As a matter of fact, a number of main roads such as Alan Paton Avenue, Oribi Road and parts of

Commercial Road are taxi routes. I therefore felt it was worth exploring from the private car owners' perspective how the presence of taxis affects fluidity dynamics.

BEYOND UTILITY: PERCEPTIONS OF CRIME AND DIFFERENTIATED RACIALIZED CONCEPTION OF SPACES

Perception of crime is another factor that influences decisions regarding which route and roads to frequent. This is due to the fact that fear of crime, or more accurately, anxiety and worry about crime, has notably become a familiar part of life in South Africa. Harris and Radelli's (2007) study on the perception of crime and violence in South Africa suggests that 3 in every 5 South African adults (59%) believe that the crime rate in the country is on the rise, whereas only 15% believed it has decreased and 24% felt it has remained the same. An interesting finding of the above study is that the majority felt that crime was escalating, which highlights crime becoming a serious concern to many South Africans. The results of the above study were similar to those released by the International Studies of Security in 2006, which found that 53% of South Africans felt that crime was on the increase. A survey done nationally by Harris and Raddeli (2007) suggests that the racialization of spaces in the country could be attributed to the existing perceptions of crime. Stereotyping and interpersonal relations are thus likely to be shaped by such reactions to experiences and perceptions of crime. The experience, and perception, of crime not only allows individuals to behave in stereotypical ways but also influences their decision-making and strategies of avoiding crime. For example, routes perceived to be unsafe or located around areas where a high amount of crime is reported are likely to be avoided. As Masuku and Maepa (2007:35) put it: 'perceptions about crime are influenced by many factors such as actual experiences, media reports and recent events that may be discussed among family and friends or a particular community.' The striking element about the International Studies of Security's study reported above is that the view that crime was on the increase is particularly prevalent among people in the metropolitan and urban areas, and among Indian and White South Africans (who make up the minority of the population but the majority of the middle-class in the country).

A close reading of the two above studies allows one to infer that there is a racialized pattern of perception and signification of crime which is likely to frame racial interactions and influence racializing social spaces. This assessment has a significant impact on the study under question, since it directly links crime as a factor influencing decisions on route choices and its ramifications for the reproduction of racialized forms of such decisions and consumption of space. More importantly within this context, as part of the above reaction, the stereotyping of the 'black male' as the ultimate or perhaps conventional face of criminals in South African has become dominant (Centre for The Study of Violence and Reconciliation 2007). According to Harris (2004) the racialized discourse of crime not only misrepresents whites as the predominant victims, but conversely portrays blacks as the primary perpetrators. Harris (2004) further highlights that in the post-1994 context of rainbow nationalism, this discourse does not overtly employ a black and white vocabulary. However, race is commonly coded into, and coded by, everyday conversation. For example, 'the hijacker' frequently means 'the young, black, male criminal' in white suburbia. Again this is a clear indication of racialized perception of criminality, which will, without a doubt, affect decision making especially in areas around predominantly black settlements. Kruger and Landman (2005) have also highlighted the fears and concerns of some citizens about being on the road with certain road users, for example taxi drivers (who happened to be predominantly black). This could be associated with reserved driving habits of taxi drivers, such as stopping to drop a customer without indicating and taxi violence which has plagued the South African taxi industry.

Another key variable within the above context is class. South Africa has seen the emergence of new black middle and upper classes. Harris and Radelli's (2007) study on the perception of crime in South Africa indicates that in the minds of South Africans class plays a role in terms of vulnerability to crime. Potentially this could mean that roads and spaces are not only likely to be segregated along racial lines but also along class lines. Race and class also play a major role as to who lives in the suburbs and in the townships of Pietermaritzburg; however their relationship remains complex. For

example, class and race do not overwrite each other as variables in the study, rather they intersect.

CONCLUSION

Thus far, this chapter has reviewed a body of literature regarding two key aspect of the research. Firstly, the different rationales guiding private car owners in terms of road choice and various aspects are influencing spatial consumption by members of different race and class. It is worth noting that the study of mobility patterns and their role in spatial consumption is relatively undeveloped in the field of sociology, and particularly so in South African scholarship. The body of literature highlighted in the two sections above has, however, been useful in providing the dissertation insights into factors contributing to route choice. More importantly, though, studies on route choice in this chapter have, to a certain extent, contributed in the conceptualization process of both the theoretical framework and the methodology used in this dissertation. From a theoretical point of view study of route decisions highlighted in this chapter suggests that participants generally use routes that provide them with the maximum positive outcomes. In other words drivers, depending on their situational context, regularly make decisions with respect to their mobility. Therefore cognitive theories studying the decision making process of drivers need to be explored. This is why theories of rational choice are explored and are appropriated in the next chapter. One also notes that, in fact, all the studies highlighted in this chapter, in terms of methodological approach used quantitative methods. However after further engagement with the theoretical framework I have opted for a qualitative approach. Data provided as well as reviewed studies have also demonstrated how concepts such as race and class can be spatially expressed within the South African context. One of the aims of this dissertation is to add to the developing literature on this topic within the South African context. In fact, the literature highlighted above shows that sociology can no longer turn a blind eye on mobility since it has huge significance to the process of modernity.

CHAPTER THREE: CONCEPTUAL AND THEORETICAL FRAMEWORK

'[T]he way to re-enchant the world.....is to stick the concrete.' – Richard Rorty

INTRODUCTION: THE CASE FOR RATIONAL CHOICE THEORY

The body of literature explored in the previous chapter is useful in terms of understanding the various factors influencing route choices of drivers. Context as well as internal motives seem to be the key determinants of what decisions are to be taken by drivers with regards to their selection of routes. For this section, thus, seeking to explore and appropriate a theory that explains, or at least allows interrogating, how these decisions are made would be useful for the purposes of this research, in order to understand why private car drivers in the Bisley Area choose certain roads and routes. My research draws heavily from rational choice theories as a way of understanding decision-making, assessment of a given context and action. Theories of rational choice are guided by the assumption that people are rational and base their actions on what they perceive to be the most effective means to achieving their goals. Broadly categorized, according to Keel (2004), the central points of these theories are: (1) The human being is a rational actor; (2) Rationality involves an end/means calculation; (3) People (freely) choose all behavior, both conforming and deviating, based on their rational calculations; (4) The central element of calculation involves a cost benefit analysis: Pleasure versus Pain (one can add safety and danger); (5) Choice, with all other conditions equal, will be directed towards the maximization of individual pleasure.

In this section, thus, I motivate for the appropriation of rational choice as a theoretical framework. I use Max Weber's action-theoretic model (in which 'rational action' serves as an ideal type) as a starting point to motivate for the appropriation of rational choice theory. I feel it is necessary to start with Weber, for his formulation insists on motivated action as a subject of sociological inquiry, which is central to my thinking about the research question and the research approach. This, as the following section shows, allows us to separate active choices from mere habits, motivated actions from reflexes.

Subsequently, I also review contemporary views on rational choice theory that have moved beyond the classical appropriation rational choice theory. In this regard, I assess the strengths and weaknesses of the different views of this theory by way of appropriating it to the research at hand.

MAX WEBER'S ACTION THEORETIC MODEL: SOCIAL ACTION AND METHODOLOGICAL INDIVIDUALISM

In one of his last writings, Max Weber defined sociology's unique objective as 'the interpretive understanding of social action in order to arrive at a casual explanation of its course and consequences' (Weber 1947:88). Social action, according to Weber (1947:88), entails behavior to which the acting individual attaches subjective meaning. Therefore, in the Weberian sense, social action is distinguished from mere behavior. Coughing serves as an example of behavior and apologizing afterwards is action. This, according to Weber (1947), illustrates that the defining characteristic of an action is that it is motivated by a mental state with propositional content i.e. an intentional state. From a methodological point of view, the significance of action for Weber is that the social scientist, by virtue of having a capacity to understand the individual's underlying motive has interpretive access to it. Therefore, for Weber (1947), action theoretic explanations are central to social-scientific analysis because without knowing why people do what they do, we do not really understand why any of the large-scale phenomena in which they are embroiled, occur. This building up of individual action into large scale social phenomena Weber terms as methodological individualism. The next paragraph explains the significance of this methodological precept for this research and illustrates how it leads us to rational choice theory as the preferred theoretical framework for this research.

Weber states, '[m]ethodological individualism amounts to the claim that social phenomena must be explained by showing how they result from individual actions, which in turn must be explained through reference to the intentional states that motivate individual actors' (Weber 1947:112). Its principal aim is to provide the action theoretic level of explanation of society. Weber believes that this could be done through 'verstehende' (or interpretive) explanations. According to Weber (1947:113), the reason

for privileging individual action in sociological explanations is that only action is 'subjectively understandable'. Action-theoretic explanations allow us to access and understand why any of the large scale phenomena occur, within which apparently disconnected but motivated actions are taking place.

It has to be acknowledged though, that methodological individualism, as a methodological precept, does have limitations. Methodological individualism has come under heavy criticism from structural theorists for the fact that 'the most successful attempts to explain the distinctive structural features of social life have seen them as the unintended consequences of individual action' (Scott 2000: 82). It is the compounding of unintended consequences that produces social phenomena that individuals may be only partially aware of, and that they experience as constraints. According to Scott (2000), the classic example of this is the operation of market relations, as seen in economic theory. Through the operations of the competitive market, it is argued, the supply and the demand for commodities are matched without the need for central planning and co-ordination. The matching of supply and demand is the unplanned and unanticipated consequence of many hundreds of separate individual actions. Many structural theorists like Emile Durkheim see social structures not only controlling, but also constraining, the individual. Durkheim (1903), for example, in *Suicide,* provides a macro-level explanation of suicide rates. Durkheim (1903) illustrated that suicide rates were strongly correlated with a number of social ties among individuals in society. Durkheim (1903) concluded that social positions with too few ties or too many would be associated with higher probabilities of suicide. This example illustrates why micro-level explanations come up against difficulties when explaining some high-order social facts. Satz and Ferejohn (1994) highlight another useful example to support this point. They asked the very simple question, 'why do unemployed people tend to be uneducated?' Satz and Ferejohn (1994) first concede that that micro-level accounts can be brought forward and be offered as an explanation in terms of each unemployed individual's 'preferences', 'assets' and 'opportunities'. However, another perfectly plausible account can also be put forward highlighting that there are few jobs available and the jobs that are available tend to require college degrees. The second account of this social phenomenon illustrates the

power or influence of social structure in accounting for social phenomena, a point which methodological individualism, at times, seems to miss.

Despite these weaknesses, I contend that methodological individualism remains a useful approach in this research in order to understand subjectivities of mobility patterns or the choices of roads used by private car owners in the Bisley area. This theoretical and methodological approach to the subjective understanding of actions of private car owners, with regards to their mobility patterns, has assisted this research in illustrating how various forms of social organization (such as spatial consumption) occur in post-apartheid Pietermaritzburg for economic, recreation and social activities. Weber's 'ideal types' are a useful addition to this approach, which he uses to categorize types of actions. As Abrahamson puts it, '[i]deal types refer to typical courses of action whose components are intentionally exaggerated by analyst in order to differentiate them from other similar types of action' (Abrahamson 2010: 86). In other words, it is an extreme form of a concept which can be used as an analytical/ conceptual tool. For Weber (1968:6), sociological theory must be based upon a model of human action, and therefore, because of the constraints that interpretation imposes, this model must be a model of rational human action. This, as Stones (2009: 85) puts it, helps us 'to refine our understanding of the nature and capacities of the individual social actor through a typology of different ways in which she can act within the external terrain.' According to Weber, people's actions may be classified in four analytically distinct ways: zweckrational (goal-rationality), wertrational (value-rationality), affektual (emotional-rationality) and traditional (custom, unconscious habit). For Weber, these types of action classify social behavior by visualizing its four 'pure forms'. It is important to note that while Weber knew that actual empirical situations would not correspond perfectly with these types, by conceptualizing the 'ideal types' of action, he had a common reference point for comparing actual empirical cases. In this sense, '[t]he types tell us something about the nature of the actor herself as they indicate the possibility of different internal moods and states, and their concrete enactments tell us that actors have the ability to combine these in complex internal formations which manifest themselves in a hybrid orientation to action' (Stones 2009: 85). This insight is useful in making sense of the

various ways individuals act in a social field and how these actions are understood by others (including social research).

Having explored Weber's social action theory, I now move to rational choice theory following Heath's claim: 'Thus one of the most important consequences of Weber's methodological individualism is that it puts rational action theory at the core of social-scientific inquiry' (Heath 2010: 2). It is important to note that rational choice theory is not an intellectually unified entity. According to Friedman and Hetcher (1998), some theories, for example, link purposive actors to social outcomes through the mechanism of opportunity costs, while others link purposive actors with social outcomes through the mechanism of institutional constraints, or preferences. Hence as a theoretical tool in this study, rational choice theory opens up its axioms to allow us to account for drivers' selection of routes whether they are influenced by personal motives or institutional constraints. Therefore the next section not only discusses the various versions of rational choice theories, but also, through the use of epistemological schools, motivates for the appropriate version of rational choice theory which is most suitable in the study.

RATIONAL CHOICE THEORY: INTRODUCTION AND HISTORICAL ROOTS

Macdonald tells us, '[r]ational choice theory is a theory of social behavior whose distinctive theoretical assumption is that actors in the theory behave according to the rationality assumption' (Macdonald 2003:552). He further adds that the 'rationality assumption' consists of three components: purposive action, consistent preferences, and utility maximization (Macdonald 2003:552). For Macdonald (2003:553) 'purposive action' posits that most social outcomes can be explained by goal oriented action on the part of actors in the theory as opposed to being motivated by habit, tradition or social appropriateness. 'Consistent preferences', on the other hand, refers to preferences that are ranked and transitive, and do not depend on the presence or absence of essentially independent alternatives. Finally, 'utility maximization' posits that actors may select the behavior that provides them with subjectively estimated utility from a set of possible behaviors. What is common to all variants of rational choice theories is, according to Scott (2000), the adoption of methodological individualist position and attempts to

explain all social phenomena in terms of the rational calculations made by self-interested individuals.

Such a philosophical position begins with the assumption that complex social phenomena can be explained in terms of the elementary individual actions of which they are composed. This standpoint, called methodological individualism, holds that: 'The elementary unit of social life is the individual human action. To explain social institutions and social change is to show how they arise as the result of the action and interaction of individuals' (Elster 1985: 13). According to Keel (2007), these conceptions are rooted in the analysis of human behavior developed by early classical theorists Cesara Becaria and Jeremy Bentham. Theories of rational choice also owe their influence to utilitarian economics of Adam Smith and others that have reduced social and material relations as composed of calculating individuals and their calculated actions. This is a sentiment that Max Weber significantly shares in so far as a modern individual is concerned, albeit cast slightly differently. For him, what characterizes the modern is rationality. To this extent, Coleman (1990) notes that as soon as rationality is mentioned in sociology Weber's approach come to mind.

For Weber, rationality is a driving social force in modern society. Weber believed that social life is becoming increasingly 'rationalized' in the sense that people tend to lead relatively methodical lives. Abell (1995) highlights that for Weber, rational action centered on calculability, intellectualization and impersonal logic of goal directed action. 'The instrumental approach to action takes values as given and focuses instead on the efficient choices of means to reach such goals' (Coleman 1990:43). As highlighted in the previous section, rational choice theory is not a highly unified intellectual entity. 'Rational choice theorists are divided as to the substance of their theoretical assumptions, such as whether the rationality assumption is sustainable, how to define self-interest, and the utility of methodological individualism' (Macdonald 2003: 551). Taking the above into consideration, in the following sections I raise the following themes: First, I present a discussion of the different models of rational choice theory, namely the internalist and externalist perspective. Second, I highlight the weaknesses and limitations of the internalist and externalist perspective of rational choice theory. Following these, I give a

brief discussion on the epistemologies generally utilized by rational choice theorists by ways of appropriating and selecting the type of rational choice model for the study. Finally, I discuss and justify why the rational choice model is best suited for the exploration of understanding rationales influencing private car owners in the Bisley area.

INTERNALIST INTERPRETATION OF RATIONAL CHOICE THEORY

Satz and Ferejohn point out that '[t]he internalist interpretation of rational choice holds that the theory describes "what is actually going on inside us when we reason' (1994: 73). As Augiar& Francisco (2008: 5) alerts us, the internalist approach 'also assumes that mental entities – the desires and beliefs upon which individual preferences are based – are causally linked to the individual's decision given that they provide reasons for action: beliefs and desires are mental states that motivate the individual and causally explain her action.' Rational choice theory is not unique to the field of sociology but also penetrates through the field of mainstream economics. For example, according to Farmer (1982: 185, quoted in Goldthorpe 1998:170), in the version of rational choice theory expressed in mainstream economics, consistency in preferences is conceptualized in the sense of transitivity: if an actor prefers A to B and B to C, then A must also be preferred to C. Therefore, if one is rational, in the sense required by the theory, one orders specific preferences and acts to achieve those preferences which would help attain the highest overall utility. 'Thus in rational action theory as applied in much neo-classical economics questions of the rationality of beliefs and of the grounding of action in beliefs are simply dealt with by the assumption that actors have perfect knowledge and use this in the best possible way to achieve their goals i.e. to maximize their utility (or in the case of entrepreneurs, their profit)' (Goldthorpe 1998: 170)'.

Another version of rational choice located within mainstream economics that demonstrates the point expressed above is the 'theory of bounded rationality'. Much of this theory is based on subjective rationality i.e. the idea that actors may hold beliefs, and in turn, pursue courses of action, for which they have 'good reasons' in the circumstances in which they find themselves, 'even though they may fall short of the standard of rationality that utility theory would suppose' (Goldthorpe 1998: 171). The proponents of

this theory, like Herbert Simon, have argued against the idea of human beings as frictionless and omniscient calculating machines. 'The computational and information gathering costs of maximizing are simply too high; in many cases people "satisfice" instead' (Ferejohn 1994:74). Another version of rational choice theory based on the idea of subjective rationality is one that is developed by Boudon, which is known as the 'cognitivist model'. Goldthorpe (1998: 171) notes that 'Boudon is primarily interested in how individuals may, with good reason, hold, and in turn act upon, beliefs that are objectively mistaken.' Boudon (1998 quoted in Goldthorpe, 1998) argues that where individuals appear to act in a way that falls short of rationality because of their mistaken beliefs, it should not be automatically supposed that these beliefs are in some way externally caused, for example, that they are, in the jargon of cognitive psychology, beliefs formed 'hot' under affective influences, such as desires or frustrations.

The last version of rational choice theory, which is also located within the internalist interpretation of rational choice theory, was proposed by Popper and his followers. In this version of rational choice theory, the aim is to understand action as rational simply in the sense of being 'appropriate' or 'adequate', given the actors' goals and their situation of action which is taken to include their beliefs (Popper 1994).

In view of the above arguments of the internalist conception of rational choice theory, there are two important points to consider. First, this internalist interpretation of rational choice theory describes what is actually going on inside us when we reason. Davidson (1963) highlights that from the internalist perspective of rational choice theory, mental entities (for example, preferences and beliefs) are thought to be casually related to choice, in the sense of being reasons for an agent having made the choice. Davidson (1963) supports this by iterating that the reason that an agent chooses act *x* over act *y* is that the outcome that is believed to follow from *x* is preferred to that which is followed from *y*, and so preferences and beliefs are said to cause the choice. Second, as Ferejohn and Satz (1994) put it, the internalist interpretation of rational choice is a normative as well as an explanatory enterprise. In other words, it tells what we ought to do in order to achieve our aims. By relying on individual beliefs, desires and preferences and the role they play as reasons for action, the theory not only explains individual behavior – why individuals

choose as they do - but also justifies these decisions from a normative standpoint in so far as they are the best ones that an individual can make in order to maximize her interest. This is, of course, provided that she has sufficient information and is not deceiving herself (Davidson 1980: 21; Elster, 1985: 25). I now turn my attention to the other version of rational choice i.e. the externalist version.

EXTERNALIST INTERPRETATION OF RATIONAL CHOICE THEORY

The external interpretation of rational choice theory rests on an instrumentalist conception of the basic terms of the theory since it considers that external, observable conduct of individuals is the only thing that can be taken into account (Aguiar and Francisco 2008: 5). What goes on inside of each of our heads is of no interest to the social scientist; it is a black box that needs not be opened in order to obtain genuine explanations (Börgers 1996, in Aguiar and Francisco, 2008). According to the externalist perspective, mental representations or internal reasons for action are insufficient accounts of explaining action in the paradigm of the social sciences. This is due to the fact that one's choice or decision, according to proponents of the external interpretation of rational choice theory, is influenced by conditions of the environment. Satz and Ferejohn (1994) divide the externalist argument of rational choice theory into two perspectives, namely radical externalism and moderate externalism. For radical externalists mental entities are simply theoretical constructs inferred from human behavior, or calculating devices that help us make predictions about behavior; they entail no claims about the agent's psychology at all (Ferejohn and Satz 1994). As Ferejohn and Satz (1994) put it, saying that people act consistently is not to say why they act; it is not even to say that they have reasons to act, but it is to say that some of their actions can be described as if they had reasons, as if their behavior was goal oriented. Like all advocates of rational choice theory, radical externalists subscribe to the rationality assumption.[4] However, when it comes to preference relations radical externalists take a differing view. Consider the

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[4] As highlighted earlier, the rationality assumption consists of three components: purposive action, consistent preferences, and utility maximization.

following table that demonstrates preference relations when an actor has three possible actions A, B and C.

Available Action		Preference
A	B	A
B	C	B
A	C	A

The above table sums up the internalist perspective argument of transitivity i.e. if an actor prefers A to B and B to C, then A must also be preferred to C. This argument has already been discussed in the previous section. Now consider the same actions available to another actor with the outcome demonstrated below.

Available Action		Preference
A	B	A
B	C	B
A	C	C

Both the internalist and radical externalist conception of rational choice theory could account for the choices in the above table as a result of a shift in preferences or beliefs. However, from the radical externalist perspective, the explanatory statement would connect some observable choices to equilibrium (agent's environment) outcomes and will contain no statements positing a causal relationship between psychological entities and behavior.

Like radical externalism, the moderate perspective subscribes to the fact that features of an agent's environment are crucial in explaining and predicting the behaviors of actors. Unlike radical externalism, however, the moderate externalist perspective view of

rational choice theory does not deny the existence of mental entities like beliefs and intentions. In fact, for explanatory purposes the moderate externalists advocate for some semantic relationship to individual decision making. In particular, the theory aims to illustrate how behaviors are consistent with the hypothesis of maximization, given that individuals have preferences and beliefs. The starting point for this is conceding to the fact that individuals are located in an equilibrium, system or particular environment. Ferejohn and Satz (1994) use James Scott's argument in the 'Moral Economy of the Peasant' to illustrate the explanatory power of the moderate external version of rational choice theory. 'In the Moral Economy of the Peasant, Scott (1976) derives the peasant's conservatism and aversion to risk from his precarious position - the result of shortages of land, capital, and alternative opportunities' (Scott 1976:97). For example, according to Scott (1976) where introducing new farming techniques and crops increases the risk and failure, and therefore threatens subsistence economy, Scott (1976) argues that peasants will eschew innovation. Scott (1976) further highlights that this risk-minimizing strategy explains many of the peasant's apparent preferences: his preference for crops with low yield which are reliable over those with higher yield which are not; his preference for food crops over cash crops; his preference against specializations. To briefly summarize this: rather than maximize wealth or return, Scott (1976) argues that the peasant attempts to minimize risk. For the moderate-externalist, this argument suggests that the peasant's action can be explained with his relation to the structural system. Indeed, what happens on the system limits the number of psychological possibilities.[5]

LIMITATIONS OF RATIONAL CHOICE THEORY

Like many theories in the social sciences accounting for human behavior, rational choice has numerous limitations and for that, has come under an enormous amount of criticism. The following section discusses the various limitations bedeviling the usage of rational choice theory with respect to the study in question. The limitations of rational choice

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[5] For the moderate - externalist, utility maximization in this case will entail decisions or choices that are compatible with structural conditions. This will result in a constraint or limitation in the number of choices individuals can make, hence contributing to the explanatory and predictive strength of the moderate externalism version of rational choice theory in understanding human action.

theory are explored here from two vantage points: one is by assessing the distinction that needs to be made between rationality and intuition, and two exploring behaviors that not dictated by self-interest.

In Chapter Two, I explored the various accounts of how drivers make decisions with regards to route choice, and most of these accounts use rationality as their starting point. However, what is ignored in these accounts is the role of intuition. Fyvbjerg (2004: 21) defines intuition as follows: 'the ability to draw directly on one's experience - bodily, emotional, intellectual - and to recognize similarities between these experiences and new situations.' The definition implies that intelligent action can consist of something other than calculated or analytical rationality. The use of the Dreyfus Model, which I discuss below, shows us how intuition is different from rationality and why it poses a threat to rational choice theory in the study.

The Dreyfus Model of Skill acquisition is a model developed by Stuart and Hubert Dreyfus. According to Fyvbjerg (2004), this particular phenomenology is useful for understanding the linkage between knowledge and context, and because it directly addresses the question of whether knowledge about human activity can be context dependent. The model holds the assumption that human learning happens in five stages. These stages are novice, advanced beginner, competent, proficient and expert. According to Fyvbjerg (2004), the Dreyfus model contains a qualitative jump from the three first to the fifth levels: the jump implies an abandonment of rule-based thinking as the most important basis for action, and its replacement by context and intuition. When considering this research example, drivers may be ranked on different levels (novice to experts) in terms of the ability to make correct decisions about choices of routes that will maximize their intentions in the presence of situational dependent cues. For example, consider two routes, A and B, which both lead to destination C. Route A, the shorter route, is congested with traffic and route B is twice the length of Route A. the assumption here is that the driver is faced with the predicament of not only getting to C timely, but also intending to minimize petrol costs.

There is no denying that rational calculation does serve as an option for a way out of this situation. However rational choice appears to lose its explanatory strength when

accounting for why certain individuals failed to make the apt decision about which of the routes to take. Another shortcoming of this theory is, how can we separate the intuitive from the rational, the internalized from the calculative. Fyvbjerg (2004) also shows us that existing research provides no evidence for intuition and judgment can be externalized into rules and explanations, which if followed, lead to the same result as intuitive behavior. Such externalization, Fyvbjerg (2004) maintains, is possible only for analytical rationality, that is, for those skills which characterize the lower levels in the learning process.

In general, rational choice theory often finds itself least powerful in explaining phenomena that bring into play reactions that do not, by the very nature of things, spring from any consideration of self-interest. One of these behaviours that we could likely encounter in the study, is habit.

According to Butler *et al* (1995), habits are routine behaviors that are repeated regularly and tend to occur subconsciously, without one being conscious of them. Like intuition in the previous paragraph, habit also poses a problem with our theoretical tool, since habits and routines also impact on the route selection process. This means that these types of actions do not go through a process of analyzing or goal calculation as it is with rationality. This is due to the fact that our lives largely consist of daily routines (Huff and Hanson 1986; Pas, 1988). For these reasons, things we frequently do become habits or learned behavior (Trandis 1977). According to Papinski *et al* (2009), habits provide inertia for people willing to stay with familiar routes instead of switching roads.

The weaknesses of rational choice theory highlighted above are among all other limitations of rational choice theory specific to or affecting this research. Other noted weaknesses of rational choice theory such as behavior dictated by social norms, collective action, reciprocity and trust, deemed to pose no threat to the usage of rational choice theory as a theoretical tool in this study.

THE CASE FOR EPISTEMOLOGICAL PERSPECTIVES ON RATIONAL CHOICE THEORY

Having now considered the different versions of rational choice theory as well the limitation it may impose on the study, one now needs to consider which of the rational choice theory perspectives highlighted above is most suitable to the understanding of rationales influencing route trip choices of private car owners in the Bisley area. Both perspectives offer different tools for the understanding of the problem. The internalist perspective, for example, offers insight into cognitive or psychological elements influencing route trip choices, whereas the externalists' perspective gives insight as to the elements that are external the driver, which influence his or her choices. As will be illustrated later in the discussion, both perspectives serve different purposes in answering certain questions in the social phenomena. To illustrate this, as well as justify the selected perspective for the research in question, the discussion moves towards an epistemology of rational choice theory, which I think is a necessary step in order to select the most appropriate or suitable perspective for the research in question. For example, how do we know 'intentionality' the internal?

Here I am following Macdonald's (2003:553) suggestion that '[w]henever social scientists present a theory that attempts to describe or explain a given social phenomenon, they are implicitly advocating an epistemological position - a justification for how and why a theory can produce valid, scientific knowledge.' Macdonald (2003) further highlights that a focus on epistemology is crucial in understanding the scope, purpose and possibilities of rational choice theory in the social sciences since different epistemological positions possess different conceptions of the appropriate ways in which to design and test individual theories as well as to adjudicate between competing theories. Importantly though, Macdonald (2003:555) highlights that an understanding of the epistemological foundations of rational choice theory helps clarify what is at stake in existing debates concerning different theoretical claims made by rational choice theorists about the nature of the rationality assumption, self-interest, and the relations between individuals and structures. As will be demonstrated later, in examining epistemological foundations this theory plays a huge role in helping eradicate inconsistencies within rational choice theory when theoretical assumptions are adopted. A focus on

epistemological foundations is also crucial in a sense that it allows for the assessment or feasibility of rational choice theory as a universal theory of social behavior.   In the following section, I discuss two philosophical foundations generally utilized by rational choice theorists. These are instrumental empiricism and scientific realism. The next section demonstrates how these two epistemologies are utilized by rational choice theory and then proceeds to select one which would be most applicable for the question under discussion i.e. selecting the appropriate type of rational choice theory in order to understand factors influencing rationales of private car owners in the Bisley area.

INSTRUMENTAL EMPIRICISM AND RATIONALITY

Instrumental empiricism is one of the most influential positions within the philosophy of science. For instrumentalist-empiricism, theoretical assumptions are tools that help generate predictions about the world that can subsequently be verified empirically (Macdonald 2003:553). According to this epistemological argument, theories should be designed with two goals in mind - testability and generalizability. For instrumentalists, theories are seen as instruments of calculation, permitting scientists to generate or asses the empirical hypotheses of these statements about the real world. Instrumental empiricists also do not grant any ontological status to entities that are unobservable. According to Macdonald (2003: 553), unobservable entities are generally not considered, because instrumental empiricists believe that it is impossible to create empirical tests that can reliably measure, or effectively evaluate relationships between such phenomena. Instead, generalizable predictions that can be evaluated in a number of widely different yet sufficiently similar observable, empirical domains are preferred. For example, theorists can generate testable hypotheses about the rationality assumption. Macdonald (2003:554) states that in instrumental empiricist terms, the rationality assumption is useful because it facilitates the construction of hypotheses that are generalizable across a wide range of human behavior. For example, consider the following criticism of the rationality assumption highlighted by Bourdieu (1990) and Nadel (1957): These authors argue that a large portion of human behavior is the result, not of purposive calculation but rather, of social roles that define appropriate behavior. Similarly, many social

psychologists challenge the notion of consistent preferences and utility maximization, pointing out that human beings rarely possess consistent preferences (Halpern and Stern 1998; Hogarth and Reder 1986; Sen 1979), engage in 'satisfying behavior rather optimization (Simon 1982), and routinely make cognitive errors in calculation (Tversky and Kahneman 1986)' (Macdonald 2003: 556).

In response to these criticisms the internalist conception of rational choice theory perspective offers the 'as if' response. Macdonald (2003) highlights that the 'as if' response does not concern itself with whether individuals actually act in a manner congruent with the rationality assumption. Rather, the response states that social theorists can construct illustrative theories of human agency by assuming that actors behave as if they are following dictates of the rationality assumption, even if actual decision making proves otherwise. This means that instrumental empiricists place more focus on the creation of generalizable hypotheses (which are supposed to be proven empirically valid) as opposed to the accuracy or validity of the actual processes assumed by their theories. Hence within the context of this research, an instrumental empiricist (which could both be internalist or externalist perspectives) could assess whether or not actors (private car owners) select their routes rationally when subjected to certain environmental conditions and conclude by providing empirical results. Macdonald (2003) coins the term 'useful fiction' to illustrate how this epistemological position aids in the creation of hypotheses about the observable world.

SCIENTIFIC REALISM AND RATIONALITY

Scientific realism's contribution as an epistemological perspective is that theories should be designed to explain phenomena in the universe (whether they be observable or unobservable entities). According to the scientific realist perspective, theoretical statements in science are, as they appear to be, bona fide true or false statements, and that theoretical terms are, as they appear to be, bone fide referential expressions. This is opposed to the Instrumentalist thesis that scientific theories are not really statements at all, but instruments, devices for making observational predictions (Haack 1987: 275). Scientific realism maintains that we can reasonably construe scientific theories as

providing knowledge about unobservable entities, forces, and processes, and that understanding the progress of science requires that we do so (Little 1998). It is also important to note that, whereas empirical verification and prediction lie at the heart of instrumentalism-empiricism, scientific realism sees a central and important role for theory building alone. By clarifying assumptions, developing concepts, and specifying casual mechanisms, theory building can be as equal to, if not more important than empirical testing (Macdonald 2003:555).

Like instrumental empiricism, scientific realism is utilized by a number of rational choice theorists. These include many of the externalist rational choice theorists like Satz and Ferejohn (1994). According to Macdonald (2003: 555), scientific realists find rational choice theory useful not simply because it generates testable hypotheses, but rather because it makes a seemingly realistic and convincing appeal to mechanisms that social science theorists believe are in actual operation when human beings act - namely that people purposively maximize their subjected expected utility over a set of consistent preferences. Macdonald (2003:555) further highlights that the primary standard for the development of the theory for scientific realists is accuracy. Therefore, for Macdonald (2003), theories that clearly specify, describe and explain the casual mechanisms that operate in a particular situation, are superior to those that fail to provide any mechanism at all.

A BROADER NOTION OF RATIONALITY FOR 'RATIONAL FOOLS'

Having now considered the basic tenets of each epistemology generally utilized by rational choice theorists, I now contend that on the basis of what this project aims to achieve (i.e. provide sets of rationales that influence route choice) scientific realism would be the most viable epistemological position to utilize. The mere fact that scientific realism emphasizes theories which describe and explain casual mechanisms, as opposed to generalizability and predictability, creates a compatibility with the goals of the project. The theory chosen also needs to be able to account for casual mechanisms in the environment that may influence route choice or spatial consumption. The significance of such is that actors and their context are considered real, meaning that the ontological

status is granted to both the actors and their environment[6]. Therefore, a theory which considers not only preferences and beliefs as motivations for choice, but also the influence of social facts would be most useful in accounting for the behavior of private car owners in the Bisley area. Considering earlier discussions about the internalist and externalist perspective of rational choice theory, the internalist perspective put forward by Boudon (2003), known as the cognitivist theory of action, seems most plausible. According to Boudon (2003:10), the cognitivist theory of action assumes that any collective phenomenon is the effect of individual human actions (individualism); in principle, provided that the observer has sufficient information, the action of an observed actor is always understandable; the causes of the actor's action are the reason for him or her to undertake it (rationality). The strength of the cognitive rationality is that it does not limit the action of individuals to instrumental rationality. In this sense it allows a nuanced exploration of influences affecting private car owners, affecting choices of private car with regards to routes or spaces. This model, which has long classical roots in theories of Max Weber, concedes the fact that the rationality of actors cannot be solely reduced to expected utility. More importantly, this model concedes the fact that preference of routes or spaces can also be affected by beliefs (this includes false beliefs) or other sentiments. Sustaining this view, Boudon (2003) has argued that false beliefs, if grounded on strong reasons can be considered rational. In other words, a belief in a false idea can be caused by reasons in the mind of actors. Furthermore, for Boudon (2003), to explain what they perceive as right is wrong, we do not have to assume their minds are obscured by some hypothetical mechanism of the kind proposed by Marx ('false consciousness'), Freud ('the unconscious'), Levy Bruhl ('the mentalite primitive'), and which their many heirs imagined, nor by the prosaic 'frames' evoked by Rational Choice Theory. Therefore the cognitive theory of action model makes the argument that action has to be explained by its meaning to the actor.

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[6] By granting the environment ontological status, one concedes that there are casual mechanisms daily operating in the environment which directly have nothing to do with the actor, but in some contexts influence the decision or rationality of the actor with regards to route choice.

CONCLUSION

The conclusion regarding the theoretical tool to be utilized in this research is made by considering the following as summarized below: First, the theories of rational choice are unpacked to illustrate the tools available for social science research like this one. Second, the epistemological foundations are brought into scrutiny as they are central to the construction of theory and setting out criteria for the creation of knowledge. Both instrumental empiricism (generalizability) and scientific realism (accuracy) are explored and compared with the goals of the project (to adequately explain influences affecting decisions of private car owners with regards to decisions on routes) in mind. Therefore, because of its ability to explain the actions of individuals without 'leaving black boxes', Boudon's rational choice version known as cognitive theory action is selected as the theoretical tool for this study. The diagram below sums this up.

Fig. 2: Illustration of the theoretical models

An important lesson learned from Boudon's cognitive theory of action model, is that it is simply 'foolish' to reduce rational choice theory to instrumental rationality as is traditionally done by many theories advocating for rational choice theory. Boudon (2003: 17) argues that social action generally depends on beliefs, that as far as possible beliefs, actions, and attitudes should be treated as rational, or more precisely, as the effect of reasons perceived by social actors as strong, and that reasons dealing with costs and benefit should not be given more attention than they deserve.

CHAPTER FOUR: RESEARCH METHODOLOGY AND METHOD

Practice has a logic which is not that of logic - Pierre Bourdieu

INTRODUCTION

Due to the fact that the study of decisions influencing route choice has gained more attention in other genres (engineering and psychology for example), studies highlighted in Chapter Two have contributed more to a conceptual understanding of how these decisions are formulated as opposed to providing the methodological design for this study. One important lesson drawn is that decisions are not only made on the basis of intellectualization and calculability but also on the basis of habit and intuition. Hence in terms of the theoretical framework adopted, a broader notion of rationality known as the Cognitive Theory of Action was adopted as the theoretical framework. The purpose of this chapter is to explicate the research methodology employed by the researcher in this study. According to Babbie and Mouton (2006:74), research methodology focuses on the research process and the kind of tools and procedures to be used. The discussion in this chapter includes the reasons for choosing the methodology and various methods that were employed, an outline of the data collection and analysis tools, sampling techniques, ethical considerations and limitations of the study.

METHODOLOGY: THE CASE FOR VERSTEHEN AND QUALITATIVE APPROACH

Debates about methodological practice in the social sciences are as old as the very concept of social science. For example, the question of whether the study of human and society can be scientific in the same manner as the study of natural objects has raged on for centuries and still causes controversy today. 'The controversy is due partly to the fact that besides having fundamental methodological consequences, the question touches on a sensitive factor such as the status of the social sciences in relation to natural science, as well as what Richard Bernstein calls, 'Cartesian anxiety' that is, fear of ending in relativism and nihilism when one departs from the analytical-scientific tradition that has dominated Western science since Descartes' (Fyvbjerg 2001: 25). Considering the success that the natural sciences have seen in aiding society with efficient tools to master

and manipulate their environment as well as technological tools which have completely revolutionized the way we live, it is not difficult to see why there is a huge professional envy. This goes back to the hey-day of the Enlightenment era (which also corresponds with the emergence of social science) which celebrated scientific knowledge, and man's capacity to generate it in order to control nature. It is in order to provide legitimacy to social research as scientific work, that early social scientists paid particular attention to the epistemological and methodological tools they employed, so much so, that they looked at the natural sciences to find standards and tools for social science, informed by this impulse to attain the classification as science. Context independent theories which have the ability to explain and predict natural phenomena have given the natural sciences a strong and prestigious position in society. It is therefore not surprising that traditions in the study of human activity such as functionalism and structuralism adopted a positivist view of social science, an approach that views the natural science as a model and an ideal to studying social phenomena.

However, this approach to social research has been waning in the last few decades. This is due to the realization that the social sciences' subjects are self-reflecting humans, and, must, therefore, account for the interpretations of the object of study and context. This, in my opinion, is the distinguishing element of the social sciences. Context, the multiple possible interpretations, and the inability to control all variables affect the outcome of the knowledge produced. These are central to understanding what knowledge production in social sciences can be. As Babbie and Mouton (2006: 270) put it, 'If one understands events against the background of the whole contexts and how such a context confers meaning to the events concerned, then one can truly claim to understand events.'

According to Max Weber, social action is appraised as the key subject of study in the field of sociology, and this should be understood through interpretive understanding. Social action, as highlighted in the previous chapter, entails behavior in which the individual attaches subjective meaning. This, therefore, suggests that social action is context dependent. Generalizable and predictive theories face strong limitations in understanding this phenomenon. The hermeneutic phenomenological argument of Anthony Giddens and Harold Garfinkel also supports this point. 'The hermeneutic

phenomenological argument of Anthony Giddens and Harold Garfinkel proposes that the study of human activity must be based on people's situational self interpretation' (Fyvbjerg 2001:47). With this in mind, I argue for the deployment of Max Weber's methodological concept of 'verstehen' for the probe into factors influencing choices of roads by private car owners residing in the Bisley area.

The methodological tool of Max Weber known as 'verstehen' loosely translates to 'understanding'. Tucker captures a broader interpretation of this concept in observing that, 'Intentional behavior, meaningful behavior, and subjectively understandable behavior are all three, synonymous with regard to "verstehen" (Tucker 1965:157). Following the discussion in the previous section, it must be emphasized that the concept of 'verstehen' is a methodological tool to explain not all behavior, but behavior which is of a social nature i.e. social action. Since what is investigated are subjectivities of actions, the most effective way to understanding the decisions of drivers with regards to their route choices is through interpretive probes into the narratives of their own decision. This means allowing the drivers to explain their decisions by taking context into consideration. Methodologically suitable to such possibilities, is the qualitative approach to research. What makes such an approach appropriate is that it demands and allows the participants to tell their stories, contextualize their actions, and, stretched a bit, it encourages getting involved in a dialogue with the participants.

Qualitative research aims at creating an understanding of human behaviour and the reasons that govern human behaviour. Qualitative research relies on reasons behind various aspects of behavior. 'Simply put, it investigates the why and how of decision making, not just what, where, and when' (Denzin*et al,* 2005:117), which, I think, makes it far more appropriate to this research. According to Babbie and Mouton (2006:53), the goal of the research is defined as describing and understanding (verstehen), rather than explanation and prediction of human behavior. Babbie and Mouton (2006: 270) re-emphasize that one of the main goals of qualitative research is to understand the actions in terms of the actors' own beliefs, history and context. Therefore, within this context, the research, which is to seek and understand how and why such choices with regards to roads are made, the range of choices and decisions influencing the choices are likely to be

different based on the participants' interest and background. Therefore the qualitative method is the more appropriate approach regarding the question under study, as it will allow the research to explain the phenomena in terms of the eyes of the actors. In conclusion, a qualitative approach essentially looks for 'meanings of behaviours or actions' and attempts to describe and analyse them. This is not only compatible with the methodological tool of verstehen, but also to the goals of this project.

SAMPLING AND DATA COLLECTION

Sampling entails participants' selection criteria which is necessary to address the issues and provide answers to the questions contained in the goals of a study (Stouthamer-Loeber and Kammen 1995). Due to unavailability of information as to how many private car owners exist in the Bisley area and their break down in terms of race, non-probability sampling was the preferred sampling strategy here. Since the purpose of this research is to conduct a qualitative investigation that is far more interested in generating insight than assessment of variables, non-probability sampling was appropriate. According to Durheim and Tredoux (2002:5), non-probability sampling is a type of sampling where people have a greater, but unknown, chance of inclusion than other forms of selection. Non-probability, unlike probability does not involve random selection. Convenience sampling was used to select the participants in this research. This is due to the fact that research participants were selected because of the convenient accessibility by and proximity to, the researcher.

While considering and planning the data collection process, two challenges were apparent. Firstly, how does one locate private car owners residing in the Bisley areas, and, secondly, exactly at which locations can one conduct such interviews bearing in mind the nature of qualitative inquiry being rigorous and detailed? There was also the issue of class to consider. Class (a complicated concept to capture) is an important variable in the study; thus, the mechanisms to effectively capture this phenomenon had to be considered. It was through these considerations that households were chosen as sites for the data collection process. Households, unlike malls or car parks, provided an intimate and comfortable surrounding for the interview process. Houses also greatly

assisted the researcher in the capturing of class, as indicators such as household income, tertiary qualification and ownership of property served as yardsticks. Bearing in mind that Monday to Friday are conventional days for work, the weekend was chosen as the days for the data collection process. The data collection process happened over a period of 3 weekends in April 2009. Participants in the study were interviewed using an interview schedule and a digital recorder. By the time I ended the fieldwork, I had managed to conduct 18 in-depth interviews.

10 roads stretching from the north end to the south end of Bisley were selected and participants from each of the roads were interviewed. The logic of selecting different roads was to get participants who used different roads (possibly because of proximity) as well as to assess to what context related scenarios for different roads exist in framing decisions of private car owners. Houses on these different roads were approached and participants were recruited in terms of willingness. There was no systematic selection of the roads; the selection procedure was to select participants on roads housed at different geographic ends of Bisley (these roads are highlighted on Fig. 3 below).

Race, gender and class are central variables in the study. In the section to follow I detail the process of capturing each of these phenomena and the dynamics that emerged during the data collection process. In Chapter Two, I argued for a spatialized conceptualization of race or racialization. 'Arguing for a spatialized conception of racialization is to make the claim that first, 'races' are bodily inscriptions, and second racialization entails above all else, notions of boundaries and separations: spatial assignments' (Foster 1997: 10). Therefore one of the aims of this project was to observe whether this trend in post-apartheid South Africa persists. In other words, in terms of spatial consumption or the spatialization process, is race still an influential element in post-apartheid South Africa? In other words is race a factor in the road chosen by a participant? In terms of the racial make-up of participants in the study, they consisted mainly of Blacks.

Fig. 3: Locations of Roads Sampled

This was influenced by two factors. Firstly, because of my racial background, i.e. being allowed to enter the intimate social settings (households) of members of the Bisley community, I had a higher rate of allowed entry with Blacks. The irony, though, is that despite the fact that I had a better chance of recruiting a Black to be a participant in the study, I received more personal information (e.g. salary earnings and educational level)

from participants of other population groups. Secondly, in terms of the ability to convince participants to partake in the study, the perception of an 'educated Black' appealed more to Black community members as the majority of Black participants probed further about my degree and remarked on the fact. Some white community members perceived me as a municipal worker, or as somebody working for a political party. The racial distribution of participants consisted of 9 Blacks, 5 Whites, 1 Indian and 3 Coloureds.

Gender was purposively controlled in the study to the effect that the proportionality difference was not extreme. The reason for this was to asses to what extent gender had any bearing on mobility patterns and spatial consumption. The gender make-up of participants consisted of 8 females and 10 males.

As argued with race, the literature covered in Chapter Two also argues for a spatialized conception of class. Hence one of the elements to asses was to note, among the interviewed participants, whether this conception holds true in post-apartheid South Africa. Two indicators were used to categorize participants. Firstly, these were socio-economic measures such as household income and ownership of property. The assumption already made before contact was that participants also owned vehicles. Secondly, the educational background of participants was included as an indicator for the reason that a tertiary qualification was a value in itself since it increases life-chances and opportunity.

Due to the sensitivity of this information not all participants sampled gave this information. This constituted 5 of the 18 participants. Not surprisingly, 3 of those participants were black law enforcement officers and one was a white female. Household income data can be categorized in 3 categorical ranges. These ranges, are R10-R15000, R16-21000 and R21000 and above R21 000 per month. 7 participants fell within the first range, 1 in the second and 5 in the third. It is important to note that with these income ranges, all participants would fall into the middle to upper class lifestyle classification when combined with all South Africans.

ACCESS TO THE FIELD: THE CHALLENGE OF BEING A BLACK MALE RESEARCHER IN A PREDOMINANTLY WHITE SUBURB

One of the challenges I faced during this research was access and recruiting participants. Many residents in the study refused even to consider a conversation with me, let alone allow me access into their property, and some showed little interest in participating in the research. On the first Saturday of the data collection process, I was only given access to 4 houses, 3 of which comprised black households and the other a white household. This led me to believe that race was going to be an influential element concerning whom I would be able to recruit to participate in this study. Therefore, to overcome this challenge I resorted to employing the services of a white female assistant. The presence of this white female assistant assisted greatly, as access was not only consistently granted across houses of different racial households, but also doubled the rate of participants who were recruited for this research. Particularly, a resident in Carey Road, who participated in this research, displayed a tremendously welcoming spirit by going as far to making tea for the researcher and the white female assistant. In addition, this participant went as far as phoning and recommending other neighbors who became potential recruits for the study.

On the third Saturday, I opted to go without the white research assistant, having learned from the previous research that racially diverse roads yielded higher rates of access. This proved useful as this led to a higher response rate to people partaking in the study, most notably white people. As highlighted above, capturing the socio-economic status of research participants is central to this inquiry, and thus, the interview schedule included a question on the rough estimate of household income. More respondents were confident to share this information while I was accompanied by the research assistant than while I was alone. I could not help but wonder whether it was the gender or the race or the combination of both that mattered. During the weekend when I was with the white female assistant, all participants recruited revealed this information. Surprisingly, the majority of participants that felt uncomfortable revealing this information were black participants. From this experience, one can deduce that race and possibly other forms of representation pose challenges and should be taken into consideration in the data collection process in post-apartheid South Africa.

DATA ANALYSIS

Having completed the data collection process, the first challenge I faced was to organize the data in a meaningful way. Data organization, especially in qualitative research, as my experience with this project has taught me, is a key pre-requisite; it builds up on the analysis and assists in making the process of analysis a smooth one. This is due to the nature of qualitative data, which, by its very nature, is bulky. For this, a range of software was used. Google Earth and Arc View (a Geographical Information System Software) were used to create and plot maps which assessed road movements of the participants. Data collected during the research process was transcribed. Thematic analysis as a means of data analysis was used as a method to analyze the response of the participants. This was done through classifying and categorizing the themes and concepts as they emerged from the data. The emerging themes, issues and relationships were then consolidated into data of a narrative form.

ETHICAL CONSIDERATIONS

A number of ethical considerations were taken into account during the research process. Firstly, the participants were fully informed about the details of the research, and of what was to happen with the information obtained once the research process was over. No participant was forced, coerced or manipulated into partaking in this study. All the participants in this research participated voluntarily and with full informed consent. Participants were also given the option of withdrawing from this research, at any stage of the research process, if they felt uncomfortable or offended by any of the questions posed. Since the interviews were conducted at the houses of the participants, it was my view that the participants might feel uneasy about someone knowing where they resided or had their addresses. In this case, I tried to assure the participants that all information would remain confidential. Participants were made aware of this at the beginning of the research process and were assured that the information obtained was exclusive to the School of Sociology and Social Studies as well as the National Department of Transport. This also includes all forms of confidential information such as household income.

LIMITATIONS OF THE STUDY

The first concern experienced during the research process was that of road names. Over the last 3 years the Msunduzi Municipality has begun implementing a national political process of changing road names, possibly trying to do away with the apartheid identity and to fit in with the identity of post-apartheid South Africa. Some of these roads include, Durban Road being changed to Alan Paton Avenue and Commercial Road being changed to Chief Albert Luthuli Road. In some instances, certain participants were not that well informed about these changes, and, in some cases, did not remember the names of the roads they used to access their destination, but merely highlighted their geographical location. As much as the primary aim for this research was to enquire about factors framing their decisions about their choices, good knowledge of the road names would have allowed the researcher to contextualize the chosen routes and possibly investigate whether there were any other elements that would have influenced choice.

The second major concern of this research project was the issue of the race of the researcher. As highlighted earlier, for various reasons, race is itself an important variable in this study. There are questions in the interview schedule which relate directly to the expression of race. One such question is: 'Would you consider the people who consume chosen recreational spaces to be of the same population group as yours?' Another question highlighted is: 'Would you consider a multi-racial Bisley to be much safer than pre-1994 Bisley? Both these questions are sensitive to the expression of racial identity and could easily be misperceived by participants as asking the question of, 'Are you racist?' The key problem that arises when asking question that are racially related is that participants, especially those not of the same population group as that of the researcher, could practice caution not to offend the researcher. Therefore, I feel with regards to certain questions on race, some of the participants' responses were based on their perception of me i.e. an educated, male, black South African. I, however, do not think that this hindered my ability in assessing the influence of race on spatial consumption.

CONCLUSION

This chapter has highlighted the significance regarding the consideration of context in the social sciences. It has also argued for the usage of 'verstehen' in the understanding of social action. The consideration of the significance of context also led the researcher to conclude that 'verstehen' would be an effective tool in the subjective understanding of the choices made by private car owners with regards to roads as it also aims to understand intentional and meaningful behaviour. Again, I found this methodology strongly compatible with the theoretical tool of this project, i.e. the cognitivist theory of action which assumes that any collective phenomenon is the effect of individual human actions (individualism); that, in principle, provided the observer has sufficient information, the action of an observed actor is always understandable; that the causes of the actor's action are the reason for him or her to undertake it (rationality). This led me to adopt a qualitative approach in which I conducted in depth interviews at various households in Bisley. As noted with the data collection process, who I was, not only partly determined how participants responded to me (for some questions), but also whether I was granted access or not. This led to me obtaining the services of a white female assistant. This proved useful as my response rate increased, and most notably among white participants. Ethical issues of confidentiality were also brought to the fore in this chapter. Furthermore, this chapter brought to attention the fact that race created a considerable limitation and challenge in this study.

CHAPTER FIVE: DRIVING IN AND OUT OF BISLEY: RATIONAL CHOICES AND RATIONAL PEOPLE?

'Our task is to broaden our reasoning to make it capable of grasping what, in ourselves and others, precedes and exceeds reason.' - Maurice Merlau-Ponty.

INTRODUCTION

Kaufman *et al* (2008:37) state, '[a]dvancements in technology have produced a time-space compression.' These technologies include the cell phone, internet and, significant to the purposes of this research, the automobile. The importance of the automobile can be attributed to the fact that it serves as a vector to manipulating this time-space compression. Therefore, one of the key pre-requisites for integration into modernity is mobility, and, as highlighted earlier, the automobile has become a useful 'prosthetic' for humans in achieving this integration. The setting in which this mobility occurs – that is, roads and the dynamics occurring in them as well as their state – is also central to thinking about mobility and how it is shaping the socio-political and economic organization of society. This is what I have attempted to do in this chapter; in this sense, I unpack factors influencing choices of roads (in the process, exposing mobility patterns) as well as document the state of these roads and dynamics occurring on these roads. In the preceding chapters of this dissertation, I conceptualized roads to be both pathways and spaces which drivers consume. I attempt to unpack them as pathways that facilitate mobility, and this is done with the sociological elements of driving in mind (which is thoroughly explored in terms of the social contents of driving patterns and consumption of spaces, in next chapter).

An insight into the underlying decision making process with regards to the route choices of private car owners in the Bisley area is accessed through, first and foremost, a broad analysis of primary social activities. On the basis of their significance for livelihood, these are identified to be work (since it is the means to attain 'the ultimate social tool', i.e. income as a source of livelihood in the modern economy), leisure, shopping (since it necessitates sustenance and consumption), and other social activities (such as sports, family or friend visits, etc.). The first three are prominent elements of this inquiry. These

primary activities were also selected due to the fact that they take place at different times of the day (which according to Papinski *et al* (2009) is one of the main factors that determine whether a route is used or not). Issues of safety and the quality of the road are also explored. The first section of this chapter interrogates the routes to the workplace by assessing participants' driving patterns while accessing work areas. The first section (item 2) highlights the work areas of participants, the most popular routes as well as factors informing and framing decisions in choosing these roads. The second section explores driving patterns of participants while accessing shopping areas. This section also highlights these shopping areas, provides popular routes in terms of accessing these shopping areas and provides factors informing and framing decisions in terms of choosing these roads. Finally, the last section provides a conclusion for the chapter by testing the arguments brought forward in this chapter.

THE MORNING ROUTINE: CHOOSING ROUTES TO THE WORKPLACE

In the first part of the analysis to follow, the rationale behind the routes chosen by participants in terms of accessing their work areas is given particular attention. Important to note is that all the participants who are listed as employed used roads in the Bisley and surrounding areas between 6H30 and 8H00 am. Therefore, this part of the analysis focuses on the usage of roads during these times. The analysis details and pays attention to the most popular roads/routes to work destinations chosen by participants. This also reveals the factors influencing the decisions of the participants in terms of their choices regarding road/route usage. The areas which participants accessed during this time include Imbali Unit 13, the CBD, Mkhondeni and Chase Valley. These areas are illustrated on Fig. 4 below. In this map, the locations for the houses of participants are marked in green and the main routes in which these work areas can be accessed are labeled in brown. The main roads constitute Alexandra, Oribi, College and Alan Paton Avenue.
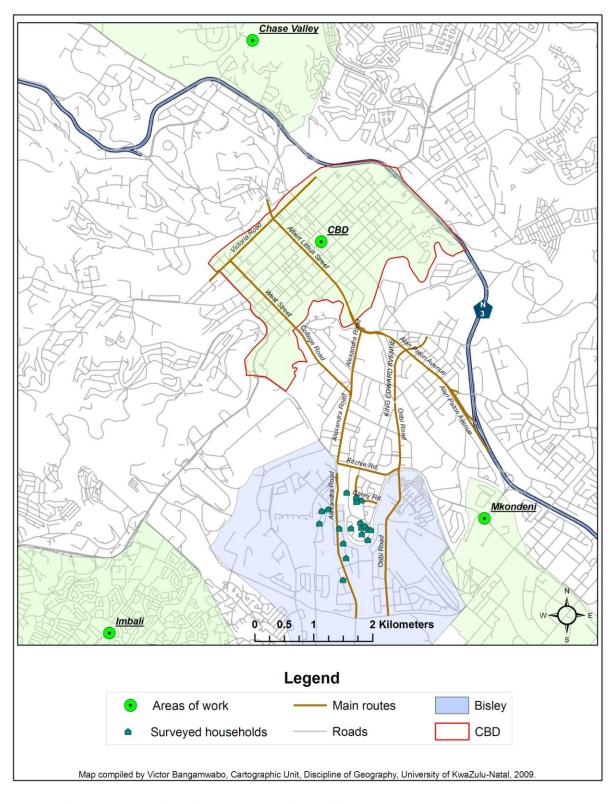
Fig. 4: Illustration of work areas of participants

The CBD is a popular work location for the majority of the working participants in this study. Generally, roads in the CBD are characterized by high volumes of traffic. Despite the limited routes available to the CBD and the other workplaces, considerations such as safety on the road, traffic flow, and proximity appear to be important to the private car owners. In the following, I try to explore these using extracts from the interviews. One of the participants, Mr Smith is a 71 year old white Administrator who works in Prince Alfred Street in the CBD. When I arrived at his doorstep formally dressed and accompanied by a white female assistant, [7]Mr. Smith received us warmly. For Mr Smith the selection of routes while driving to work is based on his perception of public transport and safety, particularly concerning kombi taxi drivers:

Res: Which road or route do you use to get to your work place?

Mr Smith: Ok, I leave Carey, then join Ritchie Road, go into Alexandra then join Commerce, turn into Prince Alfred and finally into Pine Street.

Res: What's the logic for using such a route?

Mr Smith: ayy….it is to avoid public transport. Taxi drivers are negligent drivers. Those people don't think. They can make it unsafe for everyone one on the road. Plus I like to drive where it's quieter.

Mr. Smith's interview underlines an important element which is explored in Chapter Two, i.e. the reluctance of most of the participants to be on the road with taxi drivers, which is a general pattern in South Africa. Mr. Mthethwa, a 47 year old Black pastor residing in Haynes Road also expanded on this topic describing which makes many drivers unhappy about taxi drivers:

Mr. Mthethwa: taxi will take a right hand but because of such a long traffic it comes from a right hand side and it turns left especially and for you who is going

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[7] The choice of dress code was deliberately done to make me appear as if I was in a good social position so that I appeared less threatening to my participant and the white female assistant tagged along to increase my response rate, especially in houses of different racial lines.

straight you have to wait for them. In fact, they've got these guys that they are having, we call them *usicabha* and these guys will stop you for taxi assistance, and the guys will actually flag you down so that you must stop so that a guy goes through. I had lot of that with taxi drivers, which is a problem. I think all these guys if you don't make way for them you feel like a horse. They just threaten you. They are like a law to themselves. And also the parking: you know when they stop for a passenger, they will stop anywhere. These guys can stop in the traffic lights, they can stop at the no stopping zone and there is nothing you can do. They can even talk in the middle of the road and they will signal you to pass somewhere else.

This reaction is typical of the perception the general public has about taxi drivers on the road. As Allopi and Govender (2007:3) put it, '[t]axi drivers in the South African context have developed a notorious reputation for the disregard of road rules and the proclivity for the dangerous overloading their vehicles with passengers'. There are many reports of taxi (and also bus) related accidents across the country. Mr Smith and Mr. Mthethwa's decision to factor in such possibilities, while choosing routes to work, is then justifiable.

However, this cannot be considered as a shared calculation. For example, taxi related safety concern does not seem to influence Mr Smith's neighbor Mr. Hendricks' decision on which routes to take while driving to work, or anywhere, for the matter. Mr. Hendricks, a 24 year old coloured male has no issue about the fact that the alternative route which links Carey to Ritchie and the Oribi Road is a busy taxi route during early hours of the morning. He uses proximity and familiarity as the basis for his choice and also sees himself as a competent driver who can easily navigate himself out of traffic. It is not that difficult to notice there is an age difference between the former two participants and the latter. The suggestion here is not that there might be causal link between age and the issues considered by the participants. However, this is to suggest that issues and factors individuals consider vary depending on their experiences in this world and life stages. This highlights that Mr. Smith and Mr. Mthethwa are more settled and consider driving more as a necessity instead of a gratifying activity and, therefore,

look rather, for easy traffic, while Mr. Hendricks is at his prime and, perhaps, has a whole lot of energy and vigor to negotiate heavy traffic and recklessness the of the taxi drivers.

Another route linking to the CBD that appeals to many of the participants (especially those on the north-eastern side of Bisley e.g. Rudling Road) is the route connecting the main road Alexandra and Albert Luthuli Street. Like the CBD, Chase Valley is a key commercial area and offers a number of possible pathways in terms of accessibility. The Chase Valley area not only hosts Pietermaritzburg's biggest shopping mall, but is also a home to a number of commercial enterprises such as restaurants, automobile dealerships (BMW, Damien Chrysler, Volkswagen etc.) and a semi private hospital (Grey's Hospital). Therefore, as a result of its commercial significance to the Pietermaritzburg area, traffic volume along routes which connect directly is often high. Two of the research participants utilize these routes on a daily basis i.e. Mr. Naidoo and Mrs. Moon. Mr. Naidoo is a 25 year old Indian mechanic who works at one of the major automobile dealerships located in Chase Valley. We caught him during his lunch hour at his house on Erwing Drive. The sight of engine parts disseminated all over his yard and the strong smell of grease drew our attention as we came along to his house. Like Mr. Smith, his reception was welcoming. His preferred route to access the Chase Valley Area during the early hours of the day is the road that connected Erwing to Ritchie and then to Alexandra and instead of using Commercial to go through via the CBD, uses College and Victoria to reach Chase Valley. When probed about the basis for his choice, he responded in the following way:

> **Mr. Naidoo**: It's a shorter route.
>
> **Res**: What about the N3?
>
> **Mr. Naidoo**: Everybody uses the N3 in the morning; you have cars coming from Durban. You donwanna via through that side!
>
> **Res:** But is the CBD not as congested, because of public transport?
>
> **Mr. Naidoo**: Aaaah, you see now It depends where you go via through the CBD, Remember, I hit a turn at College. I don't use Commercial (Albert Luthuli)!

From this interview, one gets the sense that the factors influencing the decisions on which road to follow can be multiple and shaped by the condition that each road creates, and at which time of the day. Shorter routes and then relative ease of traffic are central in the above interview. Others have also considered the condition of the roads, avoiding pot-holes and pedestrians, etc. that vary from road to road until they arrive at their destination. Private car drivers I interviewed also seem to have a good sense of public transport routes, and, during peak transportation hours, often prefer to avoid these routes. As illustrated with the interviews already reviewed thus far, proximity, physical conditions of the roads, and avoidance of traffic congestion seem to be key influential factors in determining route choices. These again appear to be the case for participants who highlighted Imbali, Chase Valley and Mkhondeni as their work areas. Washington Road which links the Umkhondeni/Cleland Area with Bisley and surrounding areas and Richmond Road which links Imbali and Bisley/Pelham are preferred routes for Umkhondeni and Imbali respectively because of proximity. It is also worth noting that despite the fact that the majority of the participants found roads in the Bisley and surrounding areas to be of good quality, one participant found the roads not to be accommodative for school children using these roads during the morning time. Mrs. Majozi a 53 year old black teacher residing in Haynes Road complained about the lack of pedestrian facilities in Crawford Road:

> **Res**: So, are there ways in which travels for drivers could be better improved in Bisley area?
>
> **Mrs. Majozi**: The…what I think they could do, I mean more especially there are cars that are rushing, I mean…at a very high speed sometimes, and at this corner one lady was knocked down and she was on the pavement.
>
> **Res**: But how?
>
> **Mrs. Majozi**: She was on the pavement, so we did ask for a ramp somewhere...also because there are schools that are, there are learners that use this road (referring to Crawford Road) to go to school but we feel if there could be a

ramp whether this side or on the other side it will be helpful.., just to cut traffic because really they could drive at a very high speed.

Indeed, while I was navigating the heart of the Bisley area by foot, I also observed this to be the case. Pedestrian accommodative facilities like ramps and pedestrian crossings seem only to occur on the outskirts or on roads connecting main roads like Oribi, Alexandra and Ritchie Road. Ironically, this also caught the attention of Mr. Myeza, a 38 year old black traffic official residing in Erwing Drive who, at the time of the interview, had been residing in Bisley for two months. Mr. Myeza noted, "One thing I have…have notice about that road, is that people are traveling at high speed. Speed calming may be necessary. Ja..that could be another part, maybe the Department of Transport could do more in clamping on drivers rattlers, maybe install more traffic police."

Deducting from the responses of participants in the study, the main roads in the Bisley and surrounding areas during morning hours of 6H00 to 8H00 am are congested with high traffic volumes and for these reasons drivers, on a daily basis, need to negotiate a suitable pathway to access their work destinations on time. Main roads[8] are also filled with kombi taxis, which are seen by some drivers as negligent and lawless. Therefore the chosen theory, the theory of cognitive rationality which assumes that that any collective phenomenon is the effect of individual human actions (individualism); that, in principle, provided that the observer has sufficient information, the action of an observed actor is always understandable; that the causes of the actor's action are the reason for him or her to undertake it (rationality), seems to hold major strengths in accounting for individual actions for two reasons. First, responses in terms of factors influencing choice of roads or pathways indicate that rational calculations (in the form of proximity and avoidance of traffic congestion) seem to best explain mobility patterns. As highlighted above, these factors are nothing new as these are already documented in the studies by Papinski *et al* (2008) and Stark *et al* (2006) reviewed in Chapter Two of this dissertation. Second, drivers' rationale with respect to the influence of their surroundings demonstrates how

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[8] As highlighted earlier, main roads in the Bisley and surrounding areas include Albert Luthuli (Commercial) Road, Alan Paton Avenue, Alexandra Road, Oribi Road and King Edward Avenue

social phenomena (i.e. early morning traffic) can be a result of individual actions. This corresponds with the key argument of methodological individualism on the basis of which all forms of rational choice theory are formulated. Contextualising dynamics on the roads as well the decisions that play a role in traffic formation is not only useful in getting an overview picture of understanding mobility in Bisley and surrounding areas, but from an economic standpoint and policy making, can ensure that the labour force (in the form of private car owners as well as commuters) gets to its destination with relative ease and speed to refuel the engine of modernity. Costs of maintaining and expanding roads and pressures on the existing infrastructure etc. can be understood and considered within the latter. In the next section, I explore the route choices made while considering shopping and leisure.

HUBS OF CONSUMPTION

Shopping is the second primary activity for interviewed drivers in the Bisley area. Of course, like work, shopping has become an essential activity of modern individuals. Since the separation of site of production and consumption, they are not mediated by the market which allows one to obtain the essential necessities needed for consumption and sustenance. Shopping, unlike work, can take place at almost any given time of the day. Therefore, this has a methodological implication while creating a nexus of time and route, for this determines what the road or route would be like at a specific time of the day. Beside the reason that shopping is a primary activity and its flexibility from a time-route nexus point of view, there are also diverse shopping places with different distances from Bisley and a range of services on offer. This is in contrast to the work place which is more or less fixed. This makes the overall analysis and interrogation of the question rather complex. Thus, it is believed, this would suggest a different way of thinking about routes/roads and making decisions on which routes to take compared to when one makes a decision while driving to work. In the following, I try to engage with these highlighted themes: preferential shopping areas as well as roads/routes used to access these destinations, factors informing decisions in terms of road choice, as well as mobility patterns of participants.

As part of the growing consumerist culture of later modernity, shopping centers are becoming the staple for a growing middle class. Bisley residents are no different. They frequent shopping centers in Pietermaritzburg and most of those surrounding the Bisley suburb. These are undoubtedly social spaces - vibrant social hubs that facilitate economic and recreational activities. Participants in the study highlighted the following areas as their preference in terms of shopping: the Nedbank Plaza located in Alan Paton Avenue, Southgate Spar located in Alexandra Road, the Liberty Mall located in Chase Valley, Victoria Road and Retief Street in the CBD and Hayfields Mall located in Cleland Road (these areas are highlighted on Fig.5 below).This map also highlights the main roads (e.g. Alan Paton Avenue, Albert Luthuli Street etc.) which link directly into these areas. These shopping centers serve the growing middle class in the city of Pietermaritzburg. From the interviews with the participants, unlike the choices of route to a workplace (where there seem to be little variation in terms of the factors influencing choices of participants), divergent themes and factors influencing route choices emerged when the participants considered their routes while going out for shopping. Unsurprisingly, I also noticed that there were overlaps. Emerging themes with regards to factors informing and framing shopping routes are, broadly: proximity and accessibility, habit, familiarity, pedestrians' behaviour and sense of order and fluidity.

Proximity is, by far the most dominant factor influencing which shopping areas are frequented by the research participants. Participants regularly chose to frequent the closest shopping locations available to them. For example, participants who chose the Nedbank Plaza as their preferred shopping destination reside in Carey Road, Erwing Drive and Andries Pretorious Road. These roads are easily connected to Ritchie Road, Oribi Road, King Edward Avenue and then finally Alan Paton Avenue to access the Nedbank Plaza. In terms of traffic flow, this route is traditionally a busy route utilized frequently by the public transport sector, servicing commuters to and back from the CBD as well surrounding areas such as Pelham and Scottsville. Mr. Smith, who highlighted his dissatisfaction with the driving patterns of taxi drivers using the route, indicated that he chooses this route while driving to Nedbank Plaza. When I pointed out, rather with haste, that he has a negative view of this route already and avoids it by any means while

travelling to work, his response was: "Well, we don't shop every day. Plus time of the day is a factor. Before and after work hours it's usually busy on the road."
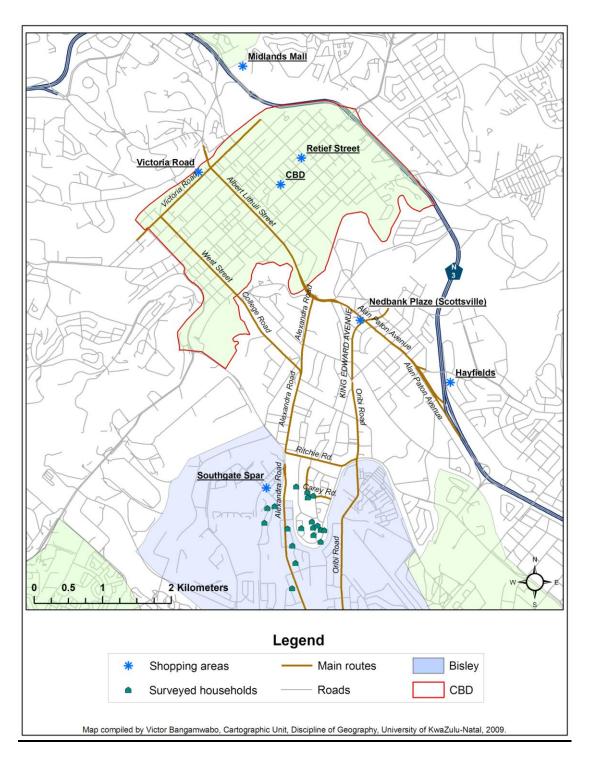

Fig. 5: Preferred shopping locations of participants

Mr. Smith's response illustrates how crucial the issue of time of the day is, as it has a role in terms of determining the nature of context within which a particular decision has to be made (e.g. traffic flow and concentration) and decisions made in that context. Although the foundations of his decision making process (systematic rational calculation) remained consistent, choice, or preference, depended on context.

Another shopping area which is frequented because of proximity is the Southgate Mall. All of the participants who frequented this mall, also had their residence close to the mall, and also chose their route with distance as a determining factor. The Southgate Mall, which hosts Spar among its many stores, has a strong appeal to the participants who are located a few hundred meters south from it. In total, four participants in the study chose this mall, two of them residing in Haynes Road, one in Barbara Place and one in Human Road. Barbara Place and Haynes Road are approximately 500 meters away from the Southgate Mall whereas Human Road is less than 3km away. The participant located in Human Road uses Rudling Road to connect to Ritchie Road and then finally to Alexandra Road to access the Southgate Mall.

Despite proximity being a dominant factor in these decisions in the choosing of this shopping center, these participants raise other factors influencing their choice of shopping destination. The most prominent one is habit. It can also be argued as shown by Mr. Hendricks' extract that habit also provides certainty for participants.

> **Mr. Hendricks:** I use the simplest route.

> **Res:** What exactly do you mean by this?

> **Mr. Hendricks:** I choose the closest, Don wanna go to a place where there is like lots of twist and turns. I prefer the most cost effective route.

As I indicated in Chapter Two, habit is defined by Butler *et al* (1995) as routines of behavior that are repeated regularly and tend to occur subconsciously, without one being conscious of them. This is due to what is known as the 'habitual domain' first proposed by Yu (1980). Yu (1980:2426) proposed that people's thoughts, thinking, judgment, and reactions are dynamic; however they become stable over time and stay within a domain

unless unexpectedly stimulus. Because of the fact that this mode of thinking does not involve cost-benefit analysis, it is seen as posing a threat to the chosen theoretical model. However, there is a way in which this problem can be remedied. Here I sought to shift away from reducing the theoretical model from instrumental rationality into a different type of rational choice i.e. cognitive theory of action. A key argument of this model is that action grounded on beliefs can be considered to be rational. Roads linking the CBD are highlighted by three participants as the regular shopping destination. These participants reside in Human Road, Dunbar Road and Torrence Road. One of the participants, Mr. Myeza, a 38 year old makes use of shopping facilities in Victoria Road, while MrsMadlala a 51 year old who lives in Dunbar Road and MrsLatha a 49 year old who resides in Torrence Road make use of Longmarket and Church Street shopping facilities. In terms of accessing the Central Business District, Mr. Myeza uses popularly used routes by many participants in the study i.e. connecting to Ritchie Road, Oribi Road King Edward Avenue, Alan Paton Avenue, Commercial Road, and then finally Victoria Street to get to his shopping destination. Familiarity and proximity are used as reasons for choosing these roads. Mr. Shabangu and Mrs. Latha from their location connected to Alexandra and Commercial Road to get to their destination. Mr. Shabangu also highlighted turning off College road from Alexandra, to avoid the Commercial Road traffic, especially if the shopping is to be done in time.

Hayfields and the Liberty Midlands Mall both are also chosen as main preferred shopping centers by two participants. For Hayfields (which is in Cleland Road) the two participants live in Hamilton Road and Emmett Crescent Drive. An excerpt from an interview with participant, Mr. Jones, a 62 year old retired administrator residing at Emmett Crescent Drive, reveals another consideration other than proximity i.e. a smooth and fluid driving experience:

> **Res:** So you said you are retired, and you don't work so skip that…what about shopping? Where do you do your shopping?
>
> **Mr. Jones**: Mainly…uh, Hayfields.
>
> **Res:** Hayfields? And…?

Mr. Jones: And you know, Southgate, sometimes, I would say sometimes. Uh, Hayfields…

Res: Hayfields?

Mr. Jones: …and that just depends on what my wife wants to do.

Res: Ok, So let's jus say you want to go to Hayfields, which particular route do you normally use, like your preferential route?

Mr. Jones: Ah to-for when we get there? Quickly?

Res: Ja.

Mr. Jones: I go down Richie Road, into Washington Road…

Res: Ok…

Mr. Jones: … left into Parlett, Left into Croft, through Elizabeth Beard Hall, and then I'm there.

Res: Ok. And the logic of using that route is…?

Mr. Jones: There's no stop streets, very few.

Res: Alright, ok.

Mr. Jones: There's - you don't have to stop - start, around the corner up and stop, around the next corner up, its just (whistles) so there's-I think there's-the less-the less robots that catch you, right. So you got one, two… three robots…

Res: Ok.

Mr. Jones: …that's all…

Res: Alright…

Mr. Jones: But if I go another route…

Res: Ok…

Mr. Jones: …the chances of getting a robot are bloody good!

Mrs. Johnson, a 29-year old white pre-school teacher, is one other participant who chose Hayfields as a preferential shopping destination. Mrs. Johnson indicated that she uses a similar route as the one noted above, but she deviated in terms of rationale behind the choice - her route choices are made based on familiarity. Finally, the participants who chose the Liberty Midlands Mall as the place of their regular shopping area are located in Rudling Road and Erwing Drive. Both participants use the N3 as the means to access the Liberty Mall. The interview with one of the participants, Mr. Mahlangu, brought another concern for drivers on the road i.e. the concern for vehicle users to be on the roads where there are intense pedestrian crossings. A similar sentiment is captured in an interview with Mrs. Johnson:

> **Res:** Where do you do your shopping?
>
> **Mrs. Johnson:** I usually drive to Midlands Mall.
>
> **Res:** Which roads do you use to get there?
>
> **Mrs. Johnson:** Well from here I try and get on the N3
>
> **Res:** Judging from where you are geographically located, would it not be closer and quicker for you to cut through town?
>
> **Mrs. Johnson:** Yes, but there is too much traffic there and people crossing the road!

Although most roads in the CBD do have the pedestrian crossing facilities, Mrs. Johnsons' opinion is more directed towards recklessness and risk taking behaviors sometimes displayed by pedestrians in the CBD. I have personally noted this trend on the intersection of Church and Albert Luthuli Road.

CONCLUSION

The first two sections of this chapter have been useful in providing insight about mobility patterns on the roads of Bisley and surrounding areas. As highlighted earlier in the introduction, shedding light on the state of mobility and state of roads in the Bisley and surrounding areas is useful to the Msunduzi Municipality and the KZN Department of Transport which are tasked with the maintenance and upkeep of these roads. Data obtained during the research process suggests that rational calculations that consider multiple factors related to context are important elements of the decision making process of choosing a route. However, as illustrated with both movement to work and shopping malls, the nature of context seems to play a role in determining the form of rationality that influences decision making. For example, in the morning (6H30-8H00), main roads in the Bisley and surrounding areas are congested with motorists and taxi drivers. Therefore, participants who need to access their work locations timeously on a regular basis need to systematically work out a route that ensures this. This is not to suggest that there is no consistency in the preferences of roads used during that time, but consistency in a preference of routes can be maintained if the conditions of those routes allow for the achievement of the participants' purpose. This inquiry of individual decisions with regards to mobility also gives us insights as to how a larger social phenomenon, i.e. traffic, is formed. Participants during this time use routes which they perceive will offer them the best rewards (such as reaching to work on time or saving on distance).

The interpretive probing of movement towards shopping destinations illustrates, in some instances, a shift from instrumental rationality. Again this could be attributed to situational context. Unlike in the morning, where there is a higher sense of urgency and time constrains, shopping hours have more hour flexibility. From the discussions above one can therefore conclude that conceptualizing a road as a pathway helps in providing great insight into understanding mobility patterns.

For capitalism to progress beyond fixed production lines, mobility - through the use of the automobile (which facilitates for a space-time compression) - is a necessity. Therefore, this has made fluidification a primary activity for human beings located in modernity. Fluidification fuels sustenance and consumption. This is why I felt it is

necessary in this dissertation not only to probe mobility patterns but also to understand, from a socio-political point of view, the consequences of this fluidity, which I focus on in the following chapter. The automobile is dubbed as 'the prosthetic of kinetic' as it is seen an extra leg in aiding individuals' mobility. The chapter to follow now shifts to assessing sociological phenomena (race, class and gender) when a road is conceptualized as a consumable space. Do mobility patterns revealed in the above sections show a re-racialization of space as argued in the second chapter of this dissertation? Or perhaps are there any unique patterns in terms of mobility and spatial consumption among the different races and class? An argument was made in the literature review indicating how race and class had become spatialized in post-apartheid South Africa. Therefore, the next chapter interrogates patterns of road choices and how it is located within race, gender and class context.

CHAPTER SIX: THE UNPACKING OF SOCIAL CONTENTS OF DRIVING PATTERNS: THE INFLUENCE OF SOCIO-POLITICAL CONTENT IN FRAMING DECISIONS

'All social science needs to reflect, capture, simulate and interrogate movements across variable distances that are how social relations are performed, organized and mobilized.'- JohnUrry

INTRODUCTION

Thus far, I have attempted to explore factors influencing the decision making process of private car owners in the Bisley area, with the aim of generating insight and understanding into spatial mobility[9] and mobility patterns contributing towards traffic flow and connectivity to Bisley and surrounding areas. These themes were explored within the broader context of modernity's fluidification of society. This chapter sets out to explore the consequence of this fluidity. Spatial mobility is a vector for social relations. Therefore, it is within this context that the dynamics of spatial consumption is explored. To be more specific, I intend to probe to what extent socio-political factors such as race, class and gender frame spatial consumptions and appropriations. As highlighted in previous chapters, roads are conceptualized not as simple gateways or pathways, but rather as spaces that host a range of economic and social activities. Their consumption, appropriation, use, misuse or aversion by the inhabitants tells a story about the state of society, its organization, configuration and its members' engagements. These are transfused with a range of social issues such as crime, race and class structure of society. Therefore, the focus of this chapter is geared towards such conceptualization and interrogation of people using roads by drawing from the data analyzed. The first section of this chapter explores whether the decision to consume certain roads facilitate a re-spatialization of either class or race in post-apartheid South Africa, while the latter part of this section assesses the possible role automobiles - which in the second chapter, were

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[9] According to Kaufmann (2002) spatial mobility, due to use in many fields, is not a univocal concept, but rather has different meanings. In this dissertation it is used to refer to physical movements.

dubbed the 'prosthetic of kinetic', a vehicle in modernity - that have allowed for multiple socialities in facilitating this re-spatialization. The second section examines the extent to which the perceptions of crime (or feelings about safety) on the roads of Bisley and surrounding areas frame route decisions. This section also assesses to what extent these perceptions of crime are racialized, class based and gendered. In addition, participants' suggestions about how safety can be maintained on the roads are highlighted.

ON ROADS, MOBILITY, RACE AND CLASS

Shopping and recreational areas offers us a first insight in terms of the influence of demographic factors (race, class) in re-spatialization of spaces. The aim of this section is to assess the role of socio-political contents such as race, class and gender in framing decisions about choices of roads. As highlighted in the earlier chapters, roads in this research are not merely conceptualized as pathways that facilitate mobility but are also viewed as spaces which host social, cultural and economic activities. In other words, the aim is to asses, for example, the following questions: Have mobility patterns and spatial consumption resulted to a re-racialization of spaces in post-apartheid South Africa? Or perhaps, has the automobile become a new vehicle or instrument for the expression of race and class in post-apartheid South Arica?

Studies of Durheim and Dixon (2005) as well as Tredoux and Finchilescu (2007) reviewed in Chapter Two indicate that within the South African context there is a relationship between racial dynamics and spatial social forms. This is due to the fact that as Harris and Radelli (2007) put it, in post-apartheid South Africa, race relations have become an extremely complex concept due to the fact that race finds its expression on many different levels including identity, conflict and interpersonal relationships. Fig. 5 below shows the movement of research participants to their respective choices of shopping areas. Movements of participants are traced in the main roads of Bisley and surrounding areas right to their shopping destinations. Different colors are also allocated to participants' racial groups. These movements are classified by race. Fig. 6 illustrates that race is only significant in shopping areas located within the CBD. In terms of demographic profile, the 3 participants who highlighted the CBD as the preferential

shopping destination are black. All roads leading to or closer to the shopping areas (that are highlighted in the research i.e. Hayfields, the Nedbank Plaza, the Liberty Mall and Southgate Mall) are utilized by all participants from the four different race groups.

It is important to keep in mind though, that shopping, as a social activity does not require much social intimacy and interaction; hence, if quality services and products are provided within that shopping vicinity the likelihood is that race alone becomes a poor factor influencing who frequents a particular shopping area. The question which is unexplored though is why only certain racial groups frequent the CBD. In the case of the white participants who actually work in that area, none seems to choose malls in the CBD area. The key point is the fact that these roads, in terms of racial demographics, are dominated by black people and dominated by members of society of a lower socio-economic status. Furthermore, one of the participants, Mrs. Majozi, whom one could regard by class standards in the wider South African context as upper middle class, raised concerns about its safety. Mrs. Majozi states, "Ja...ee, it is safer in Scottsville rather than town, for instance, if I want to go to the ATM, but not aaaa I'm not saying that it is totally safe but is better (jajaja) and is not as full as in town, so whenever I want to draw money I go to Scottsville."

This left me wondering whether the consumption of certain roads or spaces as a social practice by a particular social group hinders other social groups from using these spaces. Recreational spaces such bars and restaurants, and places of worship such as churches, where intimacy and contact is much higher, were assumed, at the beginning of my research, to likely have racial undertones, if not outright racial separation. The question was then; would such racial sentiments have any influence on choosing places and, similarly, routes/roads to frequent? Apart from my early assumption on this matter, none of this emerged as any significant concerns in the interviews and the choices the research participants made. My experience and reflection of the data collection process suggests to me that, however, had this been the case, it is highly unlikely that the participants would have revealed this (for race is such a turbulent topic in this country). Yet we know Pietermaritzburg has racialized spaces – both residential and recreational. This for

example can be demonstrated by Mr. Mthethwa's experience of the Maritzburg and Victoria Country Clubs where he plays golf:

> **Res:** Tell me about the members that consume the spaces that you consume for your recreational activities. Would you say that they are of the same race as you? Are they of the same class status as you?
>
> **Mr. Mthethwa:** No nono. They are far away. Guys are playing golf with the…no guys are at the better position than me It just happened that I was given the clubs. I don't think, ja, we of the same status.
>
> **Res**: Racial wise, what would you say?
>
> **Mr. Mthethwa**: Racial when comes to, especially with golf? That's one that you are interested in?
>
> **Res**: Ja.
>
> **Mr. Mthethwa**: No golf, I don't think I'm wrong if I say we are 1% if not less. There is very few of us, at most…most time when I'm playing there I'm on my own and the rest is white and some few Indians.
>
> **Res**: What would you attribute to this make up? What do you think is such a huge difference in terms of the demographics?
>
> **Mr. Mthethwa**: It's a cause factor, in economic factor, ja and may be many of our blacks are not interested on it or they can't afford it and ja, as they say, golf is for the rich. For me, it's happened that, then I got given the clubs and I used the cheapest route to be a member.

Within the South African context, it is a known fact that golf is predominantly a white sport. This can be attributed to a number of factors, a significant one being apartheid which privileged facilities, equipment and opportunities to white people. Mr. Mthethwa's reflection of his recreational space not only exposes the slow transformation of the racializing space, but the intersection of class and race which still lingers in post-apartheid South Africa.

The data also seems to suggest that the roads that the participants choose or avoid can hardly be racialized, and these decisions are informed by pragmatic concerns other than

racial sentiments. In some ways, however, the route choices are related to avoiding certain sections of the city which are deemed chaotic and disorderly. What is not said, however, is that they happen to be areas frequented predominantly by black people – mostly working class who rely upon public transportation. This is where class and race overlap. Comments such as 'like downtown, there you got taxis, people and night some scary people there!' and 'it is safer than the CBD' are suggestive.
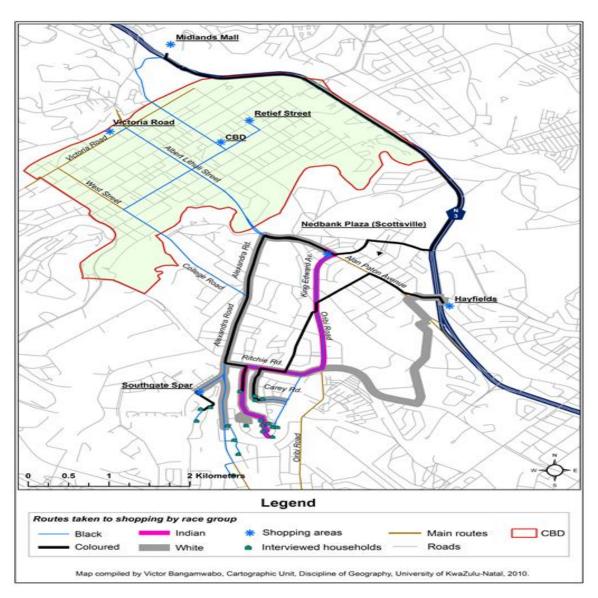

Fig 6: Routes taken to shopping by race group of participants

The participants' movement to shopping areas by class is depicted in Fig. 7. As highlighted earlier, in a wider socio-economic status scale most, if not all, of the participants, fall in the position ranging from lower class, middle class to lower upper class. However, the classification for class (in terms of who falls in what class) I used here is relatively considered and can only be useful for the purpose of this case study (in this case Bisley) as opposed to the wider context in South Africa. For the large part, it is income as reported by the participants which is used as a way of categorizing them into classes.

Earlier, the preferential shopping areas of individual participants from the different racial groups are noted (see also Fig. 6). A similar effort is done to plot there preferred routes for class (see Fig. 7). These maps superimposed on one another show the overlaps between class and race with regards to choices of shopping areas, which is increasingly becoming typical of post-apartheid South African in many senses. As observed with this map, movement patterns as well preferential shopping spaces categorized by class show an overlap between the categorized classes. My intention here is not to find a correlation between route choices in relation to race and class, but rather to assess the ways in which these factors impose themselves on how individuals rationalize their decisions, in this case which routes to take. In many ways, the shopping facilities (which include within them, recreational spaces such as cinemas, bars etc.) are located with Pietermaritzburg's middle to upper class suburbs namely Hayfields, Scottville and Chase Valley. Thus, my concern remains how private car owners tactically choose certain routes to avoid areas and roads in their way to these spaces.

These trends (which are depicted as overlapping race and class) are part of the lingering legacy of apartheid which forged class and race as intertwined; in this sense, the racialization of spaces (which finds its roots in apartheid spatial planning) led to a spatialization of class. Perhaps due to the improved socio-economic standing of Blacks, there appears to be a diminishing intersection of race and class spatialization in the context of Bisley which used to be a formerly white suburb. Instead, it is a mixture of race and class shaping the suburb. This is why in Fig. 6 one cannot see distinctive racial

patterns in terms of mobility as non-whites who live in Bisley by virtue of socio-economic indicators used in this research, occupy a higher class position compared to the average nonwhite in the country.
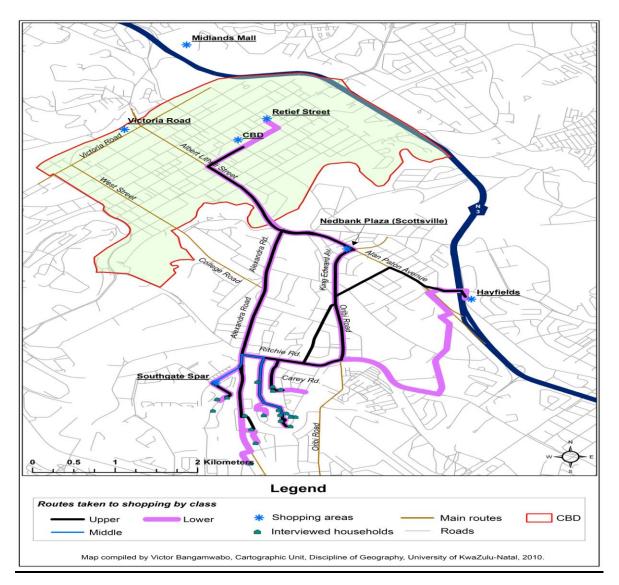

Fig 7: Routes taken to shopping areas by class

This is not to suggest that racial identities no longer inform choices and appropriation of space, but to point out the ambiguous dichotomy class is able to administer in post-apartheid South Africa. From a spatial point of view, class has the ability to unite

different races (so long as these people are of the same socio-economic status) and yet at the same divide races[10].

DRIVER SAFETY AND PERCEPTIONS OF CRIME

Chapter Two of the research project provided considerable discussion on the issues of crime and suggested that, to a certain extent, perception of crimes on the road can become an influential factor in the choosing of pathways and spaces. This is due to the fact that fear of crime or more accurately, anxiety and worry about crime, has notably become a familiar part of life in South Africa.   As demonstrated through reviewed studies in the previous chapters, perception of crime and danger inform stereotypes. Stereotype-making and perceptions, which are highly racialized, class-based and gendered, in turn continue to shape patterns of relations and interactions in South Africa. Therefore, it is important to note that the racialized use of public spaces and roads have a tendency to feed into the cycle of racializing social and political life. The same can be said of gender and class. The aim of this section is to asses, as individuals, car owners' qualification of their decisions as to why they choose or frequent certain roads, for other factors such as utility to emerge or to what extent the perception of crime influences their decision on the type of road used. As part of this exercise, I probe the participants who have been victims of crime, for their perception of safety on the roads in Bisley and surrounding areas. Here I try to sustain the distinction made between perceptions and the 'actual experience' of crime, even though each feed into one another.   The most important consideration remains how these inform participants' choices of roads, or the roads which participants consider to be unsafe and safe. The data suggests that the factors which participants believe make them most vulnerable to crime on the roads vary depending on their gender, class and race.

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[10] One has to note the increase in the Pietermaritzburg Area of poor people across the different races. White car guards and people living in Oribi are prime examples.

In the interviews I probe the research participants on whether or not they had been victims of crime, in the hopes of determining how victims of crime or similar encounters their perceptions of safety in the roads of Bisley and surrounding areas and whether the perceptions have framed their decisions in terms of usage of roads. Only two of the research participants had been victims of crime: Mr. Smith and Mr. Khumalo. Here is an excerpt of the interview with Mr. Smith:

Res: Have you ever been a victim of car-theft or hi-jacking?

Mr. Smith: Yes

Res: When (time of the day) and where did this occur?

Mr. Smith: It happened at Rutland Road, one and a half years ago at about 2:15/2:30 pm. We were waiting to attend Bible study, with the other old folks, and these two black guys made us lie down. They took handbags, cell phones and my car since it was the only one that was still there at that time. Fortunately it was later recovered.

Res: In the light of this, would you consider the roads in Bisley and surrounding areas (Scottsville, Pelham and Oribi) to be relatively safe?

Mr. Smith: Ja, I think it is safe. I mean my case was just one of few. It's really quiet here.

Res: Which of the above areas, would you regard to be unsafest to drive through during the night?

Mr. Smith: I would say Oribi Road and anywhere close to OribiVillage.

Res: Why is this the case?

Mr. Smith: I've heard stories from car guards that stay there. They say it's not safe.

This interview extract shows that irrespective of the incident encountered, one has to consider frequency of it, even if it comes as a rumor. Mr. Smith might have had a terrible moment in the Rutland Road, which he simply considers as 'just one of the few', while avoids another road on the basis of what has appeared to become 'common knowledge'.

Mr. Khumalo, who was recruited through his neighbor, who had already participated in the study, had a similar experience. It was in 2001 at night around 10pm, Mr. Khumalo narrates. 'As I stopped by the robot close to the intersection, a car stopped right in front of me and these two guys in balaclavas came out from the back (passenger seats) and asked me to get out and lie down!'. In spite of the trauma, Mr. Khumalo takes reprieve in the fact that he was not assaulted physically. – 'But none of them physical assaulted me. I just quickly gave them the keys, lay on the ground with my knees and they drove off. It happened very quickly!' After other similar incidents, Mr. Khumalo still feels 'relatively safe'; in his own words: 'Relatively safe, yes…ja but I have been followed may be twice or three times. I've been driving and I saw a car following me and it eventually gave up…..[it is here] in Bisley, and the people were suspects but I did not drive in. I just drove around until they gave up following me'. However, Mr. Khumalo has not yet considered which road is safe and which is not, and has been driving consistently in the area where he encountered the hijackers and other stalkers. This certainly indicates in his case, that crime is not shaping the decision on which roads to frequent. The incidence for Mr. Khumalo, in fact, does not appear to have created any level of discomfort or fear for him to be on the road at any particular time.

What the extract from these two interviews shows is that, what would have enriched this probing process would have been the assessment of female victims. For example, considering that despite both male victims went through traumatic and frightening situations and seemed unfazed or undeterred in terms of their choices on the roads, how would female victims respond? Would their choices be affected by these incidences or perhaps the facts that statistics show fewer female victims and indicate that woman are more cautious and attentive of their surrounding?

Many of the participants in the study conceded that roads in the Bisley and surrounding areas could be considered to be relatively safe. The road that was of most concern though to drive through especially at night was Oribi Road. Oribi Road is an 8km long road stretching from Scottsville, traversing Pelham and Oribi Village and entering the northern parts of Bisley. The part of the road that was of most concern was the part traversing

Oribi Village. To shed light on the significance of Oribi Village it might be appropriate to give its brief history. 'In 1957 after serving as military barracks, housing, for ex-servicemen and their families, and university residences - the village was officially designated as a low-rental government village for poor whites' (Kockoot, 2003:2). However, after 1994 this changed. In 1995 accommodation for all race groups was provided under the Kwa-Zulu Natal Department Provincial Housing Development Board. Houses were allocated to non-white citizens on the criteria of the citizens earning an amount of R2000 a month. Since then, the township has become predominantly African, with a still large number of poor Whites, Indians and Coloureds residing. Therefore in terms of the profile, Oribi hosts the lower middle to lower class citizens with most being predominantly black. This village also hosts a taxi rank, which serves as a central area for controlling the taxi system in Scottsville, Pelham and Bisley. An excerpt from an interview with Mrs. Majozi, a 53 year old black female residing in Carey Road highlighted that crime was a norm in the area. Here is an excerpt of the interview:

Res: So which means in the surrounding areas like Scottsville, Pelham, and Oribi even Bisley, which of these areas would you consider unsafe to drive during the night?

Mrs. Majozi: I would say Oribi

Res: You say Oribi is unsafe?

Mrs. Majozi: Is very unsafe

Res: You not advise anybody to drive during the night

Mrs. Majozi: I don't…

Res: Why do you say that?

Mrs. Majozi: Because I meannnn, there is a lot of crime even if, the problems that you know if ever there is a burglar you find that are the people of Oribi, you not sure whether is because of other or because of drugs.

Another participant expressing vulnerability with this road was Mrs. Johnson a 29 year old white female residing in Hamilton Road. She expressed uneasiness when stopping at the robots on that road. Statistically though, the road that had the most number of

reported hi-jackings, or road related crime incidences is Golf Road which is in the Scottsville Area. This road, stretching about 2,5 km long is located between the suburbs of Scottsville and facilities of the University of Kwa-Zulu Natal. This information was provided by Mrs. Shelembe a policewoman residing in Andries Pretorious Road. Surprisingly though, no participant reported this road as a concern. One possibility may be that participants are unaware of its safety or the road may have no significance in terms of usage for any of the participants.

In terms of perceived vulnerability to being victims of crime on the roads, there was a general consensus among the participants that criminals had no set criteria in terms of targeting victims: i.e. anyone, irrespective of race, class or gender could be a victim of crime. There are however a few participants who distinguished certain elements that contributed to their vulnerability. For example Mrs. Thompson a 48 year old colored female residing in Barbara Place highlighted her gender as a contributing factor, while Mr. Isaacs and Mrs. Majozi highlighted their types of cars as contributing factors. Mrs. Majozi highlighted that she heard rumors that for some specific types of cars, the parts were stripped down and sold cheaply to taxi owners. Mr. Isaacs vaguely joked that his race made less vulnerable, since he was Coloured, since Coloureds were perceived as gangsters and Mr. Jones a 62 year old white man residing in Emmett Crescent Drive believed he had one of the oldest and most unique cars in Pietermaritzburg, making it less likely for someone to get away with stealing his car.

It is a general consensus among participants in the study that roads in the Bisley and surrounding areas are relatively safe and are also in good condition for driving. The biggest concern, however, appears to be the ineffectiveness of the law enforcement structures that do little to ensure roads safety. Some of the participants suggested that there is a growing need for the effectiveness of law enforcement. An interview with Mr. Jones captures this sentiment aptly:

> **Res:** How do you think it could be improved? What are - what are the ways in which safety could be better improved for drivers? Also including um, reckless

drivers, reckless drivers: do you thinks that safety could be improved for just drivers?

Mr. Jones: A lot of people have complained and they've told the cops, but the thing is they come and they sit here and they wanna spend - I don't like speed traps, I think it's a lot of bull-shit as far as I'm concerned. Speed doesn't kill. Stupidity does. Um, cause I used to race before, and I mean you come off…

Res: Drag racing?

Mr. Jones: …motorbike racing…

Res: Oh, motorbike.

Mr. Jones: …I mean I came off, I mean I came close to a 180 k's an hour. I didn't hurt myself. I just got bloody cross because I fell off, and you know if speed kills I should have been dead. But you know the thing is with the cops, you know we've got so many of them and they do nothing. They don't enforce the law. And if you start off with the small things, like I've been wearing seatbelts since 1964 when I started driving and people [say], 'ah, I don't wear my seats[belts] because they rubbish!' But, it's the law that you supposed to wear them, it's the law that you not supposed to do this. But these guys, they come to a stop street that says, 'Stop means stop'. And, am I right…?

Res: Ja.

Mr. Jones: It doesn't say, 'You'll drift through', it just says, 'Stop. Look. Go': even if there's nothing coming, just stop, heed what it says and then go. No, the guys - and then used to see the cops too they've stopped there and the guy drifts right past them and they say…in our days when I was a kid, if you did that the cops would, aah pull you over - you- fine straightway. Not - now. They just turn a blind eye. And with a result, they guys think, aah, he does it so why can't I? And that's the wrong attitude to have: the cops turning a blind eye. Now we see cops driving under the influence, honing in their cars, I mean…

It is clear that safety concerns from reckless driving and not following the traffic rules as well as the criminal activities such as hijackings and mugging are weighing down the research participants. However, while the latter concern - that is, crime or perception of

crime - seems to inform very little of the ways in which the participants thought about roads and route choices, the reckless driving and behavior of drivers on the road certainly organize how routes are chosen and/or considered.

CONCLUSION

This chapter focused on the sociological context of driving. It assessed how the social content provides specific ways of organizing one's decision on which route to follow. The response from participants as to whether crime levels on the road in the Bisley and surrounding areas had changed from pre-1994 and ways in which safety could be improved in the Bisley and surrounding areas were also explored. The studies of Harris and Radelli (2007) and Masuku and Maepa (2007) reviewed in Chapter Two indicate that perception of crime may affect choices of roads. However in the study under question, this did not appear to be the case due to the following reasons: Firstly, roads in Bisley and surrounding areas were perceived by participants to be relatively safe. The same also applied for the quality of roads. Drivers' chief concern was with traditional taxi-routes (Oribi Road and Alan Paton Avenue). Participants felt that there was a very a minimal enforcement of traffic rules by traffic law enforcers as they were rarely visible. Therefore, during certain hours this affected route choice. In terms of spatial consumption the only place that shows homogeneity (in both class and race is the CBD). There is no evidence in the participants' responses that indicates that spatial consumption is influenced by the perception of crime[11].

Therefore, from the analysis of data, it is clear that within this particular context (i.e. Bisley), perception of crime has no role in framing decisions of roads being chosen. There is an acknowledgement from participants that crime exists in the Bisley and the surrounding areas in the form of house robberies and occasional hi-jackings. However this has no influence in framing mobility patterns. Concerns of chaotic movement and

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[11] But then again, based on my personal interaction, the participants who never used these spaces for commercial or recreational activities would not reveal this had it been the case, as this would be easily be perceived as racism. In fact, from the participants who resided in Bisley pre-1994 none suggested that crime rates had changed.

lawlessness especially in public transport routes are seen to compromise safety and should be dealt more effectively by law enforcing structures.

CHAPTER SEVEN: CONCLUSION

In this dissertation, I have attempted to address the following issues: Firstly, provide insight into factors influencing private car owners located in the Bisley Area on how they make decisions on the roads with regards to route choices; Secondly, I explored whether mobility patterns or choices of routes/roads had any effect with the spatialization of race and class or decisions as to what spaces to consume; Thirdly, I explored whether the perceptions of crime influenced choices of roads; And finally, I assessed the driver's perspectives and understanding of their choices as well as their concerns on the roads and how institutions concerned with ensuring effective mobility on roads in Bisley and surrounding areas. By ways of conclusion, I try to recap how I proceeded with this inquiry, summarizing the central arguments of this dissertation and highlighting methodological implications and lessons learnt from the study.

The linking of the literature review, theoretical framework as well methodology was central in this research. From the outset, roads in this research were conceptualized as a pathway and spaces which drivers consume. Therefore, the literature reviewed for this study concentrated on how decisions to consume roads or spaces were made and put into context dynamics emerging with respects to race and class with regards to the consumption of spaces. Analysis of the data suggests drivers use routes that provide them with the maximum positive outcomes, and consider their options within multiple factors as they arise out of the conditions of each road. In other words, drivers depending on situational context regularly make decisions with respects to their mobility. This can be best understood within a cognitive theory by ways of assessing the decision making process of drivers. For this purpose, I chose theories of rational choice which I explored and appropriated by locating my discussion of the theory. In this regard, I found Max Weber's action-theoretic model (in which 'rational action' serves as an ideal type) useful. We have also seen that there is wide range of rational choice theories; I focused on breaking them down by using the constituents and the fundamentals of rational choice. On the basis of this, they are divided into internal and external perspectives of rational choice theory, and the theoretical chapter assessed the strengths and weaknesses of both.

Having considered the different versions of rational choice theory as well the limitation it may impose on the study, the next step is to select the rational choice theory perspective most suitable to understanding of rationales influencing route trip choices of private car owners in the Bisley Area. To do this, I resorted to looking at the epistemological perspectives of rational choice theory i.e. instrumental empiricism and scientific realism. My concern here is informed by Macdonald's (2003) arguments that a focus on epistemology is crucial in understanding the scope, purpose and possibilities of rational choice theory in the social sciences since different epistemological positions possess different conceptions of the appropriate ways in which to design and test individual theories as well as to adjudicate between competing theories. This is solidified by an argument that an understanding on the epistemological foundations of rational choice theory helps clarify what is at stake in existing debates concerning different theoretical claims made by rational choice theorists about the nature of the rationality assumption, self-interest, and the relations between individuals and structures.

From this one notes that both epistemological versions offer different emphasis in what theories should do in the understanding of the social. Instrumental empiricism emphasized on theories generalizability and predictability whereas scientific realism emphasized on theories which describe and explain casual mechanisms. On the basis of the aims of the project i.e. explore factors that influence route choice, I found the scientific realism to be the most viable epistemological position for the purpose of this research. This position assumes the necessity of a theory with the ability of accounting for causal mechanisms in the environment that may influence route choice or spatial consumption. The theory I am considering should account for not only preferences and beliefs as motivation for choice, but also the influence of sociological factors on the behavior of private car owners in the Bisley Area. It is for this reason I attempted to appropriate the internalist perspective put forward by Boudon (2003), which also known as cognitivist theory of action. According to Boudon (2003:10), the cognitivist theory of action assumes that any collective phenomenon is the effect of individual human actions (individualism); in principle, provided the observer has sufficient information, the action of an observed actor is always understandable; the causes of the actor's action are the

reason for him or her to undertake it (rationality). The key strength of this model that it concedes to the fact that preference of routes or spaces can also be affected by beliefs (this includes false beliefs) or other sentiments (see Boudon 2003).

Having explicated for the influence of situational context in the literature and considered Max Weber's action theoretic model in its influence on rational choice theory, an approach of which was compatible with the theoretical tools of this project was needed. For this, Max Weber's 'verstehen' was chosen. The consideration of the significance of context in the social sciences also led the research to conclude that 'verstehen' would be an effective tool in subjective understanding the choices made by private car owners with regards to roads as it also aims to understand intentional and meaningful behavior. Therefore, a qualitative approach was adopted, in which in depth interviews at various households in Bisley were conducted.

Data obtained during the research process suggests that rational calculations that are situational and context based as well as multi-focal seem to be the dominant influential factor in the decision making process of choosing a route. As illustrated with both movement to work and shopping, the nature of context seems to play a role in determining the form of rationality that influences decision making. For example, in the morning (6H00-8H00), main roads in the Bisley and surrounding areas are congested with motorists and taxi drivers and therefore, drivers on a daily basis need to negotiate a suitable pathway to access their work destinations on time. The study reveals that instrumental rationality was the main explanation for accounting as to why drivers residing in the Bisley suburb chose certain roads/routes over others. As highlighted in the conceptual and theoretical framework chapter, instrumental rationality involves the calculation of costs and benefit. Participants during this time use routes which they perceive will offer them the best rewards (such as reaching work on time or saving on distance). We therefore concluded that drivers' rationale are shaped by the influence of their surroundings (information available on context and experience with the roads), and it turn this demonstrates how social phenomena (i.e. early morning traffic) can be a result of individual actions. This corresponded with the key argument of methodological

individualism on the basis of which all forms of rational choice theory are formulated. Following these pointers, I tried to locate my analysis within the theory of cognitive rationality which assumes that any collective phenomenon is the effect of individual human actions (individualism), by accounting for availability of sufficient information, observability of the action under consideration, the condition within which specific actions are taken. The interpretive probing of movement towards shopping destinations illustrated in some instances a shift from instrumental rationality. Again this could be attributed to situational context. Unlike in the morning where there is a higher sense of urgency and time constrains, shopping hours have more hour flexibility. Factors such as pedestrian crossing, habit and familiarity in addition to instrumental rationality (proximity) are brought forward by participants.

Contextualising dynamics on the roads as well as the decisions that play a role in traffic formation is not only useful in getting an overview picture of understanding mobility in Bisley and surrounding areas, but from an economic standpoint and policy making can ensure that the labour force (in the form of private car owners as well as commuters) get to their destination with relative ease and speed to refuel the engine of modernity. Cost of maintaining and expanding roads, and pressure on the existing infrastructure etc. can be understood and considered within the latter.

Findings uncovered in this study reveal about decision making on the road, seem to support some of the findings found in the literature review of this dissertation. These include findings by Stark *et al* (2006), who suggested that maximum positive outcomes seem to be the main rationale guiding private car owners in terms of making decisions regarding their route choices; Golledge and Stimson (1997) highlight that minimizing generalized cost, time or distance may not be the sole influence of individuals' route choices, but specific types of path selection criteria may include using routes with fewest obstacles (e.g., stop lights), avoiding congestion, minimizing number of roads, restricting to a known area or corridor, maximizing aesthetics (comfort), and avoiding unsafe areas (for this research this was Oribi at night).

One other concern that constantly featured in the study was the negligent and recklessness driving of taxi drivers in the Bisley and surrounding areas. Earlier reviewed studies by Allopi and Govender (2007:1) had highlighted this to be the concern of South African motorists, and therefore it was not surprising when this emerged from the data. In my opinion, concerns over negligent driving of taxi drivers in the Bisley and surrounding areas points out a problem directly affecting traffic flow. Based on my personal experience (I have been using the kombis in Bisley and surrounding areas for the last 10 years) taxi drivers, like private car owners, because of economic reasons are likely to use the quickest or shortest possible routes to get to their destinations, therefore are inevitably in the majority of the cases going to share the roads with private car owners of the Bisley and surrounding areas. Therefore one way of partly resolving their effect on traffic flow and safety would be to invest in creating special lanes (where possible) for their use. As recommended by some of the participants, a cheaper means would also be to increase traffic police presence especially during peak hours of traffic as this would also help in curbing lawlessness. Also an important observation made with Crawford, Haynes and Emmet Crescent Drive revealed a lack of pedestrian facilities. These included pavements, pedestrian crossings and traffic calmers. Participants living around these roads also highlighted frequent speeding and occasional pedestrian fatalities.

Another element explored with regards to decision making was the influence of the perception of crime in framing decisions with regards to usage of roads or consumption of physical spaces. Studies highlighted by Harris and Radelli (2007) and International Studies of Security of 2006 had alluded to the fact that due to increasing rates of crime within the South African context, perceptions of crime may to some extent influence decision making on the roads as well as the consumption of spaces. Furthermore these studies proposed that racialization of spaces in the country could be attributed to the existing perceptions of crime. However this research did not emerge from the data in the research. My experience and reflection of the data collection process suggests to me that, however, had this been the case, it is highly unlikely that the participants would have revealed this (for race is such a turbulent topic in this country). Almost all participants (including the two participants who had been hi-jacked) rated the roads in the Bisley and

surrounding as to be safe to drive through. The only concern some participants had was the Oribi Road (especially area bypassing Oribi village). It is common in South Africa to associate settlements (whose members have a low socio-economic status) located near suburbs as the source of criminal activity occurring in suburbs. In this case the perception of Oribi seems no different. Important to note though is that participants considered this road to be unsafe to drive through only at night. The presence of a taxi rank or a popular taxi course also does little to enhance its reputation.

Also very central to this research was the exploration as to how choices made by private car owners influenced the consumption and spatialization of physical spaces. Again earlier studies by Durheim and Dixon (2005) and Tredoux and Finchilescu (2007) had pointed towards a spatialized expression of race and class in the South African context. Furthermore the element of class was also brought to the fore. In fact within the South African context, at least, elements of class dynamics also occupy a significant position in understanding social relations and (de)segregation, particularly considering the intersection of class and race. Socio-political dynamics such as BEE, Affirmative Action and race based labour policies implemented after 1994 and a shift in political power to black majority played an instrumental role in giving the previously economically disadvantaged 'blacks' an opportunity to move up the socio-economic ladder. Consequently this has meant that in terms of spatial consumption at the intersection of race and class has become an important observable element.

Results obtained in this research demonstrated no evidence of such. In fact the data seems to suggest that the roads that the participants choose or avoid can hardly be racialized, and these decisions are informed by pragmatic concerns other than racial sentiments. In some ways, however, the route choices are related to avoiding certain sections of the city (the CBD being the prime example) which are deemed chaotic and disorderly. What is not said, however, is that they happen to be areas frequented predominantly by black people – mostly working class who rely upon public transportation. This is where class and race overlap. Comments such as "like downtown, there you got taxis, people and night some scary people there!" and "it is safer than the CBD" were suggestive.

In terms of shopping and recreational spaces highlighted by participants, there was a lot of overlapping between the choices chosen by the different races. Class on the other hand highlights a different picture. Although within the members of the Bisley community no patterns with regards to class had an influence in the spatialization process, when the broader contextual picture is taken into account one notes a pattern emerging. Firstly that of different population or race groups seems comfortable with consuming any space so long as it has members of a similar class. The shopping malls were prime example. This led the researcher to conclude that class, in terms of significance in post-apartheid South Africa is becoming more crucial than before in determining the profile of members consuming the spaces.

Although the methodology employed in this study yielded the necessary result to understand factors influencing route choices of private car owners in the Bisley area, certain aspects of the researcher could have been better improved. For one, I learnt that, the manner of questioning and interrogation is crucial in yielding rich data in a qualitative study. In other words questions should be posed in a manner that allows the participant to speak as much as possible about the topic. During this research, there were certain instances in which I could have tapped on deeper on participants' logic on their perceived factors affecting route. Secondly, I learnt significance of appearances in fieldwork. During my research I discovered this in two intertwined aspects, firstly dress sense and secondly race. Race is still a sensitive issue in the country, and therefore how one appears can in some instances affect the process during fieldwork. For example, the Saturday in which I was formally dressed and accompanied by a white participant I received high responses in terms of recruitment and received more personal and intimate information such as salary earnings. I also noted that one's race can affect how the participant answers race-related issue. This especially becomes more apparent if the interviewee is of a different racial group.

Finally, as Nietzsche (1974: 335) has written, 'learning to see-habituating the eye to repose, to patience, to letting things come to it; learning to defer judgment, to investigate

and comprehend the individual case in all its aspects, this is the first preliminary schooling in spirituality.' This is certainly what this Bisley case study has offered me, a first step in insight in the technicalities and the ability to analyze society, a key pre-requisite which is crucial for any sociologist interested in making the field relevant and of value for society.

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APPENDIX I

INTERVIEWS

FORMAL INTERVIEWS WITH BISLEY PRIVATE CAR OWNERS

Mr. Smith   April 3 2009

Mr. Isaacs   April 3 2009

Mrs. Majozi   April 3 2009

Mr. Hendricks   April 3 2009

Mr. Mahlangu   April 10 2009

Mrs. Cooper   April 10 2009

Mr. Myeza   April 10 2009

Mr. Naidoo   April 10 2009

Mrs. Sisulu   April 10 2009

Mrs. Johnson   April   10 2009

Mr. Jones   April 10 2009

Mr. Shozi   April 17 2009

Mrs. Thompson   April   17 2009

Mr. Khumalo   April 17 2009

Mrs. Latha   April 17 2009

Mr. Mthethwa   April 17 2009

Mrs. Madlala   April 17 2009

Mr. Shabangu   April 17 2009