THE UNIVERSITY OF NAIROBI

MEANINGS OF CAR WRECKAGE TEXTS DISPLAYED ON KENYAN HIGHWAYS AS A TACTIC FOR ROAD SAFETY AWARENESS

ENOCK OMONDI AMIMO

A RESEARCH PROECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF ARTS IN COMMUNICATION STUDIES AT THE SCHOOL OF JOURNALISM AND MASS COMMUNICATION
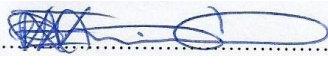
2019

DECLARATION

This project is my original work and has not been submitted for a Masters Degree to any other university or institution.
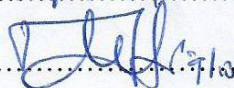
Name: AMIMO ENOCK OMONDI

Date: 28th October 2019

Adm. No: K50/76597/2009

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This project has been submitted for examination with my approval as university supervisor.

Date: ....9 | 10 | 2019..............

Sign: ....

Supervisor: DR. JOSEPH NYANOTI

University of Nairobi

DEDICATION

To my late dad,

Elias Amimo Rayola

this is dedicated to you, with much love and respect.

May your name and spirit be forever immortalised.

ACKNOWLEDGEMENT

ABSTRACT

The key objective of this research was to study the meanings of the car wreckage texts displayed on Kenyan roads. This attempt would shed light on the extent to which the meanings the texts influenced their prospective consumers. Since interpretation of artefacts is a human behaviour, the study was guided by descriptive design. This study adopted a qualitative research approach due to its leanings on consumers' interests, interpretations, perceptions and opinions. Semiotic methods and research tools were used to unravel meanings of the texts and across the communication chain. The study was underpinned on Semiotics and Fear Appeals as the guiding theoretical concepts. The study was conducted in four counties in Kenya – Nairobi, Nakuru, Kisumu and Uasin Gishu. The population included Kenya Traffic Police officers, National Transport and Safety Authority officers, motorists and car wreckage texts. A purposive sampling design was used to get a sample population of three National Transport and Safety Authority officials, five police offices and 54 motorists. Data was collected using photography and interviews over a 12 month period. Images of the car wreck texts were captured on camera in different parts of the country. Interview guides were used to conduct in-depth interviews. The key findings of the study showed that motorists interpreted the texts mostly the preferred position. Fear, scare, shock, surprise, danger, blackspot, police presence, accident, and death were the hegemonic-dominant readings. Further, the study found that the authors embedded strong fear appeal elements in the texts at publication. The results indicated that the texts elicited mostly desirable attitude and behavioural change towards road safety rules and regulations over the short term. As had been envisioned by authors, consumers reacted to the texts by slowing down, driving cautiously, and not using phones while driving. The study concluded that the campaign which targeted speeding, overlapping, drunk driving and usage of mobile phones while driving became weak, meaningless and ineffective due to prolonged exposure, familiarity and vandalism. The study recommends that more car wreckage texts be deployed strategically at identified road accident hotspots and vouches for improved financing, planning, coordination and management of the texts. It also recommends that future deployment of the texts incorporate complimentary strategies to road safety awareness involving publicity, education, information and enforcement to maximise reach among stakeholders and effectiveness among consumers.

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LIST OF ABBREVIATIONS AND ACRONYMS

ABC – Australian Broadcasting Corporation

CBD – central business district

CD – compact disc

CSR – corporate social responsibility

DIG – Deputy Inspector General of Police

FYI – for your information

GB – Great Britain

GDP – gross domestic product

GM – General Motors

HIV/AIDS – Human Immunodeficiency Virus / Acquired Immunodeficiency Syndrome

ITV – Independent Television

KI – key informant

KII – key informant interview

NGO – non-governmental organisation

NMG – Nation Media Group

NTFRS – National Transport First Responders Services

NTSA – National Transport and Safety Authority

OALD – Oxford Advanced Learners Dictionary

PSV – Public service vehicle

RIP – rest in peace

RTA – road traffic accident

RWJF – Robert Wood Johnson Foundation

STV – Scottish Television

SUV – sports utility vehicle

TV – Television

UAE – United Arab Emirates

UK – United Kingdom

UN – United Nations

USA – United States of America

WHO – World Health Organization

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter provides a background on the study of the meanings of car wreckage texts deployed for road safety campaigns in Kenya. It provides information on the context of this tactic, why the artefacts were installed, when, and by whom. The chapter also introduces theoretical approaches and essays which underpinned this study. First is the semiotic approach, which formed the basis for the research's data analysis. It also discusses the concept of fear appeals. This chapter also covers the problem statement, justification of the study, rationale of the study, the study objectives, and the research questions. It also discusses the assumptions, the scope, and limitations of the study.

1.1 Background to the Study

High prevalence rates of road traffic accidents in Kenya leads to thousands of deaths, injuries and losses annually. This adversely affects the socioeconomic aspects of individuals, communities and the nation. One of the strategies to reduce traffic accidents was through display of car wreckage texts. Despite their presence alongside other road safety measures on the roads for several years, road traffic accidents and incidences continue to occur. This study sought to find out the meanings of car wreckage texts used in road safety campaigns in Kenya. It treated the displayed car wrecks and the notice boards accompanying them as media texts aimed at conveying some messages to consumers. These texts under study are signs combining linguistic and non-linguistic elements. Their purpose was to provide instructions and information to motorists. They were expected to help reduce road traffic accidents (RTAs) and crash fatalities.

Jones (2006) defines a media text as any media product a researcher wishes to examine. According to Media Literacy in the Elementary Classroom (2009), media texts include any works of objects or events that communicate some meaning to an audience. Media texts include newspapers, books, cartoons, drama, fairy tales, songs, posters, flyers, sculptures, CDs, radio and television programmes, photographs and website pages (Literacy Today, 2018).

This study proceeded from the fundamental concept that all communication and all discourse is a construct of reality. Modern communication theory argues that meanings are individually 'read' and 'negotiated' by audiences based on their own circumstances. Thus the meaning of a text is not determined by authors, producers or critics, but by, among other factors, an individual's age, gender, cultural background, race, level of education, and skill in reading (Barthes, 1967; Hall, 1973). The author of a text attempts to construct, describe or define reality in his or her view, by representing, describing or defining the world, be it in a fictional or 'real' manner Jones (2006).

In an article published on the ITV (2017) website, Dr Clarissa was quoted, saying that with so many road crashes resulting in serious injuries or deaths, it was vital to raise awareness which could best be done through seizing motorists' attention and imagination. To view a crashed vehicle would be an effective way to provide a stark insight into the consequences of car accidents. In Kenya, the road safety tactic of using car wreckages has been in use since 2013. It is not unique to Kenya. Car wreckages have been observed in Dubai, United Arab Emirates (UAE), the United Kingdom (UK) and in Alice Springs, Australia.

Road accidents are a major cause of mortality and injury around the world. According to Kenya's National Transport and Safety Authority (NTSA, 2019), an average of 3000 people die in Kenya through road accidents annually. The WHO (2018) reports that between 3 000 and

13 000 Kenyans die in road accidents every year. Several road safety interventions have been taken in Kenya. Despite many different initiatives and continuous appeals by authorities and religious leaders for road users to observe safety, RTAs still continue to rise.

Informants gave different dates for the display of the first car wreckage text in Kenya. According to police sources, one base commander took the initiative to erect a car wreckage text in his jurisdiction to in response to the scourge circa end of 2013 and early 2014. A few other base commanders replicated this idea within their jurisdictions at identified accident black spots.

This study focused only on the meanings of car wreckage texts deployed on Kenyan roads for safety campaigns. It applied the concept of semiotics to examine meanings of the car wreckage objects. The concept of fear appeals, central to the design and implementation of these media artefacts was also referenced during the analysis of the texts.

1.1.2 Semiotics

Semiotics is the science of signs. Ferdinand de Saussure (Swiss-French, 1857-1913) and Charles Sanders Peirce (Anglo-American, 1839-1914) are credited as originators and proponents of semiotics as a field of study (Nyanoti, 2015). Semioticians analyse meanings generated by anything – from facial expressions, hair styles, fashion, colours to jewellery, and how these reflect about society and culture (Berger, 2000). They analyse signs and symbols for meanings and how it is represented, produced, referenced, interpreted, and attributed (Punch, 2005). Semiotic analyses of visual signs explore their literal as well as cultural meanings (Hall, 1973). This study did not find any studies on the meanings or interpretations of car wreckage texts tactic deployed on Kenyan roads. It sought to uncover the denotations and connotations of the signs. It

undertook a close reading of the car wreckage texts, then examined their meanings from both the encoders' as well as the decoders' viewpoints.

Two essays were heavily referenced in this study: *The Death of the Author* by Roland Barthes and *Encoding / Decoding* by Stuart Hall. Barthes' *The Death of the Author* essay argues for a model which places the focus on meaning-making on audiences. He posits that it is not the writer's tastes or passions which make meaning, but rather the reader based on his or her own impressions. Hall's *Encoding/Decoding* provided a communication model for evaluating positions within which messages are read by consumers compared to producers intended codes. He proposed that audiences interpret messages differently based on their cultural, social, economic, and individual experiences. This model suggests that audiences are not simply passive consumers of information, but play an active role in decoding media messages.

This study proceeded that consumers' perspectives are the most important in making meaning of the car wreckage texts. While intended meanings may have been obvious to the producers of the wreckage texts, no studies available had sought to find out what consumers think about them. It also proceeded that as TV audiences can decode a commercial in multiple ways, so can motorists understand the car wreckage texts in ways different from those intended by the message producers and transmitters. Not only are there no studies on road safety campaigns delpoying car wreckage messages, there have also been no studies in Kenya focusing on audiences perspective or interpretations of such texts.

1.1.3 Fear Appeals

The design and contents of the displayed car wreckage texts pointed out that they were fear appeals type messages. They contained gruesome mangled wrecks splashed with red paint – to

symbolise blood. They were accompanied by self efficacy messages, written on an appended notice board. Witte (1994) defined fear appeals as persuasive messages aimed at frightening audiences into doing what the message endorses by demonstrating the undesirable consequences of noncompliance, through expression of a significant threat, followed by a practicable recommendations to forestall the threat. A fear appeal is primarily intended to influence behaviour (Tanner, Jr., Hunt and Eppright, 1991). As suggested in an ITV (2017) article, this study considered the display of crashed cars an effective technique of creating blunt awareness among motorists about the consequences of car accidents. Different countries integrated fear appeals in road safety messaging differently based on their cultures. The USA, Australia, New Zealand and GB mostly applied explicit images such as those of crashes, casualties, injuries and blood, and the related emotions of pain, sorrow and grief of traffic victims and relatives. In contrast, the Netherlands used humour rather than fear (Hoekstra and Wegman, 2011).

1.2 Statement of the Problem

Despite road crashes and deaths being largely preventable, initiatives to fight RTAs have been insufficient (WHO, 2015). In spite of the many tough rules enforced by the Kenya Traffic Police, the number of RTAs is still high (The Standard, 2016). According to the WHO (2018), more than 3,400 people die on the world's roads every day resulting in the loss of more than 1.2 million lives globally each year. Tens of millions more are injured or disabled annually. These statistics exert an enormous toll on health and development, and call for active measures to reduce number of road accidents (Lukyamuzi and Friday, 2014). Hoekstra and Wegman (2011) posit that the evaluation of road safety campaigns is still the exception rather than the norm. Semiotic analysis of the artefacts is one such way of evaluating the car wreckage texts campaign.

Most accidents are attributed to drivers (Kaburu, 2015; Manyara, 2013). Motorists are, therefore, the most significant player in road safety. This makes for a strong argument on studying consumer interpretations of these texts that targets human behaviour. Examining meanings of these artefacts from the consumers' perspective would offer insights into their impacts and provide feedback to their authors. Limited scholarly work and little mention of car wreckage texts in the media is evidence that the technique attracts narrow interest.

From the foregoing, this study sought to fill that gap by studying meanings of the car wreckages deployed on Kenyan roads.

1.3 Objective of the Study

1.3.1 Overall Objective

To study meanings of car wreckage texts displayed on Kenyan highways for road safety.

1.3.2 Specific Objectives

   i.   To examine car wreckage texts deployed on Kenyan highways for road safety campaign.

  ii.   To find out the meanings encoded in car wreckage texts deployed for road safety campaigns in Kenya.

 iii.   To investigate meanings that motorists make of the car wreckage texts displayed for road safety on Kenyan roads.

1.4 Research Questions

The study was guided by the following research questions;

i. What meanings emerge from a semiotic analysis of the car wreckage texts displayed on Kenyan highways for road safety?

ii. What are the meanings encoded and intended by the Police in the displayed car wreckage texts deployed for road safety campaigns in Kenya?

iii. What interpretations do motorists make of the car wreckage texts placed on Kenyan roads as a safety campaign tactic?

1.5 Assumptions of the Study

The study on meanings of car wreckage texts was carried out under the following assumptions: That motorists were the demographic considered as potential consumers of these texts; that the texts were meant to enhance adherence to road safety by motorists; that through design and placement, the intended meanings of the texts facilitated the actual delivery of the intended message to motorists; that motorists noticed the texts and formed perceptions towards them which influenced how they interpreted them, consequently affecting their level of adherence to road safety; and, that the texts were fear appeal type messages.

1.6 Justification of the Study

Road safety is an ever crucial theme. It is important to establish the performance of road safety tactics and campaigns to justify their existence on the roads. This technique is scarce in information and has previously attracted little attention from scholars, researchers and journalists. Despite the campaign having been in force since 2013, there is little to no coverage about them in the media and published journals. The United Nations (UN) acknowledge RTAs as being a significant impediment to the attainment of health and development targets (WHO, 2011). With so many road safety campaigns in place, yet deaths and injuries continuing to occur

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through road crashes (The Standard, 2016), it is justifiable to interrogate the deployment of car wreckage texts.

Motorists are key stakeholders in road transport and most accidents are attributed to human causes. It is worth investigating what consumers think about a campaign targeting their interpretation. It is also important that road safety campaigners determine if this communication strategy effectively leads to a reduction of RTAs. If the car wreckage artefacts mean little or nothing to motorists, or to convey meanings that do not not promote road safety, then it follows that they are not an effective road safety campaign strategy (Hoekstra and Wegman, 2011). By investigating the meanings motorists make of the displayed car wreckage adverts, this study made insightful inferences into the strengths and effects of the tactic. The insights therefrom may be used to address possible gaps, and to optimise future messaging.

1.7 Significance of the Study

This study sought to contribute to the field of road safety research by adding to the already existing stock of knowledge. It sought to shed light on the never before studied area of use of car wreckage artefacts in Kenya. It may guide and inspire future research on road safety communication. In future, the data from this study will serve as a reference for researchers and experts interested in employing similar types of messaging. Designers of the texts will be better equipped to understand the strengths and weaknesses of this tactic. Policymaking may use it for planning, evaluating and executing future road safety campaigns and in coming up with improved communication strategies targeting motorists. Corporates may use the findings to evaluate the potential value of sponsoring the display of car wreckage artefacts.

1.8 Scope and Limitation of the Study

This research focussed on studying meanings of car wreckage texts deployed for road safety campaigns within Kenya. It covered the following areas: Literature review; Photographic collection and semiotic study of car wreckage artefacts; Traffic police and NTSA officers interviews; Motorist interviews; Field observation of the physical environment of the car wreckage texts; and textual analysis of the interview transcripts of the Police, NTSA and motorists. It limited itself to those exhibited media artefacts featuring mangled car shells and appended sign boards bearing written messages. It analysed the qualitative data generated using the semiotic approach. Only informants considered to have relevant authority, knowledge and understanding on the car wreckage artefacts. It relied consumer interpretations, thoughts, opinions and ideas about the texts.

The findings of this study may not apply to other types of road safety campaign techniques or to consumers in other countries. Since socio-economic and cultural factors play a role in meaning making, Kenyan motorists may interpret meanings differently from motorists in other countries. Due to limited data on car wreckage texts, there was little literature and insights upon which to build this study. This research combined expert opinions with other related reports from around the world to guide it. There was no accurate data on the car wreckages or on the population of motorists. To overcome these challenges during the sampling phase, this researcher relied on purposive sampling methods and on the advice of his supervisor.

1.9 Operational Definitions

The following are is a list of conceptual terms used in the study and their operational meanings.

Advertising: the activity or profession of preparing or producing advertisements for commercial products or services, publication or broadcast. It is the action of calling something to the attention of the public especially by paid announcements.

Author: the originator, creator or writer of a literary work. The creator of the car wreckage texts is referred to as their author.

Behaviour change: any transformation or modification of human behaviour. A broad range of activities and approaches which focus on the individual, community, and environmental influences on behaviour.

Black spot: a location with abnormally high number of crashes. Black spots are also described as high hazard, hazardous, or hot spot sites (Geurts and Wets, 2003).

Car wreckage: remains of a car or broken and disordered parts of a car left over or behind after it has been destroyed, usually in an accident. A wreckage is also referred to as a wreck or a shell.

Close reading: thoughtful, critical analysis of texts, focussing on significant details or patterns in order to develop deep, precise understanding of the text's form, meanings, etc. (Burke, 2018).

Code/Position: a system of signals or symbols for communication that represents assigned meanings; a learned rule for associating signs to their meanings; codes embedded into a text influence the way of interpretation of a particular text. There are three positions: dominant-hegemonic, negotiated and oppositional.

Connotation: literary meaning suggested by a sign or symbol apart from the thing it explicitly stands for or describes; an idea suggested by a text in addition to its main meaning.

Consumer: one who buys or utilises goods or services. Consumers in the context of this project refers to motorists, who are the target audience for the car wreckage texts.

Crash: a scenario in which a motor vehicle noisily falls, lands, hits something or someone with destructive force and break violently in to pieces.

Decode: to make sense of, decipher or interpret a (coded) message, sign or symbol into intelligible form; to read the underlying meaning of a text; to comprehend something within individual circumstances and to assign a particular meaning within that context.

Denotation: literal meaning; the exact definition or obvious interpretation of a text; direct specific meaning of the car wreckage texts, distinct from implied or associated ideas.

Deploy/Display: to publish, show something to people; exhibit ostentatiously or put something purposely in a place where people could view/see them easily. Car wreckage texts were displayed/deployed along Kenyan roads.

Dominant-hegemonic position or code: the position/code within which consumers decode the meaning of a text exactly as was intended by the producer. In the hegemonic position, consumers of the car wreckage messages arrive at its connotative meaning in the exact way the author(s) wanted them to be interpreted.

Drink-driving: also referred to as drunk-driving, refers to driving a vehicle after drinking too much alcohol; driving under the influence (DUI) of alcohol.

Education: campaigns aimed at increasing public awareness intended to provide road traffic stakeholders with better understanding of the dynamics of road transport, the risks and the benefits observing safety.

Embed: to fix or implant certain codes or meanings in a sign in order to send readers a certain message. Codes and meanings were embedded in the car wreckage texts to communicate to consumers.

Encode: to encrypt ordinary readable text into letters, symbols, etc. in order to preserve necessary information, send secret messages. The message – car wreckage text, photo, message board writings, etc. – is not readable until the encoding process is reversed through decoding.

Fatality: death as a result of an accident; the quality or state of causing death or destruction.

Fear appeal: a persuasive message designed and intended to influence behaviour by arousing emotions, usually fear, so as to influence desired behaviour change. Car wreckage texts were principally designed as fear appeals.

Fear: an unpleasant often strong emotion caused by anticipation or awareness of danger; a state of maximal uncertainty, given the unwarranted environment of frightening situations (Williams, 2012; Gore et al., 1998).

Image: a picture produced by an imaging tool such as a camera or/and printer; the impression that a text (such as the displayed car wreckages) gives to the consumers.

Intended meaning: interpretation preferred by the author of a text. In this research, it refers to the message the police set out to elicit in motorists through the dominant codes embedded in the displayed car wreckages.

Key risk factors to road safety: attributes or characteristic which increase road users' likelihood of crashes or RTAs when exposed to. Speeding, drunk–driving, use of helmets, use of seat-belts, and child restraints are the key risk factors to road safety, according to the WHO.

Linguistic / Non-linguistic: pertaining to the use of language (words). In this study, the texts written on the notice boards, e.g. Slow Down, Don't Drink and Drive, etc. are considered linguistic texts. Non-linguistic refers to communicating information without using language. Car wreckages are non-linguistic elements of communication in this study.

Meaning: the significant quality, thing or idea that a text, a sign, a symbol or sound, etc. represents; what is intended to be or that which is actually conveyed by a car wreckage text.

Media text / Text: The terms '**media text**' or '**Text**' have been used in this work to refer to both the non-linguistic symbols as well as linguistic elements used as linguistic landscape to communicate intended information in form of warnings to motorists. Media texts / texts employ graphics, images, written words, and sounds in different formats such as print oral, visual or electronic to communicate audiences.

Message board: a notice board appended to or exhibited alongside the displayed car wreckages, bearing mostly linguistic information on road safety.

Motorist: a person who drives a car or any other road vehicle.

Negotiated position/code: in this position, readers partly accept and partly reject the message relayed in a text. While consumers may agree with the message conveyed by the car wreckage texts, they may not necessarily agree with the sender, the intent or the environment within which it has been delivered.

Oppositional position/code: a position in which a reader interprets a message in a way different from the dominant codes intended by the author/sender. Contrary readings of car wreckage texts would be shaped and influenced by the reader's socio-cultural experiences.

Perceived self-efficacy: an individual's confidence or belief in their ability to complete a task or succeed in a specific situation or task recommended in a fear appeal.

Producer: a person who has the overall practical planning, financing, conceptualising, supervising, exhibiting or disseminating a product or work of art to the public (Jones, 2006). The producer of the car wreckage texts is the Kenya Police Traffic Department.

Publicity: activities involving the dissemination of information so as to ensure the promoted material attracts the attention or interest of many people.

Reading: a particular way in which a text is interpreted or understood; the activity of getting information from analysing a text, situation, etc.

Risk: the chance or possibility of something dangerous or bad happening at some time in the future. Moller (2006) defines: *risk* as "the probability of an unwanted event (such as loss or injury due to a road crash) which may or may not occur".

Road safety: the avoidance of danger on the roads or the measures deployed to mitigate the risks that road users may be exposed to.

Road traffic accident (RTA): also referred to as **road accident**, occurs when a motor vehicle that is moving along a roadway open to public use crashes or collides with another vehicle or object, sometimes injuring or killing people.

Semiotic analysis: an attempt to deconstruct and understand the ways texts are used by authors in different contexts, and the possible meanings they are likely to generate among readers.

Semiotics/Semiology: the discipline that studies signs, symbols, signification and their functions in the society (Bignell, 2002); it is lingusitics and communications theoritical approach used in reading meanings of texts, including signs and symbols. It seeks to understand how humans use signs and symbols in their pursuit to make meaning through both linguistic and non-linguistic signs (Berger, 2000).

Sign: something which stands to somebody for something in some respect or capacity. Anything that bears a message or conveys meaning to people – be they symbols, language (spoken or written word), objects, images, visual material, culture, sounds, colours, patterns, gestures, events or motion. A car wreckage sign would create in the mind of a person an equivalent or more developed sign (Berger, 2000; Robinson, 2011; Punch, 2005; Lanir, 2012; Chandler, 2017; Hébert, 2011). **Visual sign** is a signal that communicates via nonverbal means, involving actions or gestures to encode a message. Road signage are examples of visual signs.

Signified: concepts for which images (visual objects or written letters) and sounds stand. Signifieds can either be an actual thing or an impression (Berger, 2000).

Signifier: refers to images and sounds. Signifiers are the visual objects, written letters displayed as individual components or sounds that can be heard (Berger, 2000).

Speeding: the act of driving faster than is permitted within a particular section of the road.

Symbol: a thing, mark, character, letter(s) or picture used as a conventional representation of something else; a symbol is usually a material object standing for something abstract, an object,

function or process. For example, the picture of a white dove is associated with peace, serenity, harmony, tranquillity, divinity, grace and the absence of violence. The mark % is used to represent percentage, meaning "out of 100".

Tactic: a technique deliberately undertaken with the goal yielding specific outcomes. Car wreckage texts display is a tactic for road safety awareness.

Textual analysis: a method communication researchers use to understand the ways in which members of various cultures and subcultures make sense of who they are, and to describe and interpret the characteristics of a text. Through textual analysis, we are not attempting to establish the 'correct' interpretation of a text as there is no such a thing. However, we look at the content, structure, and functions of the messages contained in a text so as to be able to make an educated guess about the most probable readings of a text. Content analysis, semiotics, interactional analysis, and rhetorical criticism are some of the ways textual analysis can be carried out.

Threat: a source of potential harm with the possibility or causing something unwanted to happen e.g. injury or damage; phenomenon, person, act, entity or event that is likely to cause trouble to, endanger or harm a person or thing; hazard or risk.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

This chapter looked at available literature and previous studies which bear relevance to the study on meanings of car wreckage texts deployed in Kenya for road safety. Thereafter, this chapter incorporated theoretical persuasions pursued in this study. To give this study a base, context, and frame, this chapter began by looking at the background of the car wreckage texts. It then appraised various literatures on studies relating to road safety. It also looked at the coverage of the car wreckage texts in the mainstream and on social media. It explored semiotics, an approach to textual analysis used in the present study. The study delved into '*The Death of the Author*', and *Encoding / Decoding* – two essays apply the semiotic model to analysis of texts for meanings. It also included the concept of fear appeals which largely informed the design of the texts. Lastly, the chapter laid out the conceptual framework guiding this study.

2.1 Background to car wreckage texts in Kenya

In October 2003, the government embarked on a project to bring sanity onto the roads by enforcing stricter regulations and rules on public transport (Kitheka, 2014). In 2012, the National Road Safety Trust launched an initiative called *Toa Sauti,* a campaign aimed at provoking activism among Public Service Vehicle (PSV) passengers to speak up whenever drivers speed or drive recklessly (Daily Nation, 2012). In July 2013, a road safety campaign dubbed *Safety First* was unveiled following the government's concerns about the death and injuries caused by accidents (The Star, 2013). In May 2015, the *Zusha* campaign was officially launched after an initial trial phase. *Zusha* campaign deploys stickers to create awareness among PSV passengers

on the need to demand safe driving by heckling and chiding drivers in case of reckless driving (gui2de, 2015; The Star, 2015).

Other road safety measures had been tried Kenya, including: the use of billboards and road signs; mounting of road blocks to check on speeding, overloading or roadworthiness of vehicles; use of breathalysers, commonly known as *alcoblow* to test drivers' level of alcohol consumption (Mogambi and Nyakeri, 2015; Daily Nation, 2017); imposing of night travel bans for PSVs, and installation of speed limiting gadgets on PSVs which cut off vehicle power to inhibit acceleration beyond a set limit of 80km/h (NTSA, 2013).

The car wreckage text display was one of the many initiatives on road safety in Kenya. According to the Kenya Police, the tactic featuring car wrecks and message boards was not officially commissioned. There were no structures put in place for the implementation of the campaign. There were no records about the texts within the Police Service or the NTSA. Authorities could not confirm how many texts were displayed, where and when. That they were the result of individual initiative explains why they were found only at specific locations.

The Police and NTSA told this researcher that the car wreckages tactic had an effect on the attitudes and behaviour of some motorists. They could not quantify the magnitude of that impact with statistical data. They argued that it was not easy to measure the contribution of the car texts because a reduction in road accidents may be as a result of various factors. These could be attributed to the car wreck messages themselves or the result of a combination of the texts with other campaigns. For example, hit and run deaths at a black spot may reduce, not necessarily as result of a car wreckage text display, but of the introduction of a footbridge, police road blocks, speed bumps or as a consequence of two or more of these measures combined. This argument is

supported by Hoekstra and Wegman (2011), who posit that it is impossible to tell whether the same effects achieved by a combination of road safety campaigns might have been reached if those accompanying measures had been used in isolation.

Hit and run deaths are deaths arising from motor accidents in which vehicles involved do not stop. A footbridge is a narrow bridge designed for pedestrians to walk across a road or highway.

The NTSA identified 160 black spots which accounted for more than 60% of the country's total accidents a year (The Standard, 2015; 2009). The Ministry of Transport also mapped out 50 highways as high risk. Many of these roads where RTAs were most likely to occur were in and around Nairobi. Recording highest fatalities among them were roads connecting the capital city and major towns. These included Nairobi-Eldoret highway, Mombasa Road, Thika Road, Waiyaki Way, Eastern Bypass, Kangundo Road, Northern Bypass and Jogoo Road. Other notorious black spots were Kericho-Kisumu Road, Embu-Meru Road, Chepsangor, Mosoriot, Salgaa, the Mau Summit, Sachangwan, Migaa, and Total Junction (The Standard, 2016). A black spot is a place considered dangerous for motoring because several accidents have happened there (The Standard, 2009).

This researcher recorded car wreckage artefacts in the following places: Waiyaki Way – in front of Kabete police station, Thika Road - in front of Muthaiga police station and in front of Safari Park Hotel, on Jogoo Road, Salgaa Trading Centre, in Kachok, Kisumu town, in Nakuru town, on Mombasa Road at General Motors (GM) and in Eldoret town. There were previously more of such artefacts at spots such as Nyayo Stadium Roundabout, Uhuru Highway-University Way roundabout, Westlands roundabout, in Nyeri town, on Mwingi – Garissa Road, at Kenol Trading Centre, at Ntulele, and along Mwea – Embu Highway.

While preliminary interviews with the Police and the NTSA gave this researcher the above documented background into the context for the placement these texts, there was no indication of what they meant to consumers. There were no records to back up arguments for their effectiveness. There were no empirical data to show if and how the artefacts influenced motorists' perceptions and attitudes. There was no evidence to show if they impacted motorists' aversion to risk taking while driving. There were no statistics to use to compare RTA trends before and after the car wreckages were deployed. Furthermore, no available studies on motorists interpretations of the car wreckage texts displayed on Kenyan highways for road safety.

2.2 Studies on road safety

In Kenya, an estimated 3,000 to 13,000 die in road accidents annually. Most of these casualties are aged between 15 and 44 years (WHO, 2018; Manyara, 2013). It was estimated that road traffic fatalities cost Kenya US$4 billion annually, which was the equivalent of 11% of the country's 2012 GDP (Manyara, 2013). According to the WHO (2018), the main causes of RTAs are almost always driver-related. Humans account for 85% of all fatal and injury crashes (World Highways, 2013). According to Manyara (2013), 85.5% of road traffic accidents in Kenya can be attributed to poor or risky driver behaviour. These include speeding, driving under the influence of alcohol and other psychoactive substances, distracted driving, non-use of seat-belts, non-use of motorcycle helmets, and non-use of child restraints.

Of the leading human causes to RTAs, drowsiness contributes to over 87% of crashes (Manyara, 2013; Kaburu, 2015). Even though several measures ranging from controls in travel time for PSVs, installation of speed limiters, use of *alcoblow* equipment, among others, have been adopted by the government to curb RTAs, drowsiness remains a challenge (Manyara, 2013).

Studies further show that the causes, frequency and severity of road traffic injuries can be attributed to a poor driving culture, unsafe vehicles, badly designed and neglected roads infrastructure, and inadequate enforcement of existing traffic laws (Manyara, 2013; Kaburu, 2015; WHO, 2018). Drivers driving under immense pressure, stress, sleep deprivation and those who drive longer for economic reasons contribute greatly to these statistics.

The WHO concluded that road accidents and injuries are preventable through behavioural change of all concerned parties. These include the enforcement of legislation to control speed, regulating alcohol and drug consumption, mandating the use of seatbelts and crash helmets, and the safer design and use of roads and vehicles WHO (2018). According to Manyara (2013), the Kenyan law has in place policies formulated to address the key risk factors to road safety which are speeding, drunk–driving, use of helmets, use of seat-belts, and child restraints. He observes that the challenge is in their implementation, and regulation on road design and use. In order to effectively address the RTA's scourge, he advocates for further engagement in meaningful and committed participation by stakeholders. The high rates of accidents and fatalities is due to the fact that the prevailing laws touching on road safety issues are either not well legislated or are not adhered to (WHO, 2013).

WHO (2004) concluded that road safety campaigns influenced behaviour when used in conjunction with legislation and law enforcement. It indicated that education, information and publicity achieved little effects towards sustained reductions in road crash deaths and serious injuries, when used in isolation. Campaigns can only succeed if advertising is a component of the campaign, and usually not the key element (Elliot, 1989).

Iipinge (2014) established that television was the main medium through which the public received messages in all road safety programmes being implemented in Namibia, followed by radio. Respondents in her study believed that law enforcement agencies should be at the forefront in ensuring safety on the road. The report recommended, the need for continued public education campaigns using various media, both print and electronic, such as TV, radio, stickers, leaflets, posters, billboards and newspapers, on road safety (Iipinge, 2014).

Elliot (1993) opined that locally driven and personally directed campaigns have the biggest effect on RTAs. He added that not only were mass media campaigns for road safety far more likely to fail than to succeed, they were also highly visible and likely to be embarked upon because of profile rather than efficacy (Elliot, 1989).

Hoekstra and Wegman (2011), suggested that one of the reasons why ineffective campaigns and campaign techniques continue to be employed without much interrogation is because evaluation of campaigns aimed at improving road safety is still the exception rather than the rule. Given the sheer number of road safety campaigns, only a fraction of such campaigns were formally and meticulously assessed for their effectiveness. As this happened, new methods of behaviour modification were snubbed. They championed for proper evaluation and discussion of the pros and the cons of the strategies used in road safety campaigns. This researcher observed that the road safety campaign deploying car wreckages has little literature available. It has also not attracted many researchers and journalists.

Various meta-analyses suggest that deploying car wreckage texts alone would have little effect in reducing the number of RTAs, without either enforcement, education or publicity. Ulleberg and Vaa (2009) concluded that the effects of individual campaigns alone would be insignificant,

when compared to the effects of campaigns that were combined with other measures. According to a meta-analysis by Odero, Khayesi and Heda (2003), a blend of publicity, education, enforcement, and personal communication had a direct bearing on the road safety campaign and behavioural change of the audience. The study revealed that with drink-driving campaigns, both enforcement and publicity campaigns had significant independent effects, but no combined reinforcing effect. As for speeding campaigns, only a combination of enforcement and publicity campaigns was effective and not the two initiatives independently.

Audience refers to anyone who receives a media text such as an individual reading an article on a newspaper or a group of people watching a movie at a cinema.

The WHO (2013) advocates a "systems approach" to road traffic safety. This emphasises involvement at all levels of the road traffic system. From vehicle manufacturers, road traffic planners, road safety engineers, police, educators, health professionals, and insurers, through to road users. One such approach in Kenya is the piece of legislation widely known as the *'Michuki Rules'* that targeted motorists and vehicles within the entire road transport system. The rules, so named after the transport minister who enforced them, were gazetted in 2004. PSVs were required to install speed limiters and seatbelts for each passenger. *Matatus* were to strictly operate on designated routes. They were mandated to carry not more than a specified number of passengers. They were to be painted in a uniform colour with visible continuous yellow line on both sides. PSV personnel were to get a certificate of good conduct, and to wear uniform while at work. In addition, PSV drivers were to always hang their photographs next to them in the vehicle (Koimur, Kangogo, and Nyaoga, 2014; Kitheka, 2014; Mitullah and Onsate, 2013). The *Michuki Rules* did not integrate any car wreckage texts.

Matatu is the dominant means of public transportation in Kenya (Mitullah and Onsate, 2013) and are usually operated as private-for-profit business enterprises, subject to public transport legislation in Kenya. The term originates from *mang-otore*, a Kikuyu word meaning 'thirty cents', which was the standard fare when *matatus* emerged in 1950s (McCormick et al., 2011).

According to Angle et al. (2009), road users lack understanding of the various factors which influence their behaviour while on the road. To effectively change road user behaviour, they propose road safety communication campaigns which integrate the science social marketing. Police and NTSA suggested that the deployment of car wreckage texts was accompanied with enforcement. There was no evidence to suggest that the campaign was implemented in conjunction with other publicity drives in traditional media or using social marketing strategies.

A road user is anybody who uses the road – be they motorists, passengers, pedestrians.

Traditional media are media channels that existed before the internet-enabled ones. Also referred to as conventional media, they include the newspaper, magazines, radio and television.

From the literature above, one can deduce that indeed there have been previous pieces of legislation and studies on road safety in Kenya. However, none of those laws or studies available has focused on campaigns on Kenyan roads using graphic car wreckage texts and supporting cast of messages written on appended sign boards. There is no information available to support the recommendation by Hoekstra and Wegman (2011) to evaluate its effectiveness. This study concentrated on investigating the meanings of the car wreckage media texts.

2.3 Coverage of car wreckage texts in the media

Mweresah (2011) studied how road safety messages are primed on Nation Newspaper. He noted that the Nation Media Group (NMG) has an editorial policy against publishing graphic images of dead bodies and sometimes the injured. However, the *Nation* publishes images of wrecked vehicles and strewn personal effects to depict the picture of an accident scene. Mogambi and Nyakeri (2015) studied *practices, patterns, and issues* informing *'Media Priming of Road Traffic Accidents in Kenya* and concluded that the priming of an accident report in the Media in Kenya depends on its magnitude and profile. How many casualties are involved, who is involved, where it occurred, and how many vehicles are involved determined type of coverage. Many RTA stories do not occupy prime pages or get large spaces of coverage.

Figure 2.1: A mangled wreck of a car displayed at Kabete to warn motorists to drive safely (Source: The Star, 2017)

Figure 2.1 above shows the image of the car wreck at Kabete, was published by *The Star* newspaper in 2017, more than three years after the campaign was first launched. This is the only report and image that an online search in the mainstream and on social media yielded.

An interrogation of *Ma3Route* confirmed that the car wreckage tactic did not have an official media launch. A search on Twitter and Facebook by this researcher yielded a few mentions of a car wreck artefact in Nyeri Town. This was in relation to its theft and eventual return. On 18. Aug 2014, *Othaya Yetu* tweeted that a car wreck placed in Nyeri to "warn motorists had been stolen and sold as scrap metal" (Twitter, 2018). It appeared to have received attention because of the nature of crime, and the resultant humour it generated on social media.

Ma3Route is a Kenyan based mobile, web and sms platform that crowdsources current transport and traffic information, and shares them on social media (Ma3Route, 2018).

Below are screen shots of Tweets and Facebook posts via *Ma3Route* and *Othaya Yetu*, a Nyeri based Twitter user and their followers.
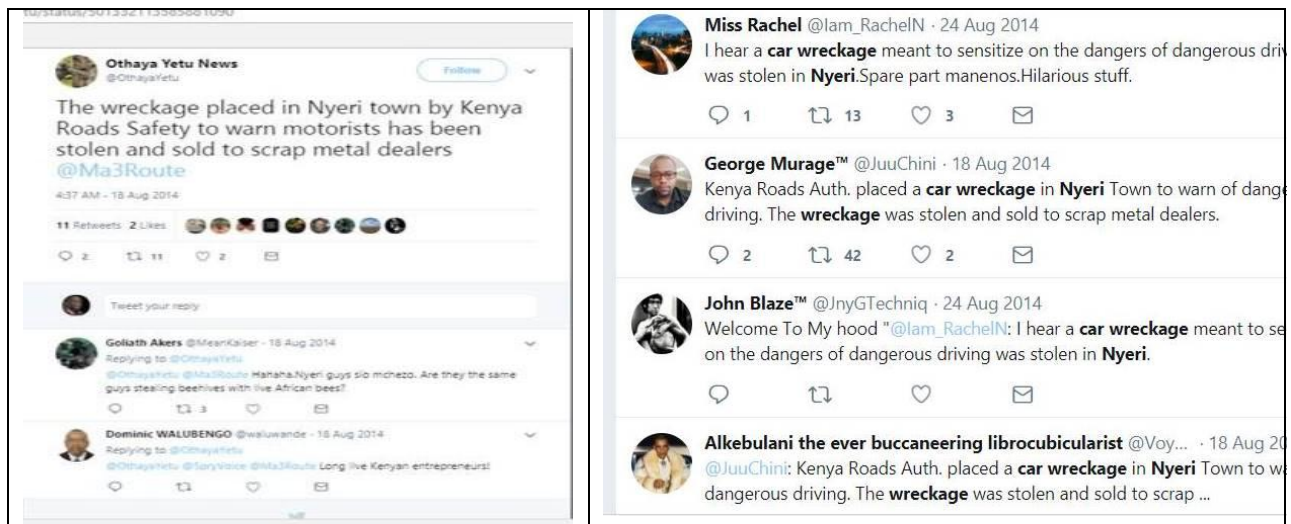
Figure 2.2: Screenshots of tweets about a car wreckage in Nyeri (Source: Twitter, 2018)

The road safety awareness deploying car wreckages are not unique to Kenyan roads. Similar campaigns have been run elsewhere. For example, one campaign in Dubai, UAE, used an innovatively coded message in the form of a sculpture.

Social media refers to social networking platforms through which users create can share information and content on the internet using computers or mobile phones.

Facebook is an online social media networking website which provides users with a platform to you stay connected with other users across the globe. It provides a platform for keeping up with the current affairs, sharing texts, photos, videos, and memories.

Twitter is a microblogging, social networking website, which allows users to write, post or publish short messages that are visible to other users. With messages known as "tweets", interact users can interact with others using up to a maximum of 140 characters.

Figure   2.3:   FYI   sculpture   in   Dubai,   made   from   crushed   car   parts (Source: thenational.ae, 2019)

The sculpture assembled out of crushed and mangled car parts retrieved from various scenes of accidents, was designed to spell FYI, short form for 'For Your Information'. Its goal was to capture the attention of and warn motorists, mainly students, of the consequences of dangerous driving. The partners involved in this campaign argue that "For awareness campaigns to be effective they cannot just be a one-off activation" (The National, 2016).

Sleath (2014) noted that the National Transport First Responders Services (NTFRS) plays a vital role in community education. One of the ways it does this is with the use of a wrecked car adorned with road safety messages and set up in various high-visibility areas around Alice Springs (ABC, 2014).

Figure 2.4: Wrecked car as part of a road safety campaign in Australia (Source: abc.net.au. 2018)

In 2016, parents of a young man killed in a road accident teamed up with organisations to display the wreck of the deceased's mangled car in front of the Houses of Parliament of the United Kingdom (UK). Their son, Joseph Brown-Lartey, was killed in 2014 by a teenager who drove at 130kph through a red light in a residential area. The campaign called for tougher sentences for driving offences, and stiffer penalties for drivers who maim or kill (STV, 2016).

Figure 2.5: Joseph Brown-Lartey's mangled car parts on display (Source: Independent.co.uk, 2019)

Despite little coverage of these car wreckage texts in the media, this study attempted to find out their meanings among the various players along the communication chain.

2.4 Theoretical Framework

This work is anchored on semiotics and fear appeals concepts. Both Stuart Hall's *'Encoding / Decoding'* and Roland Barthes' *'The Death of the Author'* semiosis models have been extensively used.

2.4.1 Semiotic Approach

Semiotic analysis was the most suitable approach in designing this study because it is qualitative communication research method suited for textual analysis of signs and their meanings. Semiotics enabled this researcher to describe and explain the findings on the meanings associated with the texts throughout the communication chain.

Semiotics is defined as the study of signs. It is concerned with everything that can be taken as a sign (Eco, 1976). It has its roots in the Greek word *semesion*, meaning sign (Yakin and Totu, 2014). It "lays out assumptions, concepts and methods for the analysis of sign systems" (Berger, 2000: 35). Such sign systems include mathematics, music, etiquette, rites, and street signs (Punch, 2005). As such, anything that bears meaning, that communicates messages to people such as a symbol, language (spoken or written word), object, image, visual material culture (Hébert, 2011) is a sign.

Saussure proposed a dyadic model, in which a *sign* is a combination of two components; *Signifiers* – images and sounds, and the *Signified* – concepts which these images and sounds bring to mind. The *signified* can either be an actual thing or an impression (Berger, 2000).

For example, "green traffic light" can be a *signifier* that *signifies* the action 'to go'; while a red rose flower is a *sign* of love; whereas smoke billowing from an industrial factory is a *sign* of fire outbreak (Chandler, 2017; Robinson, 2011). The correlation between *signifier* and *signified* is based on convention. "The word *tree* and the large stemmed plant for which it stands is not natural, but historically tied to conventions and choices that people made" (Berger, 2000: 38).
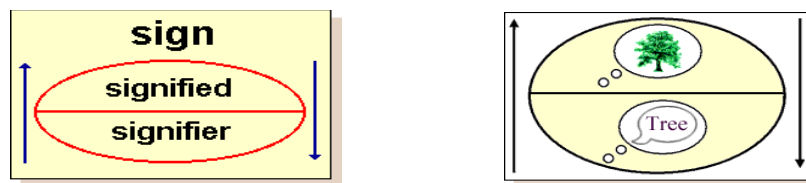
Figure 2.6: Illustration of Saussure's dyadic model (Source: visual-memory.co.uk, 2019)

Convention refers to the way in which something is done that most people in a society expect and consider to be the right way to do it.

A model is a description or analogy used to visualise or explain how a system that cannot be directly observed works.

According to Peirce, semiotics is about signification, representation, reference and meaning, while a sign as "something that creates in the mind of a person an equivalent sign, or perhaps a more developed sign." (Berger, 2000; Robinson, 2011; Punch, 2005; Lanir, 2012; Chandler, 2017). He postulates a three-part triadic model comprising a *representamen,* an *interpretant*, and an *object.* The representamen refers to the *sign vehicle* which is the form taken by the sign; while an interpretant is the *sense* made of the sign or the new sign created by the first one. An object, also known as *referent* is that to which the sign refers or that for which a sign stands. (Chandler, 2017).
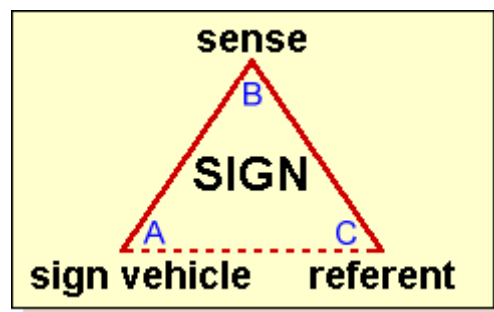
Figure 2.7: Illustration the triadic model of Peirce (Source: visual-memory.co.uk, 2019)

Rubin et al., (2010) suggest that textual analysis is the most accurate way to study the representation of a media artefact. Semiotic analysis is a method of textual analysis (Berger, 2000). Both Saussure's model of *signifier – signified* and Peirce's proposition of three types of signs – *icons*, *indexes*, and *symbols,* were applied to the study of car wreckage texts displayed on Kenyan roads. An *icon* is a signifier that has a direct resemblance, which can be seen, with the signified. For example a photograph is an icon of the object that was photographed. An *index* has

a direct (cause-effect) relationship with the signified; for example when one sees smoke, they can figure out there is fire. A *symbol* has an arbitrary relationship with the signified through convention association or shared cultural practices, that must be learnt. For instance, a cross is a symbol of Christianity among the people who understand that faith (Berger, 2000).

This study treated the car wreckage artefacts as media texts aimed at influencing motorists' attitudes and behaviour. According to Chandler (2017), semiotic analysis attempts to make what is implicit explicit by

> "establishing the underlying conventions, identify significant differences and oppositions in an attempt to model the system of categories, syntagmatic and paradigmatic relations, connotations, distinctions and rules of combination employed."

Semioticians apply rhetorical concepts in conducting textual analysis of texts. Such tropes "generate 'imagery' with connotations over and above any 'literal' meaning" (Chandler, 2017). Imagery refers to figurative language that produces mental pictures in people reading or listening. Other concepts applied in chapter four to unravel connotations of the car wreckage texts include metaphors, similes, metonymy, synecdoche, paradigms, syntagms, myths, icons and symbols.

Nyantong'a (2016) applied Semiotics to examine how child focused organisations represented the rights of children on poster images. He studied different signs and messages that were used in poster images towards communicating and raising awareness on child rights in Kenya. Kates, Shaw and Garlock (1999), used the semiotics approach to analyse women's magazines in a "*Study of Ideologies and Discourses in Advertising to Women*". They concluded that in order for one to understand the relationship between the ideologies and discourses in women's magazines, one must talk to the women who consume them.

Mayr (2013) also employed semiotic analysis to unravel the obvious and hidden cultural meanings, themes and corresponding cultural values expressed in TV commercials of Paulaner Weiss Beer on TV. She then examined how the signs in the commercial were read by Malaysian learners of the German language. A textual analysis revealed that the displayed text and the spoken text were representative of two different levels of advertisement. The displayed text provided information promoting the product as being German, but also signified the product itself – the beer. The spoken text and non-verbal communication was used on the second level of text to convey the cultural aspect of the commercial – the German tradition. The two were complimentary. She later compared if there were differences in interpretation of these signs between native German speakers and Malaysians learning the German language (Mayr, 2013).

This study borrowed the approach taken by Mayr (2013) and Kates et al., (1999) where textual analysis was combined with long consumer interviews. This researcher argued that motorists must be interviewed as they are the consumers of the displayed car wreckage signs.

2.4.2 The Death of the Author

'The Death of the Author' is an essay authored in 1967 by French literary critic and theorist Roland Barthes (1915–80). Barthes was a semiotician who developed his approach in denotation and connotation using photographic images as a system of signs (Bouzida, 2014). In this essay, he scrutinises the multifaceted relationship between the author and their text, as well as the role of the audience in reading a text (Galvan, 2016). He disapproved of biography-based literary criticism which put too much importance on the biographical background and intentions of the author (The Guardian, 2010). He argued that an author is almost irrelevant in meaning making because the reader does not rely on the author's biographical background or circumstances to

interpret a text. An author 'fixes' meaning, which may not be bought readers (Barthes, 1967; Hall, 1973; Jones, 2006). Barthes' thesis is that the author is not really dead, but once a text is out there, the 'reader' is empowered to interpret it in whichever way.

'The Death of the Author', suggests that the moment an artist puts their work out to the public, it is the audiences that hold the key to interpreting the text. It postulates that the author exists before the text's publication. After, the reader becomes the 'new author'. Each reader makes their own interpretations, based on their own cultural, historical, political, economic, psychological, ethnic predispositions. According to Barthes (1967), a text should be interpreted independently of anything to do with the author. He advances that a reader should not rely so much on the author's personal, political, spiritual, ethnic, biographical, and historical or any other such attributes in reading and/or making meaning of a text as the two are unrelated. Since every piece of writing contains multiple layers and meanings, readers must separate a text from its creator in order to liberate the text from the tyranny of interpretation.

2.4.3 Encoding / Encoding Model

The *Encoding/Decoding* communication model was developed by cultural studies scholar Stuart Hall. Hall was also a semiotician. He put the audience, not the producer or the text, at the centre of 'meaning making' in his work titled '*Encoding and Decoding in the Television Discourse'*. The encoding/decoding model proposes a non-linear theoretical approach to communication with four stages, namely: production, dissemination, interpretation and reproduction of media messages (Hall, 1973). He calls these stages "*moments*" in the creation and consumption of a media text (Hall, 1996; Chandler, 2017).

A sign has the potential for multiple meanings, which Hall refers to as *polysemic values*. This means that consumers can interpret or *decode* the car wreckage texts in multiple ways, influenced by socio-cultural backgrounds (Awan, 2007). Literal meanings are referred to as denotations. A *denotative* meaning is the explicit description of an object. For example, the denotative meaning of a car is – a vehicle, propelled by an engine, with typically four wheels, and which carries a small number of passengers. Cultural meanings, also known as *connotations*, are the cultural ideas and meanings which a term, object or phenomenon acquires (Berger, 2000). Connotatively, a car may stand for someone who has wealth, high status, or 'has made it in life'.

Hall (1980) posits that during the production of media texts, producers '*encode preferred meanings*' into the texts. These preferred meanings are the positions intended for the consumers' interpretation. He concludes that audiences actively *decode* media messages in line with their own cultural and social contexts, and not simply taking them in as *encoded* by producers.

He lays out three possible positions in which a message can be decoded by consumers: the *dominant-hegemonic* position, the *negotiated* position, and the *oppositional* position. The dominant or hegemonic position is one in which a message is read in the way preferred by the author. The negotiated meaning is a position where the audiences agree only with some aspects of a message. Here, consumers may accommodate the preferred meaning is without accepting the philosophy behind it. In the oppositional position, audiences' interpretation of a message is totally different from that intended by the producer (Awan, 2007). Even though texts are created on the basis of '*dominant-hegemonic structure*', their interpretation can still take the other interpretations. It is the audience's interpretation of a media text which matters in the end.

Encoding/decoding has been applied as a theoretical approach to study many forms of messages across multiple media. Nyanoti (2015) applied the encoding/decoding model to investigate how meanings are encoded and circulated by television advertisements, and how the Kenyan youth decode meanings encoded in these advertisements to construct their self-identities. Kimumwe (2012) used the encoding/decoding model to study how audiences received sexual behaviour change messages in Kampala. He found that audiences are active participants who engage with the media messages. He also observed that consumers judge how relevant the messages are in their individual circumstances. Morley applied encoding/decoding to inquire on audience reception of media texts of a popular UK TV magazine called *Nationwide*. He looked at the extent to which the audiences decoded the programme message within the parameters of the originally encoded preferred meaning (Chandler, 2017).

To find out meanings of car wreckage texts deployed on Kenyan highways for road safety, this researcher conducted a close reading of these texts. This was followed by a textual analysis of responses from key informants on the meanings they encode in the texts and participants interpretations. This study paid particular attention to motorists' responses. As advocated for in *'The Death of the Author'*, the authors of the texts were not available on the roads to explain their meanings to consumers. Motorists were considered as unique individuals, and the most important entities in the process of meaning making of these texts. Burke (2018) defines close reading as "thoughtful, critical analysis of a text that focuses on significant details or patterns in order to develop a deep, precise understanding of the text's form, craft, meanings, etc."

Textual analyses have been done with TV dramas, news, magazines and novels, as argued by Rubin et al. (2010). Investigating meanings of media artefacts is something no behavioural

theory is designed well to achieve. Neither can this be done through analytical and theoretical approaches that lean towards quantitative research methods. Encoding/decoding model guided this study in establishing the codes within which the car wreckage texts were authored. It also assessed the positions within which they were interpreted. No available study had attempted this.

2.4.4 Fear Appeals Concept

Fear appeals are persuasive messages that aim to influence behaviour by inspiring fear (Wildlife Society, 2013; Easterling and Leventhal 1989). They are premised on the belief that individuals will be motivated to act to forestall the threat to their wellbeing by preventing an undesirable outcome or taking control of the situation (Witte, 1994). Experts argue that some form of arousal is necessary for individual behaviour change to occur. Mere presentation of information is not sufficient to influence behaviour change (Leventhal and Niles, 1964; Henthorne, et al., 1993).

Fear appeals literature can be traced to the use of communication persuasion models (Hovland, et al., 1953). For many years, mass media campaigners have used fear appeals to enhance the effectiveness of health behaviour change messages. Fear appeals have been applied to promote or dissuade humans from using products, services and ideas (Williams, 2012). Social and health communication practitioners use fear-based persuasion techniques to design fear appeals messages to promote risk-reducing behaviours, motivate behaviour and to address a wide range of important public health issues such as safe driving practices, HIV-AIDS prevention, smoking cessation, dental hygiene, use and abuse of drugs, safe sex, and child immunisation (Wildlife Society, 2013; Tanner et al., 1991; Witte, 1994; Morales et al., 2012). Persuasion is the act of convincing or inducing somebody to do, believe or adopt something.

The basis of a fear appeal message is, for example – "if you don't do this", some particular dire consequences will happen (Wildlife Society, 2013: 116). The three main components in a fear appeal are: *fear*, *threat*, and *perceived efficacy*. Since fear is a functional reaction to threat, the uncertainty in fear stems from the frightened person's uncertainty over what he or she should do and whether he or she will be able to escape or avoid the fear eliciting object. A fear appeal should contain sufficient efficacy information to inform about adaptive behavioural responses. Witte and Allen (2000) concluded that fear appeals are most effective when they contain both high levels of threat and high levels of efficacy. This enables the individual to perceive that there are ways to address the threat and that he / she is capable of performing that behaviour.

Fear is defined as a physiological and emotional response to a salient and serious threat (Wildlife Society, 2013; Witte, 1994; Easterling and Leventhal, 1989). Threat, on the other hand, is defined as an external motivation that creates a perception in audiences that they are vulnerable to some negative consequences. Perceived self-efficacy is a person's belief that they can implement the recommendations of a message and effectively reduce the threat depicted in the message (Williams, 2012; Gore et al., 1998).

Quinn, Meenaghan, and Brannick (1992) found that fear appeals are moderated by other factors including, credibility of the source, interest, value of communication, relevance, and ethics. Source credibility refers to a communicator's trustworthiness or expertise. Audiences are less likely to discredit the source when source credibility is high. Studies appear to indicate that high credibility sources are more persuasive in their communication when they employ strong rather than mild fear-arousing messages (Sternthal and Craig, 1974).

Gender and age determine the effectiveness of fear-appeals (Morales et al., 2012). Lewis, Tay and Watson (2008) discovered that men tend to respond less favourably to fear appeals than women. Women demonstrated better recall and more positive attitudes towards the central message than men. Young males were not easily swayed by fear appeals because they tended to discount and avoid them. Adams (1995) argued that the degree of risk perceived determined the degree of action to be taken. According to Gulliver and Begg (2007), what one road user might consider risky might be perceived differently by another. Personal dispositions, religion, socio-economic and culture play a role in how humans perceive threats (Douglas, 1986).

Personality traits and characteristic such as risk-taking propensity, sensation-seeking, and other attitudes have been reported to play roles in road accidents (Iversen and Rundmo, 2002). According to Deery (1999), young drivers are more likely to indulge in compromised traffic risk perception because they feel invincible. They may be thrilled by the repercussions of a road accident on their looks or on their social standing than on their health and longevity (Williams, 2012). Risk perception has to do with one's opinion of the likelihood of suffering a threat to their health, associated with performing a certain activity Moller (2000).

The definitive goal of a road safety campaign is the actual behaviour change it leads to. Two parallel message appraisals are possible whenever a motorist is exposed to car wreckage texts – a threat appraisal or an efficacy appraisal (Witte, 1994). During a threat appraisal, a motorist would assess the severity of an RTA against their own vulnerability. In an efficacy appraisal, a motorist would assess the suitability of the proposed action against his or her own ability to execute the corresponding recommended action. If they view the threat and perceived self-efficacy to be low and posing no serious risk to personal health, it would produce no response or behaviour change. They would ignore it if it fails to register any threat worth provoking the

motorist to consider the embedded efficacy. If perceived threat is high, there will be either positive or negative behaviour change, all depending on the assessment of efficacy. If perceived self-efficacy is high, they may lead to adaptive responses. If perceived efficacy low low, they will instead adopt fear control responses.

Despite the strength of the appeal, an audience cannot be held in a perpetual state of fear. They will eventually 'switch off' from scary imagery or information as a coping mechanism. Fear appeals may be more effective in the short-term, but their influence weakens in the long term (Schoenbachler and Whittler 1996). They are designed to arouse anxiety in the target audience with the anticipation that the target will react to ease this anxiety by adopting, continuing, discontinuing, or avoiding a certain course of action (Spence and Moinpour, 1972). As such, the texts can only be effective if motorists perceive as much threat and efficacy as has been intended.

Hoekstra and Wegman (2011) posit that few insights are available to help researchers and organisations distinguish between what components are successful, and which ones are not. They argue that,

> "Evaluations of road safety campaigns may, for example, shed some light on the more controversial of current practices (such as the use of fear appeals) and help determine if and when these practices are really effective."

Researchers have studied fear appeals in media messages and social communication campaigns. Kimumwe (2012) studied how people received sexual behaviour change messages in Kampala. He concluded that fear appeals did little to deter the target consumers from engaging in multiple sexual relations and other risky sexual behaviours. However, no available studies have looked at the contents and meanings of the car wreckage texts deployed for road safety in Kenya.

This research analysed the car wreckage texts to interrogate if they display characteristics of fear appeals. It examined their relative strength and effectiveness. It also studied the responses of motorists to their perceptions of fear, threat, and self-efficacy in the messages. It scrutinised the motorists' reactions thereafter and drew inferences accordingly.

2.5 Conceptual Framework

This is a communication research of a textual nature. Messages and meanings were at the centre of the study. It studied meanings of car wreckage artefacts deployed in road safety campaigns in Kenya. The artefacts were treated as fear appeal type texts, designed and published to communicate road safety awareness to consumers. Two kinds of texts were analysed: first, the actual objects and their photographic images; and second, responses from informants and participants. Semiotic approaches to textual analysis were adopted in examining the texts and meanings attached to them. Data for this research was collected through photographing and printing the car wreckage texts in colour, and through in-depth interviews of participants.

A conceptual framework is a graphical or narrative representation of the main concepts and variables of a research. It is best presented in the form of a diagram and shows the presumed connections of those concepts and variables with each other (Punch, 2005). In investigating meanings of car wreckage texts technique used on Kenyan roads, this study did the following:

i) Conducted a semiotic analysis of the car wreckage texts deployed in road safety campaigns in Kenya.

ii) Examined the meanings encoded in the car wreckages and appended billboard texts erected on Kenyan highways for road safety campaigns.

iii) Investigated motorists interpretations of the car wreckage texts deployed for road safety campaigns in Kenya.

CAR WRECKAGE TEXTS

{Key concepts: Sign, symbol, signifier}

Semiotic analysis
Close reading of car wreckages and
sign boards by this researcher

{Key concepts: context, fear appeals}

Author / producer meaning
Meanings encoded by the constructors of
the car wreckage texts

*{Key concepts: encoding, decoding,
production, dominant/preferred meaning}*

Audience / consumer meaning
Meanings as read / interpreted by
motorists / drivers / consumers

*{Key concepts: decode, interpret,
reproduction, preferred, negotiated
/oppositional meaning}*

MEANINGS
OF CAR WRECKAGE TEXTS DISPLAYED ON ROADS

{Key concepts: textual analysis signified, denotation, connotation}

Figure 2.8: Conceptual framework visualising the focus of this research in terms of design, key variables and concepts

CHAPTER THREE

METHODOLOGY

3.0 Overview

This chapter presents the research methodology. It encompasses the research design, research approach, research method, location of the study, population, sample size, sampling technique, the nature of data collected, data collection method, data collection tools, and data analysis. It also covers credibility, and ethical issues relating to the data collection and analysis.

3.1 Research Design

This study adopted a descriptive design within the interpretivistic paradigm to present, analyse and present data on meanings of car wreckage texts displayed on Kenyan roads for safety. A descriptive design provided the freedom to comprehensively describe the context and convey the full picture of its findings in qualitative terms. The descriptive qualitative design was applied in purposive sampling techniques and semiotic analysis of the car wreckage media artefacts.

Punch (2005) posits that ….

> "the point of a qualitative study is to look at something holistically and comprehensively, to study it in its complexity, and to understand it in its context ……… human social behaviour is not independent of context;…" (p. 186).

3.2 Research Approach

This study adopted qualitative methods of research in sampling, data collection, data presentation, data analysis and interpretation. A qualitative approach was most suited for this research as it sought in-depth understanding of variables which cannot be directly observed such as beliefs, opinions, attitudes, perceptions, circumstances, observations, views and behaviours of

people in particular social contexts. In addition, a qualitative design was favoured as it allowed this researcher to work with a small number of participants and informants (Wimmer and Dominick, 2014; Lindlof and Taylor, 2011).

3.3 Research Method

Since this research involved texts and interpretations, semiotic methods of textual analysis were adopted as the key research method. Sampled car wreckage artefacts were subjected to close reading by the researcher with the aim of unravelling all possible meanings they were like to convey. These were combined with long in-depth interviews of consumer to systematically gather interpretations of the texts, record and categorise their experiences (Rubin et al., 2010).

In-depth interviews are so-called because they are intensive and enable a researcher to obtain details about participants' ideas, thoughts, opinions, attitudes and motivations on a topic. This is impossible through other data collection methods (Berger, 2000; Wimmer and Dominick, 2014).

3.4 Location of the Study

The study was conducted in the following locations: Nairobi, Nakuru, Salgaa, Kisumu and Eldoret. These locations were chosen as they still had the car wreckage artefacts displayed at the time of the study or had images of their artefacts accessible to the researcher. They also accounted for most RTAs recorded in Kenya (The Standard, 2015). Furthermore, Nairobi was the location of interviews with key informants (KIs) because it was the seat of NTSA and Traffic Police, and the only place where official interviews were authorised.

3.5 Target Population

The target population for this study included car wreckage artefacts, motorists, NTSA officials and Police officers. Those sampled from the Police and NTSA ranks were referred to as key informants. Motorists were referred to as participants.

Table 3.1: Table showing list of specific car wreck texts studied

County	Highway	Location
Nairobi	Waiyaki Way	In front of Kabete police station
	Thika Road	In front of Muthaiga Police Station
	Thika Road	Opposite Safari Park Hotel
	Mombasa Road	In front of General Motors
	Jogoo Road	Rikana-Chachami Roundabout, Makongeni
Nakuru	Nakuru – Eldoret Highway	Salgaa Trading Centre
Kisumu	Kisumu – Kericho Highway	At Kachok Roundbout
Uasin Gishu	Uganda Road	West Junction, opposite Paul's Bakery, Eldoret

According to McLeod (2014) a target population is the entire group of individuals from the population under study. A sample is the group of people who participate in an investigation. A key informant is a person selected for an in-depth interview due to the belief that they possess deep understanding or rich information about a subject. A participant is a person who participates in a research about human subjects by being the target of observation or interviews.

3.6 Sampling Techniques

The study used purposive sampling procedure. All the nine available car wreckage artefacts were considered. The researcher believed they were likely to generate diverse responses, considering they were displayed at different parts of the country. Non-random sampling was preferred

because the focus was on the quality, substance and descriptions of responses, and on meanings attached to the texts. Random sampling exploit already established informants, their knowledge and experiences.

Purposive sampling gave this researcher the freedom to make informed judgement on the artefacts to study and on whom to interview. All car wreckages were considered as having the potential to contribute rich diverse data to the research. Police and NTSA officers considered as having relevant and/or authoritative knowledge on the subject and could dedicate time to participate were sought for this study. There was sufficient reason to believe that they had a critical understanding of the car wreckage texts campaign technique. Motorists who had driven along roads with the texts and seen them were considered.

The qualitative nature of data on meanings of car wreckage texts required descriptions and explanations by participants, which demanded lengthy in-depth interviews. According to Lindlof and Taylor (2011), qualitative research is mostly about in-depth understanding of the social reality in a particular context. It is rarely about generalising findings to whole populations.

The Robert Wood Johnson Foundation (RWJF) (2018) defines sampling as the process of systematically selecting participants that will be studied in the course of a research. Sampling is necessary since it is impossible and impractical to study everyone doing everything everywhere (Punch, 2005).

3.7 Sample Size

The sample size for this research was determined after the study was completed, as recommended by Lindlof and Taylor (2011). Sampling and interviewing was done continuously until saturation. Nine car wreckage artefacts, eight KIs and 54 participants were interviewed.

Saturation or informational redundancy, is a situation where new data no longer adds much of significance to the already developed concepts (Lindlof and Taylor, 2011; RWJF, 2018). This research began with a few informants and participants. More were added, with new input continually supporting emerging themes. Sampling and interviewing new participants was stopped once the study was deemed to not be gaining any new themes, information or value.

Qualitative research has no requirement for precise number of subjects in order to attain a desired level of statistical power. According to Patton (2001) no rules exist for determining sample sizes in qualitative research. Instead, choosing a sample size depends on what the researcher wishes to know; the objectives of the study; how credible and useful the obtained information is; and the availability of time and other resources (Shackleton, 2007).

3.8 Data Collection Methods

This study relied on three sets of primary data, collected in several ways. 1) **Photography and videography**: This researcher photographed and recorded car wreckage texts and their surroundings. These pictures and videos were saved on a laptop for analysis. Some pictures were selected and printed on white A4 size papers for analysis.

2) **Internet searches**: The image of Nakuru car wreckage text as well as other images on road signs used in the study were sourced from the internet. Credit has duly been given.

3) **In-depth Interviews**: Data from KIs and participants was collected using in-depth interview methods. Interview guides were used as interviewees responded to questions related to how they understood and interpreted them.

Key informants within the Police and the NTSA were approached through official protocol. This entailed writing letters and emails to the Deputy Inspector General of Police (DIG) and the Director General of NTSA respectively to request for interviews with officers knowledgeable and experienced on matters related to these particular texts. Upon acceptance and invitation, this researcher availed himself to conduct interviews at their offices. An interview guide was used to ask questions. The researcher took notes using a pen and notepad and later typed on a laptop.

Selected participants who drove or rode different types of automobiles were interviewed by the researcher. These motorists were approached through their SACCO officials. Some were identified at bus stations and parking lots based on the routes they plied, perceived knowledge, availability and willingness to offer insights into the texts. In some cases, participants were interviewed next to an actual car wreckage text. These were complemented with print-outs of the artefacts. Voice recorders were used to capture the voice data from interviews which were later stored on a laptop before being transcribed and analysed. A note pad and a pen were used to capture observations.

The recordings were then transcribed. This researcher transcribed most of the interview recordings on a laptop. Some were outsourced to two hired transcribers. The researcher reviewed the material transcribed by the hired personnel for quality control. The handwritten notes on the pad were typed too. The transcriptions were subjected to textual analysis. As described by Rubin et al., (2010), this method was preferred as it enabled more in-depth analysis of the media texts. Audio recorders were preferred as they are "…capable of capturing and preserving all of the interview discourse with little effort by the researcher." (Lindlof and Taylor, 2011: 192).

3.9 Data Collection Tools

As suggested by Punch (2005), interview guides (Appendices I & II) were developed to guide the collection of primary data from key informants and participants on their interpretations of the car wreckages. A Samsung voice recorder and mobile phone recorder were used to record the in-depth interviews. Note pads, note books and pens were used to record observations.

Cameras (Nikon D60 camera and Samsung smart phone) were used to take pictures and videos of the car wreckages and their locations. The phone was also used to take notes of observations. The internet was an important resource for finding subject car wreck images that were no-longer available for photographing by the researcher.

Laptops and desktops were used store and to analyse captured images and videos. They were also used to transcribe the electronically recorded voice data from interviews. Different colour printing machines were used to print the pictures of selected car wreckage texts for interview purposes as well as for presentation to the university.

3.10 Credibility of the Study

To increase credibility of this study, this researcher presented an audit trail on which decisions and steps taken during the project were documented. A thick description was also provided from which readers can decide if there is a reasonable basis on which to transfer the claims the study makes about meanings of car wreckage texts. To make comparisons conceivable, *field notes* to this research are available to describe events in detail. This way, other researchers who wish to undertake a similar inquiry could follow a similar path and arrive at fairly comparable conclusions.

As suggested by Lincoln and Guba (1985); Holloway (1997); and Lindlof and Taylor (2011). This qualitative research also attempted triangulation, multiple methods, negative case analysis, disjuncture, crystallisation and member evaluation to increase credibility the data and findings. *Triangulation* was enhanced by way of interviewing participants from diverse backgrounds. *Multiple methods* of validation involved textual analysis of convergent data in field notes, interview transcriptions and semiotic analysis of the car wreckages. The study also applied *negative case analysis*, in which the data analysis process was continuously enriched with what transpired in the field. The feedback helped develop clear descriptions and explanations of meanings of the texts. Lastly, data credibility was attempted through *member validation* whereby preliminary findings were taken back to the field to test if participants recognised them.

"Qualitative research seeks to produce and demonstrate credible data." (Shackleton, 2007: 22). To enhance trustworthiness and dependability of this research, credibility was given diligence at both data collection and analysis stages. Credibility is the ability to inspire belief or trust in somebody or something. A thick description refers to the complete and meticulous account by a researcher of his or her experiences in the field, explicitly detailing contexts of the subtleties and idiosyncrasies relating to cultural and social configurations (Holloway, 1997; RWJF, 2008). Triangulation refers to the comparison of two or more forms of evidence with respect to the object under study. Credibility is enhanced when data from two or more methods point the researcher to a similar conclusion.

3.11 Data Analysis and Interpretation

This research yielded data in the form of images and words. Due to the purely textual and qualitative nature of meanings and interpretations, the data was analysed using the semiotic tools and methods. Images, interview transcripts, notes, words, phrases, reactions, observations were

subjected to close reading. Any non-linguistic data was converted or described in the form of words. Data output was presented descriptively – using words.

Data analysis and interpretation began during the data collection process. Any new angles on meanings were incorporated in the findings. Relevant observations were noted down, categorised and explored further. In order to generate as many possible meanings as possible and make the output contextual, close reading of texts looked at the texts holistically at a denotative and connotative level. It examined the philosophy, history, circumstances, locations, distribution, visibility, legibility, physical characteristics and composition of the texts. It looked at possible reasons why they were created. It also asked who the potential consumers and targeted behaviours were likely to be.

Semiotic analysis was combined with long consumer interviews. Encoding/decoding model was applied during the textual analysis of interviewee responses to uncover the relative codes/positions of interpretations. Consumers' interpretations, perceptions, opinions, beliefs, feelings, attitudes, reactions and actions towards the texts were analysed. Words and phrases used by interviewees were examined for relationships. Other semiotic tools used to interpret the data were: the dyadic model of signifier-signified; the triadic model of signs as indexes, icons and symbols; metaphors, metonyms, myths, synecdoche, and relations.

3.12 Ethical Considerations

The proposal preceding this research was first presented to the University of Nairobi's School of Journalism and Mass Communication. A certificate of fieldwork (Appendix III) was issued granting approval for field work for data collection. To enhance data credibility, interview guides (Appendix I and Appendix II) were prepared and pretested. Upon completion and submission of

the project, a plagiarism check was done and a certificate of originality issued. Attached as Appendix IV, it affirms the originality of this research and is also testimony that sources, including images, were duly acknowledged. A certificate of corrections (Appendix V) shows that the final project was checked and corrections approved as meeting the required standards of quality.

People must be protected from unethical practices because communication research relies on their goodwill and cooperation (Punch, 2005; Rubin et al., 2010; Wimmer and Dominick, 2014). To safeguard integrity, the researcher identified himself accordingly. Interviewees were briefed about the purpose for this research and participated only voluntarily. Their informed consent was sought before they were interviewed. The research was carried out with honesty, integrity and without deception or concealment. They were treated with courteous consideration and utmost respect. Anonymity and confidentiality was ensured, to protect their privacy through non-publication of their identity. Information that may lead to them was hidden, their names coded as '**XXXX**' in the transcript printouts and excerpts. Conclusions were made based strictly on the data collected. The raw interview data has been stored safely has not been shared with any other party except for transcription purposes in this research.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Overview

This chapter presents the findings by the study on meanings of the car wreckage texts displayed on Kenyan highways for road safety awareness. It investigated meanings from different points of view. The first part of this chapter presents data analysis by way of a close reading of the car wreckage texts, done using semiotic tools. The second part presents findings on meanings as had been encoded by authors of the car wreckage texts. This was the result of textual analysis of interview notes taken from engagements with KIs; the third part contains results of interviews conducted with motorists on meanings they make of the messages; finally, the chapter documents a summary of findings made from comparing the three angles of meanings.

4.1 Semiotic analysis of car wreckage texts

Using semiotic tools and principles, this study undertook a close reading of available car wreckage texts. The context within which they were exhibited was unpacked. Both the physical and the non-physical environment in which they were placed was evaluated. It presented, all meanings conceivable by this researcher. This included denotative and connotative interpretations. This close reading looked at coloured photographic images of the displayed car wreckages and message boards. The images had been taken by this researcher on different dates between 2015 and 2018. It also attempted to appraise the relative strength of each media text.

4.1.1 Close reading of car wreckage text at Muthaiga

4.1.1.1 Meaning of car wreckage text at Muthaiga

This car wreckage text was located opposite Muthaiga Police Station, on Thika Superhighway, Nairobi County. This section of the highway has twelve lanes and an intersection comprising Kiambu Road diverting off the superhighway under the Muthaiga Overpass.

Figure 4.1: Photographic images of car wreckage artefact at Muthaiga (Source: Researcher, 2019)

The object was elevated on wooden stilts, set up on the kerb separating the four main lanes from the two service lanes for vehicles headed in the direction of Thika. Traffic jams were common at this section during early morning and evening rush hours on weekdays. There was a footbridge a few metres north of the fear appeal artefact. The surrounding area was teeming with signage, huge colourful billboards, advertising and street lamps posts lined up.

The view of the car wreckage object was blurred by metallic grill barrier separating the highway. Its sighting by motorists in lower/smaller vehicles was obscured by higher or bigger vehicles driving in front. The wreck was not visible to motorists joining the highway from Kiambu Road underpass tunnel. The façades of the ongoing construction works and the allure of the imposing billboards commercials were likely to take a motorist's attention from the artefact.

Thika Road was identified as one of Kenya's most notorious accident hot spots (The Standard, 2015; 2009). Muthaiga was also listed among Nairobi's RTA blackspots. There were high number of motor vehicles passing through this section of the highway, increasing its ability to reach many consumers. These factors may explain the spot's choice for the text's placement.

The featured car wreck appeared to be remnants of a silvery saloon car. It was dirty and heavily dented on all sides. It bore no identification of manufacturer or number plates. The front part was buckled inwards. It had no glasses, bumper, or side mirrors. There was only one wheel.

The text denoted a road crash, resulting in the exhibited mangled wreckage. The driver and/or occupants of the wreckage may have died or have been hurt, with a valuable asset destroyed. The object connoted that RTAs are a reality. It was meant to sensitise motorists on the dangers of reckless driving. The image prompted motorists to take caution in order to avoid such fate. It also meant that the area was prone to RTAs or that an accident blackspot was to be anticipated ahead.

4.1.1.2 Strength of the fear appeal at Muthaiga

This was a weak fear appeal. It featured a strong threat in the form of a graphic, fear rousing object, but lacked self-efficacy. It offered neither information about the threat nor its causes. There were no suggestions on realistic remedies or practicable coping mechanisms within their ability to execute. Not being explicit in written words, it was too open to interpretation. It could be a dumped or abandoned wreck. It could have even been an artistic display.

4.1.2 Close reading of the car wreckage artefact at GM

4.1.2.1 Meaning of car wreckage text at GM

The media artefact was located on Mombasa Road, opposite General Motors Headquarters industrial plant in Nairobi. It featured a car wreckage and an appended sign board. It stood at the tip of a U-turn on Mombasa Road. Several feeder roads joined and exited the busy highway around this spot. The adjacent area had lots of human and vehicular traffic. A few metres away towering above the wreckage text was a footbridge straddling Mombasa Road at the bus stops.

Mombasa Road was named as one of the most notorious accident hot spots in a report by The Standard (2009). The area had particularly high vehicular and pedestrian traffic. Since there was no footbridge previously, the intention may have been to deter motorists from speeding and knocking pedestrians crossing. This may have been applicable to GM as much as other sections of Mombasa Road. The artefact was easier to see in the early morning and late evening hours when traffic tended to slow down. These may explain the choice of GM area to host the display.

The text at GM constituted two main parts; the wreck of a white saloon car, and two message boards appended to its sides. It was hoisted on a table-like metal frame. The car shell had no identification. Its front parts were bungled inwards. It had no front bumper. The hind bumper

was hanging. The boot was agape. It had no glasses. The sides were dented. The fuel valve was open. Red paint was splashed on the rear bumper and tail lights.

Figure 4.2: Photographic images of the car wreckage artefact at GM, Mombasa Road (Source: Researcher, 2019)

The two boards read as follows:

<u>The first board reads as follows:</u>
POLICE WARNING
SPEED KILLS!!
DRIVE CAREFULLY AND REACH HOME SAFELY

<u>The second board reads as follows:</u>
POLICE WARNING
DON'T DRINK AND DRIVE

The writings were centred and in capital letters. At the far right bottom edge of each board was the inscription 'Pelican SIGNS'.

On the front board, 'POLICE WARNING' was on a blue surface. The rest of the text was on a red background. It had the same font size as the next line, 'SPEED KILLS!!'. 'DRIVE CAREFULLY AND REACH HOME SAFELY' occupied two rows. It comprised two different font sizes. Both were smaller than the first two lines. 'HOME SAFELY', under, was the larger, compared to 'DRIVE CAREFULLY AND REACH', above it. This was due space constraints.

On the other board, placed on the side of the wreckage, the line 'DON'T DRINK AND DRIVE' was written in a larger font size than the text 'POLICE WARNING' above it. It occupied two rows. 'DON'T DRINK' was on the top row. 'AND DRIVE' appeared under it. The background was red, while the text was in white.

a) **Meanings of the non-linguistic car wreckage elements**

The exhibited car wreckage at GM denoted a vehicle involved in a road crash. It implied physical bodily harm, loss of life and of property. The red paint splattered on the body of the car wreck denoted human blood shed during the crash. It was intended to get consumers to imagine what transpired during and after the crash.

On a connotative level, its placement implied that the highway was accident prone or that the spot was an accident black spot. It also connoted vulnerability and risks of motor vehicles in the event of a crash. The mangled sight and thought of blood were meant to trigger uncomfortable thoughts of intense pain, physical bodily harm, loss of blood and transfusion, hospital stay, medical expenses, permanent disability. Consumers would then think about ways to avert such uncomfortable thought by resorting to safe driving.

b) Meanings of the linguistic elements on the message board

'SPEED KILLS!!' implied that if motorists sped, they were likely to crash and kill themselves or/and others. It cautioned against speeding in order to spare lives. The double exclamation marks, '!!' at the end of 'SPEED KILLS!!' emphasised the point that speeding results in death and to further highlight the gravity of the message. An exclamation mark is a point used after an interjection or exclamation to indicate forceful utterance or strong feelings or high volume. It is an indication of emphasis, used to indicate a distinctively high significance, interest, or contrast. (Merriam Webster 2018). The exclamation marks connoted the highlight of the message being conveyed – that speeding and death have a correlation. They also connoted danger as they resemble a road sign used to indicate danger. See black sign in the red triangle on Figure 3.3.

Figure 4.2.1: Road sign meaning 'DANGER AHEAD' (source: alamy.com, 2019)

'DRIVE CAREFULLY AND REACH HOME SAFELY' implied that if one drives carefully, they will reach home safely. Driving carelessly would result in one not reaching home safely or even not reaching home at all. The message presumed that motorists had homes, to which they wished to reach safely. 'HOME' implied more than a physical structure with a roof and material possession. It alluded to family or loved ones who may be waiting at home. This invoked thoughts of leaving them behind, all for not driving carefully. 'REACHING HOME SAFELY' was presented as the desired result, the consequence of the action 'DRIVING CAREFULLY'.

'DRIVE' and 'REACH' are commonly used verbs. They could be read quickly. They were simple, easy to execute actions. By adding '–*lly*' suffix, the adverbs 'CAREFULLY' and 'SAFELY' emphasised adjectives CAREFUL and SAFE and verbs 'DRIVE' and 'ARRIVE' they described. An **adverb** is a word which modifies a verb, an adjective, or another adverb.

'POLICE WARNING' was written in white against a background colour for this text is blue. These colours corresponded to the colours seen on the Kenya Police flag and uniform. The message was authored by the Police, the lawful authority mandated to manage road safety.

'DON'T DRINK AND DRIVE' was an indicator that the message targeted drunk-driving. It showed the action of driving while drunk was outlawed. 'DON'T' insinuated something prohibited. Against a red conspicuous background, 'DON'T DRINK AND DRIVE' stood out on the board. With the 'title' 'POLICE WARNING', it reinforced the source of that warning.

Implicitly, drink-driving resulted in a road crash whose remnants were displayed. The message sought to caution motorists that driving under the influence of alcohol may seal their fate in a similar way. It was within the motorists control to drive sober, as recommended, the outcome of which is staying alive. Insurance companies may also not compensate drunk driving RTAs.

Red denotes danger, blue is cool while white symbolises peace. The message was written within the 'peaceful' white surface. This implied it was cool and non-coercive, but with imminent threat. Blue, red and white are bright, contrasting colours. They made the text noticeable.

c) **Pelican Signs**

The Pelican Signs logo at the base bottom right corner of the boards is the brand of a road and traffic signs manufacturer. It is not part of the message and has not sponsored the text either.

4.1.2.2 Strength of the fear appeal at GM

This was a strong fear appeal. It showed a high level of threat and high level of self-efficacy. Threat was in the form of a graphic, severely crashed car, painted with what resembled blood. This symbolised the outcome of the unwanted behaviours. The self-efficacy explicitly spelled these out as SPEEDING, DRUNK DRIVING and NOT DRIVING CAREFULLY. Results of these were also expressed candidly on the board as the threat of death – 'SPEED KILLS' and risk of not arriving home safely – 'DRIVE CAREFULLY AND REACH HOME SAFELY'. The appeal was strong, clear, relevant, desirable, executable, and expressed in short simple sentences.

4.1.3 Close reading of the car wreckage text at Kabete

4.1.3.1 Meaning of car wreckage text at Kabete

This media artefact was located on Waiyaki Way, in front of Kabete Police Station, Nairobi. It was visible to motorists driving westwards toward Uthiru or into Kabete Police Station. The spot was a site for frequent Police road blocks. Vegetation lining the highway blocked the view of the text for motorists driving eastwards towards Nairobi.

Waiyaki Way sees a lot of vehicular traffic. It is one of Kenya's most notorious accident hot spots (The Standard, 2015; 2009). This may justify the location of the car wreckage display.

The media text featured two distinct components; a wrecked car and a message billboard. The car wreckage was initially orange. It was later repainted silver. It was a remnant of a saloon car. It bore no identification of manufacturer, ownership or plate registration. Red paint was sprinkled on parts of its body. The wreckage sat atop a metallic frame elevated on four wooden poles. The poles were black. This was an indication of usage of wood preservatives.

Figure 4.3: Photographic images of car wreckage artefact at Kabete (sources: Researcher, 2019 / The Star, 2017)

The metallic message board was placed under the car wreck. It was a colourful mix of graphics and texts. The following writings and illustrations appeared on the predominantly white board:

<div align="center">

KENYA POLICE SERVICE

!SLOW DOWN!

ARRIVE SAFELY YOUR FAMILY IS WAITING FOR YOU

SPEED KILLS

DON'T DRINK AND DRIVE

DON'T USE YOUR MOBILE PHONE WHILE DRIVING

DAGORETTI TRAFFIC BASE

</div>

The police emblem was drawn on the top left and top right edges of the board.

All the writings were centred and written in capital letters. 'KENYA POLICE SERVICE' was written at the top in navy blue colour. '!SLOW DOWN!' was in large red, bold font. The texts

'DON'T DRINK AND DRIVE' and 'DON'T USE YOUR MOBILE PHONE WHILE DRIVING' was written on what appeared to be the silhouette of a yellowish coffin. At the head of the coffin illustration was a black cross with the initials RIP (rest in peace).

The line 'ARRIVE SAFELY YOUR FAMILY IS WAITING FOR YOU' was written in yellow. It was smaller in font size than '!SLOW DOWN!' right above and 'SPEED KILLS' right below it. Sandwiched between bolder texts and the longest phrase on the board, it was less legible. Its smaller font size was due to space constraints.

'SPEED KILLS" sat above the coffin illustration in red, bold, large font. 'DON'T DRINK AND DRIVE' was written in black, bold font with the coffin as its background. On its left was the graphic of a BLACK BOTTLE with the inscription 'BEER' encircled in red with a single line striking across it. 'DON'T USE YOUR MOBILE PHONE WHILE DRIVING' was written in bold and black, against the coffin. It was a long line thus appeared small font size to fit the space. 'DAGORETTI TRAFFIC BASE' was written in navy blue colour against the white board.

a) Meaning of the non-linguistic car wreckage elements

The displayed wreck denoted a road crash. It connoted death, injuries, loss of livelihoods, destruction of valuable property, loss of time and money. It connoted time spent at garages, hospitals or chasing insurance claims. Such a fate was avoidable if motorists observed the message displayed under the car wreckage. The wreck also connoted that Waiyaki Way was hotspot or that Kabete was a blackspot. It intended to trigger motorist to 'SLOW DOWN'. The red paint stood for human blood supposedly spilled in the crash of the displayed car wreck. This was to heighten optics, making it appear more surreal and bizarre. It was to inspire fear and bring to life the reality that grievous bodily injuries could be sustained by RTA victims.

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b) Meaning of the linguistic elements on the message board

'KENYA POLICE SERVICE' at the top and 'DAGORETTI TRAFFIC BASE' at the bottom of the board, were a reminder that the Police were the sponsors of the sign. Their blue colour reflected the official colour of the Kenya Police. They carried implicit threats of arrest, detention, fines, bribes, time wasting, among other inconveniences, in the event of non-adherence.

'!SLOW DOWN!' may be denoted an accident or road works ahead. This sign also connoted the presence of the police on the road. It was presented in imperative form. This was a veiled command. Exclamation marks were used at the beginning and the end to grab attention. They added emphasis and denoted the significance of the message. They also alluded to DANGER AHEAD, often signified by the road sign highlighted in Fig. 4.2.1.

The phrase 'ARRIVE SAFELY YOUR FAMILY IS WAITING FOR YOU' spelt out the desired outcome of adherence to the prescribed actions of slowing down. By invoking the anticipation of one's family, the appeal was referring to people who valued, loved or depended on the motorist, or to those the motorist looked forward to being with. It implied that to family, safe arrival was more important than earlier arrival with injuries or non-arrival due to death from a crash. The family's interest in a motorist could be safeguarded if they did as recommended by the appeal message – not speed, not drink and drive, and not use their mobile phone while driving

'SPEED KILLS' was a direct and severe threat. It denoted that the risk of speeding death. Through the combination of a graphic car wreckage, the choice of words such as 'KILL' and the portrayal of a COFFIN with a CROSS bearing RIP initials, the fear appeal conjured up images of death. With the lines between '!SLOW DOWN!' and 'SPEED KILLS' being smaller and in a less conspicuous colour, it was possible to read the more noticeable message as '!SLOW

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DOWN! SPEED KILLS' as one continuous/flowing text. This implied that if motorists sped, they would kill. It suggested that the driver of the displayed car was speeding at the time of the crash. The sketch of a CROSS on the COFFIN suggested that most road deaths were caused by motorists of the Christianity faith. Christians recognise the cross as a symbol of their religion. RIP initials are often used to wish the souls of departed a peaceful rest in their afterlife.

The phrases 'DON'T DRINK AND DRIVE' and 'DON'T USE YOUR MOBILE PHONE WHILE DRIVING' were threats to make consumers fear drink-driving and using phones while driving. They were phrased in imperative form, with 'DON'T' indicating prohibition.

The graphical representation of a BLACK BOTTLE, with the word BEER on it, reinforced the message 'DON'T DRINK'. The portrayal of a MOBILE PHONE encircled and stroked in red was a graphic version of the linguistic message 'DO NOT USE YOUR MOBILE PHONE WHILE DRIVING'. The two illustrations denoted a ban on the two practices. They made it simpler for those who could not read the (long) text to grasp the message quickly. The consequences of doing these were stated elsewhere in textual and graphical forms consisting of a wrecked car, coffin, RIP, and in the word 'KILLS'. Read together with the mangled wreck, they suggested that the driver of the displayed car was drunk or was using a mobile phone while driving at the time of the crash. This use of texts and graphics pointed to inclusiveness in the messaging strategy. It showed the awareness of the existence of different factors and demographics among consumers such as age, literacy level, language competency, eyesight ranges, gender, speed tendencies, message obscurity, mobile phone and drinking habits. These influenced ability to read and process information. Use of images to complement linguistic messages demonstrated appreciation of diversity and inclusiveness.

4.1.3.2 Strength of the fear appeal at Kabete

This was a strong fear appeal. It demonstrated a high level of threat with a high level of self-efficacy. The crashed car and 'SPEED KILLS' presented a strong explicit threat. The threat was short, precise and easy to read. It was illustrated linguistically and graphically through the wreckage, the coffin and RIP. The self-efficacy on the board provided simple and doable alternative actions – slowing down, not drinking and driving or not using mobile phones while driving. These desirable outcomes of living and/or arriving safely to family were achievable and relevant. Invocation of the Police underlined the legitimacy of a knowledgeable message author.

4.1.4 Close reading of the car wreckage text at Safari Park

4.1.4.1 Meaning car wreckage text at Safari Park

This media text was located along Thika Road, Nairobi County. It was perched over the barrier separating the highway. It overlooked Gate One of Safari Park Hotel to the West, and Queen of Apostles Seminary gate to the East. This section of the road had twelve lanes for motorists, six in either direction. There were also pedestrian and cyclist paths on the extreme sides. It mostly had fast moving vehicular traffic, but would also experience slow traffic at different times of the day.

The high density of vehicular traffic made Thika highway ideal for such a campaign since it is able to reach a high number of the consumers. It was also identified as one of Kenya's killer roads (The Standard, 2015; 2009). Assuming that accident hotspots were the target of the car wreckage tactic on road safety, this may explain the location of the artefact.

Figure 4.4: Photographic images of car wreckage artefact at Safari Park (Source: Researcher, 2019)

The artefact consisted of a car wreckage and a message board. It featured the remnants of a white saloon car. The wreckage was mounted on a high, table-like metal rack. The white billboard towered above the car, supported by two metallic bars. The car bore no identification signs. The bonnet was partially open. Its front and left side of the driver's door were the most damaged.

The following message appeared on either side, centred and handwritten in black and red:

<div align="center">

PERISHED ALL!

IT'S BETTER LATE

THAN NEVER

SPEED KILLS

SLOW DOWN

</div>

The first line on the white board, 'PERISHED ALL!' was written in large, bold, red letters. At the end was an exclamation mark in black. 'IT'S BETTER LATE THAN NEVER' was large, in black font. It occupied two lines. 'IT'S BETTER LATE' sat on the second line. 'THAN NEVER' spilled onto the third. This spill over was necessitated by need to fit limited space. 'SLOW DOWN' and 'SPEED KILLS' were written consecutively in bold, large, red font. They were of a similar script and size, and occupied the two last lines on the board.

a) **Meaning of the non-linguistic car wreckage elements**

Greater damage on the front side suggested that the driver was in greatest danger, and should take the most care to safeguard, not just his/her own life, but also the lives of all involved. The display of a white sedan connoted that this type of car tended to crash, killing all involved. It may have created a false sense of safety among those driving other types of motor vehicles.

b) Meaning of the linguistic elements on the message board

Having the same information on both sides of the board showed consistency. It was to convey the same message to motorists regardless of the direction they were driving. On the flip side, it demonstrated a lack of creativity or effort to find other equally suitable messages.

'PERISHED ALL!' openly denoted death. It spelt out that all in the displayed car died. This threat of death was written in red at the top of the board to enhance visibility and attract attention. It connoted that neither the motorists nor their passengers reading the message were immune in the event of RTAs. It was a call to action to 'ALL', appealing to passengers to speak up in the event of speeding, lest they too 'PERISH'. The exclamation mark added emphasis.

'IT'S BETTER LATE THAN NEVER' employed comparatives of adjectives 'BETTER THAN' to contrast two possible outcomes – of late arrival versus of non-arrival. This common idiom was intended to reach many people as its meaning was likely to be clear to many. Consumers were expected to be rational and able to make choices between the option of late arrival and no arrival.

Read in conjunction with the mangled wreck, 'PERISHED ALL' above it and 'SPEED KILLS' below it, 'SLOW DOWN' denoted that speeding caused the crashing of the displayed car and killed all involved. Because of their death, they never made it home. Had the driver not been speeding, they would have arrived home safely, albeit later. 'SLOW DOWN' was imperatively and deliberately written just before 'SPEED KILLS'. The two made sense read together as 'SLOW DOWN, SPEED KILLS'. Motorists should slow down because speeding killed.

4.1.4.2 Strength of the fear appeal at Safari Park

This was a moderately strong fear appeal. The car wreck displayed a moderate level of threat. It was dented but not very graphic. The text written on the board combined moderately strong of threat and medium level of self-efficacy. It was not clear about the desired outcomes of the vouched for behaviour. Its location wasn't ideal as speeding motorists were likely to miss it.

4.1.5 Close reading of the car wreckage text at Salgaa

4.1.5.1 Meaning of car wreckage text at Salgaa

The text on Figure 4.5 was located at Salgaa in Nakuru County. The artefact was erected on the southern side of the Nakuru – Eldoret Highway. Adjacent to it were speed bumps and a regular police road block. Heavy commercial trucks park by the roadside around the media artefact, sometimes impeding it from view. Boda boda riders were parked at bus stops and at various road junctions around the text display area.

Boda boda is a type of bicycle or motorcycle taxi which has a space for carrying goods and passengers. The term traces its roots to the English word 'border'. Initially, bicycle riders, and later motorcycle riders, in Busia, a border town between Kenya and Uganda would shout 'border border' in reference to ferrying people from/to either territory (The Star, 2017; OALD, 2018).

The text connoted that the highway was prone to RTAs. It meant that the Salgaa was a blackspot. This is consistent with The Standard (2016) report showing that Eldoret – Nakuru highway is an accident hotspot, with the Salgaa drift, especially, being a blackspot known for high fatalities and casualties. The highway is also a busy artery on which many motor vehicles operate. These may explain its choice for display of the text.

Figure 4.5: Photographic images of the car wreckage artefact at Salgaa (Source: Researcher, 2019)

The text at Salgaa consisted of a mangled car and a message board. The wreckage of a dark blue sports utility vehicle (SUV) was placed high on a sturdy, four-legged metallic rack. Its wheels and tyres were intact. Parts of the SUV still bore the manufacturer logo. The front left side, sunken inwards, appeared more shattered than right. It was not clearly visible from a distance.

It could have been a big coiled black metal, a rugged roof on a stall/kiosk or an object in transit temporarily parked by the roadside.

Two sign boards bearing writings were suspended below the wreckage. The white plastics both had a green logo of Menengai Oil Refineries at the top. The message was written on the predominantly white surface. Only 'OVERSPEEDING KILLS' appeared against a black background.

The board facing vehicles driving from the direction of Nakuru contained the following message:

<div align="center">

Plan your journey

Drive carefully

Arrive safely

</div>

Message brought to you by MENENGAI OIL REFINERIES LTD and THE KENYA POLICE

The board facing northwards, parallel to the highway contained the following message:

<div align="center">

OVERSPEEDING KILLS!!

WATCH YOUR SPEED AND STAY ALIVE

</div>

a) Meaning of the non-linguistic car wreckage elements

The Salgaa car wreckage was the remnant of an SUV retrieved from a fatal accident. It denoted a tragic road accident, death and a written-off car. At a connotative level, it signified severe bodily injuries, pain suffered by the victims, physical disability, loss of an expensive vehicle, loss of

livelihood, visits to the hospital and/or incurring monetary expenses. It also connoted the need for caution as it signalled the existence of a blackspot.

The tyres looked unaffected despite the extent of damage to the rest of the vehicle. This may be an indictment or an endorsement of the tyre manufacturer or its brand. It may imply either that they are so good they have not been affected in spite of the fatal crash. On the flip side, it may be read to mean that the tyres are not safe as they may contribute to a road crash, with the brand displayed for all to see. The choice of an SUV for display may point to their tendency to speed and crash more than other vehicle models on this highway.

b) Meaning of the linguistic elements on the message board

The first message board sequentially indicated that 'if' consumers 'plan their journeys' and 'drive carefully', they would 'arrive safely'. 'PLAN', 'DRIVE', and 'ARRIVE' are verbs. They targeted motorist or other persons in charge of a road journey. Planning of a trip is not exclusively the responsibility of a driver. It may goad others in the vehicle to speak up in case of a driver's undesirable behaviour so as to safeguard their 'safe arrival'. Planning a journey results in careful driving devoid of hurry. Consequently, careful driving results in safe arrival.

The obvious meaning of 'OVERSPEEDING KILLS!!' was unequivocal. If one 'OVERSPED' they would 'KILL' or 'BE KILLED'. Conversely, if motorists watched their speed, they would stay alive. 'OVERSPEEDING' was used instead of the generally more grammatically accepted 'SPEEDING'. The prefix 'OVER' was added either deliberately for emphasise or erroneously. It may have also been used because it has become common lingo among road users, thus done to reach many consumers who best understand the word. The verb is in the continuous present tense, meaning it is ongoing to resonate with consumers who may be presently 'speeding'.

'WATCH YOUR SPEED AND STAY ALIVE' comprised two distinct but interrelated parts. Using the interjection 'AND', 'WATCH YOUR SPEED' was adjoined with 'STAY ALIVE' to show that the latter is a continuity or consequence of the former. If motorists watched their speeds, they would stay alive. It was within motorists' powers to 'STAY ALIVE' by 'WATCHING THEIR SPEED. The word 'SPEED' was used twice in successive lines – 'OVER**SPEED**ING KILLS' and 'WATCH YOUR **SPEED**' pointing to speed being the focal behaviour targeted.

The black background made the message stick out against predominantly white board. Apart from the contrast to highlight this text, black colour is often used to insinuate grief or death.

'Message brought to you by MENENGAI OIL REFINERIES LTD and THE KENYA POLICE' was an affirmation of the sponsors of the advertisement. Menengai Oil Refineries Ltd is an industrial company that manufactures or processes products such as cooking oil, soaps, and detergents. They may have financed the display of the text as part of Corporate Social Responsibility (CSR), in return for brand visibility. They may be keen on having their image associated with road safety campaigns, or may be keen to safeguard the wellbeing of their (potential) customers.

4.1.5.2 Strength of the fear appeal at Salgaa

The Salgaa based car wreckage artefact was a strong fear appeal. It displayed a high level of threat and a high level of self-efficacy. The severely damaged car and 'OVERSPEEDING KILLS' typified strong threat. It stated the targeted undesirable behaviour as 'OVERSPEEDING' and the risk it posed in 'KILLS'. It advised consumers to plan their trip and

drive carefully to avoid the threat of dying. These were doable and logical. The texts were short. Each line consisted of two or three words. This made it possible to read even at high speed.

This text may on its own be insufficient to convey an effective road safety campaign, considering that road crashes still continued to occur on the Salgaa. This may be due to various reasons such as road design, motorist discipline, and enforcement. Motorists may not have seen the text, may have misinterpreted, ignored or disregarded it.

4.1.6 Close reading of the car wreckage text in Kisumu

Figure 4.6: Photographic images of the car wreckage artefact at Kachok (Source: Researcher, 2019)

4.1.6.1 Meaning of car wreckage text in Kisumu

The media artefact on Figure 4.6 was displayed at Kachok roundabout in Kisumu. Kachok lies at the intersection Nyalenda Ring road – Nairobi Road – Ondiek Highway. Opposite the

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roundabout was the large Nakumatt Mega shopping mall. This was a busy site, teeming with pedestrians and motorists crisscrossing the roads. The site had road speed bumps. The location was also strategic as it was a convergence point with lots of slow traffic. It connoted that this part of the road network was prone to accidents.

The Kachok media text was the remnant of a white station wagon. The dusty artefact showed no visible identification marks. It was displayed above the ground on wooden stilts. Red paint was splattered on the body. The front part was completely crashed. The windows and the rear door were missing, revealing a shell without seats and interior parts strewn about. There were no doors on the right side. Doors on the left were still attached and are closed. The left side of the wreckage looked more shattered than its right.

The displayed artefact gave the impression of a wreckage retrieved from a fatal crash. It denoted human death, severe injuries and car damage. The red paint signified blood shed as a result of the road accident, intended to evoke a sense of pain, physical bodily harm, or even death. That the front right side of the car was shredded much more than the left hand side was an indication to drivers that they are not immune to crashes. The dirty rusty look connoted an old, road-unworthy vehicle, hinting to the necessity to drive well serviced, roadworthy vehicles. Its placement at Kachok was a sign that the area was an accident blackspot.

4.1.6.2 Strength of the fear appeal at Kachok

This was a mild fear appeal. Although it showed a high level of threat, implicitly carried in the severely crashed car, it did not explicitly state the threat in linguistic terms. It lacked self-efficacy. As it were, the text was left to open the interpretations of consumers. The targeted behaviour and recommended actions for coping or avoiding the threat were not spelled out.

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4.1.7 Close reading of the car wreckage text in Eldoret

Figure 4.7: Photographic images of the car wreckage artefact in Eldoret (Source: Researcher, 2019)

4.1.7.1 Meaning of car wreckage text in Eldoret

The artefact on Figure 4.7 was situated on Uganda Road at the West Junction, in Eldoret Town. It featured a wreckage of a car elevated high on four wooden stilts. This gave it visibility above the surrounding multitude of vehicles and humans. Around it was a beehive of activity. Traders hawking clothes, shoes and other wares, pedestrians, cart and trolley pushers, and motorists milled around the text. In the backdrop were buildings, a large mango tree, electricity poles/powerlines and a huge billboard advertising alcohol. Under it, some traders pitched base, hanging clothes and enjoying its shade. The West junction where the text sat is a convergence of Uganda and Mitaa Roads. It served lots of motor vehicle and human traffic. This may have informed its selection to host the artefact.

The artefact was the wreckage of an old rusty saloon car. Except for the plate number at the back, it showed no marks of identity. The front part was completely shattered. It had no glasses or wheels. Being raised high made it difficult to vandalise or steal. It lifted it above the sea of human and motor vehicles for better view. Hawkers sought shade under it and hang clothes on it.

This car wreckage text typified the risks and severity of a RTA. It denoted death, injury and vehicle destruction. It was intended to sensitise motorists on the importance of observing road safety. It connoted blackspot and call to slow down. There were also unintended meanings. Hawkers used its wooden frame as a strategic object for displaying their merchandise. It also provides them shade from the scorching sun.

4.1.7.2 Strength of the fear appeal in Eldoret

This fear appeal was weak. It lacked essential fear appeal elements accompanying the car wreckage artefact. The car wreckage may have demonstrated a high level of threat, but this was

not clear and explicit to all consumers. The wreckage alone did not provide any self-efficacy information. No behaviour was identified and clearly spelled out as being discouraged by the campaign. There were no recommended actions to avoid or alleviate or eliminate the threat.

4.1.8 Close reading of the car wreckage text in Nakuru

Figure 4.8: Photographic image of the car wreckage artefact in Nakuru (Source: alamy.com, 2019)

4.1.8.1 Meaning of car wreckage text in Nakuru

The media text on Figure 4.8 was located at Gate House Roundabout. This is one of Nakuru town's many roundabouts lining the Nairobi – Eldoret highway. It overlooked the Railway footbridge. It was a busy convergence of several roads with dense motor vehicle traffic. The text

comprised a car wreckage and a message board positioned facing motorists driving in the direction of Eldoret. Behind the text was a city clock. Surrounding the roundabout are towering advertisement billboards, street lamps, buildings and banners.

The choice of the roundabout may have been strategic for two reasons: First, it is a convergence for many motorists. Second, it is situated along a national highway that connects Rift Valley and Western parts of Kenya with other parts such as Nairobi, Central, Eastern and the Coast. During the festive seasons of Christmas, New Year and Easter, many travellers travel through Nakuru to and from their rural homes. This message may have been targeting that large number of consumers as they make their way through Nakuru town.

'MERRY CHRISTMAS AND HAPPY NEW YEAR' are season's tidings during mid to late December until early January.

Although it bore no identity, the displayed media text appeared to resemble a crushed Toyota Vitz model. It was elevated on metallic stand. Several of its parts were dangling. The front part was intensely crumpled. The bonnet was buckled inward, blocking the missing windscreen. Two wheels were still attached on the car. The driver door was warped with the bonnet. The right back door was partially open. The windows had glasses. There were no lamps on the front part. The rear didn't appear as severely damaged and still retained some lamps.

The rack on which the wreckage sat as well as the outer frame of the white sign board were painted in navy blue, maroon and yellow colours. These colour scheme was similar to that on the Kenya Police flag. The Police emblem appeared on either top section of the board.

The following linguistic text was written in capital letters, centred, bold and in varying font sizes and colours:

SLOW DOWN!

YOUR FAMILY WILL BE WAITING FOR YOU

DON'T END UP LIKE THIS MAN!

NAKURU TRAFFIC BASE

MERRY CHRISTMAS AND HAPPY NEW YEAR

'SLOW DOWN!' was the topmost message, written in red in the largest font size of all on the white board. There was an exclamation mark at the end. Under it in blue, large letters read, 'YOUR FAMILY WILL BE WAITING FOR YOU'. This was followed by 'DON'T END UP LIKE THIS MAN!' written in red, large font. Printed in blue, 'NAKURU TRAFFIC BASE' appeared at the bottom of the board. While all the text is horizontally arranged, 'MERRY CHRISTMASS AND HAPPY NEW YEAR' was painted vertically across other texts. 'MERRY CHRISTMASS AND' was written in orange on the left. 'HAPPY NEW YEAR' was written in green on the right side of the board. 'Between HAPPY and NEW YEAR was the drawing of a raised hand, wearing red garment with its index finger pointing upwards. It resembled the hand of the mythical Father Christmas.

a) Meaning of the non-linguistic car wreckage elements

This researcher deduced that the driver of the displayed car, and front passenger(s) – if there were any, did not survive the car crash. If they did, they may have been permanently disabled or maimed. It was intended to warn motorists of the risks lurking on the roads.

b) Meaning of the linguistic elements on the message board

Presented in the imperative form, 'SLOW DOWN!' was the most conspicuous line on the board. It was the largest in font size and red font colour. The exclamation mark accentuated the

message. It drew attention to the instruction to slow down. The line 'YOUR FAMILY WILL BE WAITING FOR YOU' may have appealed to motorists as well as passengers. It addressed consumers directly through the use of 'YOUR', treating them as being part of some 'FAMILY'.

With the use of the word '*like'*, 'DON'T END UP LIKE THIS MAN!' employed simile. It alluded to a 'man' who was driving the displayed wreckage. In everyday speech, 'man' is used to refer to mankind. It is neutral to both genders. Reference to 'the man' may also have meant that in reality, the driver of the wreck was male. This may have connoted that the text targeted men, and not women. Statistically, there are more male than female drivers in Kenya. More accidents may have been attributed to men as there evidence that men have a higher propensity than women to taking risks such as speeding (Iversen and Rundmo, 2002).

'MERRY CHRISTMAS AND HAPPY NEW YEAR' had both a literal meaning and a connotative signified meaning. On the surface level, it was a straightforward season's greeting. It also connoted the time of the year when the message was displayed. It inferred consumers of this message celebrated Christmas and New Year festivities. It was purposed to play into the psyche of the audiences that they may not live to enjoy the festive season. This was reinforced by a combination of the sight of a gory car shell, and a fear appeal message on the board. The message indicated that they may end up like 'that man' if they didn't slow down. Reference to 'FAMILY' further demonstrated awareness of whom consumers were likely to spend their 'CHRISTMAS' and 'NEW YEAR' with. 'YOUR FAMILY WILL BE WAITING FOR YOU' meant that a waiting family was worth observing the necessary safety in order to meet them.

The mention of 'NAKURU TRAFFIC BASE', police emblem and painting using colours of the police were testimony of who the sponsors of the text were. They were a statement on the authority responsible for its placement. It was also a subtle display of power and threat.

4.1.8.2 Strength of the fear appeal in Nakuru

This was a strong fear appeal. It incorporated a high level of threat and high level of self-efficacy. The gory car shell signified death. There was a simple and doable action to reduce the risk of dying. The rewards were desirable and relevant. Publishing the Police as sponsors of the message strengthened its source credibility. Police are knowledgeable and a legitimate authority.

4.1.9 Close reading of the car wreckage text at Makongeni

4.1.9.1 Meaning of text on Jogoo Road

The media text on Figure 4.14 was displayed on Jogoo Road, Nairobi. This busy highway connected some of city's most populous residential areas to the East, with the central business district (CBD). The Roundabout, on which the board stood, was located on the 1st Avenue – Jogoo Road junction. It was both a convergence and dispersal point to and from many estates such as Eastleigh, Buruburu, Huruma, Umoja, Donholm, Kayole, and Embakassi.

Jogoo Road had been listed among the roads in Kenya with the highest RTAs (The Standard, 2015; 2009). Due to the high vehicular and human traffic, the campaign could reach many consumers. This made the spot's choice strategic.

By the time this researcher learnt about its existence, in January 2018, the car wreckage, which was the other component of the media text, was no longer available on site. The existing message board consisted of a metallic board welded onto two metallic stands. The board was white. A blue strip was painted along its edges.

Figure 4.9: Message board text on Jogoo Road (Source: Researcher, 2019)

The below message was written centred, in capital letters:

<div align="center">

KENYA POLICE

SLOW DOWN

DON'T DRINK AND DRIVE

YOUR FAMILY NEEDS YOU

WE ALL NEED YOU

SPEED KILLS

MAKONGENI TRAFFIC BASE

</div>

'KENYA POLICE' was written at the top, in white, against a blue surface. It was flanked on either side by the Kenya Police emblem. Under it was 'SLOW DOWN', written in red. This was

followed by 'DON'T DRINK AND DRIVE', 'YOUR FAMILY NEEDS YOU', and then 'WE ALL NEED YOU', in that order. They were all written in blue. They were followed by 'SPEED KILLS' in red. The last line on the board read 'MAKONGENI TRAFFIC BASE'.

While 'KENYA POLICE', at the top, was a display of authority and revealed the sponsors of the media text, 'MAKONGENI TRAFFIC BASE' at the base declared the jurisdiction within which it fell. These two lines were a threat in themselves. They prompted motorists to reconsider their behaviour for fear of risking the wrath of the Police.

Speeding has been identified as a major cause of road fatalities (WHO, 2015). 'SLOW DOWN' was phrased in a short imperative form. It 'commanded' motorists to reduce speed. It connoted the presence of risks to which fast driving motorists were exposed. Consequences of not slowing down were spelled out in the line 'SPEED KILLS'. Death was likely to occur to consumers who did not heed this warning. The two phrases 'SLOW DOWN' and 'SPEED KILLS' were purposely highlighted in red. As a warm conspicuous colour, red made them stand out among predominantly cool (white and blue) elements. This suggests that these lines were the most significant on this board. Were consumers only to focus on those two lines, they would read then jointed and flowingly as 'SLOW DOWN SPEED KILLS'.

'DON'T DRINK AND DRIVE' was also phrased in command form. 'DON'T' highlights prohibition. It cautioned against drunk driving, which is one of the behaviours the campaign targeted. Driving under the influence of alcohol is a major cause of road crashes (WHO, 2015). If you drink, do not drive. Conversely, if you must drive, don't drink.

On a denotative level, 'YOUR FAMILY NEEDS YOU' implied that motorists had families, were parents, dependants, breadwinners and/or caregivers. At a connotative level, this was an

emotional appeal envisioned to touch on the core feelings of motorists. It was akin to emotional blackmail. It meant that if consumers were not willing to listen to the police, then at least they should have at least listened to the cries of their families. By mentioning that 'WE ALL NEED YOU', it was further pointing out that other than being family, motorists may be many things to many people. They may be employees, colleagues, teachers, or mentors. It may have meant that they contributed taxes that paid police salaries. Fewer motorists may have also implied fewer people to extort. The two lines place part of the campaign's rewards on the necessity to serve families of consumers and the wider society.

4.1.9.2 Strength of the fear appeal on Jogoo Road

This media text demonstrated a mild fear appeal. It showcased a mild threat and high level of self-efficacy which spelled out a clear threat and the discouraged behaviour causing the threats. It suggested actionable and practicable behaviour to eliminate or reduce the stated threat. Reasonable and relevant outcomes were pointed out. The reference to death in 'SPEED KILLS' purposed to summarise the consequences of undesirable actions. It cautioned against avoidable, but self-inflicted RTA deaths caused by speeding. A car wreckage or alternative graphics to visualise the threat would have made it a strong fear appeal.

4.2 Summary of semiotic analysis of the car wreckage texts

After a close reading of all the nine artefacts, this section consolidates the summary of the semiotic analysis. This study found similarities and commonalities during the close reading of the car wreckage texts. Certain common themes and trends emerged. These were grouped into eight categories (4.2.1 – 4.2.8) under the following subthemes: Location, visibility, components,

overt physical characteristics or features, linguistic elements, meanings, strength, targeted audience, and ongoing management – of the car wreckage artefacts.

4.2.1 Location and visibility of the of the car wreckage texts

The car wreckage artefacts and accompanying message boards were placed along major highways. They were mainly found in urban centres such as Nairobi, Nakuru, Kisumu, Eldoret and Salgaa. The sites on which they were erected are considered as accident hotspots and blackspots. With the exception of the car wreckage opposite Safari Park Hotel, all the other artefacts were displayed at road roundabouts or junctions. Two reasons may explain this: one, for easier visibility and to maximise on the potential number of consumers. Traffic tends to be slower at junctions and roundabouts; two, these are high risk spots registering high RTAs.

Footbridges, speed bumps and police stations were other common features around the car wreckage artefacts. Two of the artefacts were erected in front of police stations. The rest were placed at spots where police road blocks were frequently mounted. This may be an additional manifestation that they are RTA high risk areas requiring both sensitising and deterrence.

The artefacts were elevated on wooden or metallic stilts to enhance their visibility and to protect them from vandalism and theft. Some appeared to be dwarfed by the more conspicuous, more colourful and visible objects surrounding them. Such elements included advertising billboards, heavy commercial trucks, plants and building facades. Where there were functional street lamps, it was possible to see many of the car wreckages and message boards even at night. It was possible for motorists who sped or were engrossed on other things to miss the artefacts.

4.2.2 Form and components of the car wreckage texts

The artefacts comprised two main components; a wrecked car and a written message board. The message boards were made of either metallic or polyvinyl chloride (PVC) canvas material. In some places, one of the two components had been removed or defaced. In other cases, both have since been removed. The combination made the texts fear appeal type messages.

4.2.3 Physical characteristics of the car wreckage texts

Commonalities were observed on the car wreckage media. These were categorised into the following sub-themes: types and sizes of wreckages; colour of car; nature and extent of damage; form of display; vehicle identification; red paint; and linguistic elements on message boards.

4.2.3.1 Types and sizes of car wreckages

All car wreckage media artefacts featured small cars. The following vehicle types were observed: saloon/sedan, hatchback, station wagon and SUV. Saloon cars were the most common, constituting five out of a total eight wreckages studied. Space dynamics and access can explain the decision to display small vehicles. Written off cars salvaged from crash scenes are more readily more available at police yards. Bigger vehicles would require larger spaces and more resources to display. Furthermore, they may also impede motorists' view of the road ahead.

4.2.3.2 Colour of car wreckages

Of the eight wreckages analysed, four were white, two were silver, and another was black/dark. One had its initial orange colour changed to silver. The use of white as the predominant colour may have been deliberate or by chance. Considering that white is the most popular car colour among buyers globally, according to Edmunds (2014), it may also follow that white remnants of fatal crashes are also more readily available than the other colours. On the flip side, it may be

intentional, to target majority of the consumers. Spraying the originally orange wreckage silver may imply an acknowledgement that silver is a popular motor vehicle colour (second to white). It may have been attempt to reach a demographic of motorists whose vehicles match this colour.

4.2.3.3 The nature and extent of damage of the wreckages

The car wreckages displayed varying degrees of damage. While they were badly mangled, most revealed extensive damage on the front part, particularly on the driver's side.

4.2.3.4 Absence of motor vehicle identification

With the exception of a few, it was not easy to identify the motor vehicles. Most lacked indicators of the manufacturer, make, model, registration plate or ownership. The designers of this tactic may have done this deliberately to avoid creating the misperception that certain vehicle types are accident prone. This would have possibly inadvertently resulted in consumers shunning such brands. Those whose brands were not displayed may have disregarded the message, thinking theirs are safe.

4.2.3.5 Red paint on the car wreckages

Red paint was splashed on some of the of the car wreckage artefacts. This was intended to enhance the component of threat of a fear appeal. By convention, red colour symbolises danger. In this tactic, it was applied to denote blood. The connotation of blood was that there was bleeding, resulting from severe injuries. This invoked imagination of pain, loss, horror and death.

4.2.3.6 Message boards

The second component of the road safety campaign tactic were the message boards. This researcher learnt that all texts had both car wreckages and message boards. However, parts or

both the components had been taken away from several locations. The boards had functional complementarity with the wreckages. They augmented a vital aspect of fear appeal messaging. While the wreckages projected explicit threat and fear elements of the appeal, the boards spelt these out certainly in linguistic terms. They also provided information on self-efficacy – what the threat is, what causes it, and what could be done by the consumers to avoid the threat.

4.2.4 Linguistic elements on the fear appeal message boards

This study also observed that the linguistic elements, written, drawn or painted on the message boards have several commonalities. Below are some features themed together.

4.2.4.1 Board and text colours

Red colour was a common in many of the texts. Red is a warm colour, considered a bold, loud and conspicuous. It provides higher visibility from a longer range. Red also denotes danger. It befits its application in this campaign targeting risky behaviour. Blue colour was also a common factor on the message boards. Blue was used to write texts as well as to paint the message board frames. Usage of this colour may not only have been to heighten contrast against the red. It may also have been saying that the 'men in blue', as police are often referred, were its authors.

4.2.4.2 Text case, alignment and font size

The writings were mostly centred on the boards. They were also predominantly written in capital letters. These may have been done to maintain consistency of the script. It enured that the writing was not artistically jumbled up all over the board. This made it easy to read symmetrically and to focus on the message. Although there was no one standard font size used on the boards, most of the messages were written in bold legible fonts to increase visibility from distance. It was also a statement of boldness and confidence, expressing belief in the message being shared.

4.2.4.3 Imperative form of address

The use of the imperative tense form was prevalent in the messaging. For example, 'Don't drink and drive', 'Slow Down', and 'Drive carefully'. These are 'command forms' used in day-to-day issuance of instructions. This made them easy to read, to relate to and to understand. Commands are more likely to be issued by people in positions of authority. Police are an authoritative source within the society. *'Don't'*, implying something forbidden, featured six times on the boards.

4.2.4.4 Frequency and occurrence of words and phrases

A close reading of the lingusitic messages on the message boards revealed a set of words and phrases commonly used in the campaign. Table 4.2 below gives an overview of occurrence and fequency of words and phrases on different boards.

The **exclamation mark** '**!**', '**Speed**' and the conjunction '**and**' (in that order) were the most prevalent in the board messages. The exclamation point '**!**' appeared a total ten times at seven different locations. It was used at the start of or end of phrases, singly (**!**) or doubly (**!!**). An exclamation mark '**!**' is added messages to grab attention and for emphasis on the significance of the message. It is the writing equivalent of shouting. '**!**' was used in the car wreckage texts mostly to emphasise - 'Speed kills!', 'Overspeeding kills!', 'Slow down!' and 'Perished all!'.

The *conjunction* '**and**' was applied a total eight times at various car wreckage media texts, five of which to showed consequence or result of the desirable behaviour advocated in the appeal. It was used to join actions and their outcomes, e.g. 'watch your speed **and** stay alive' implies that staying alive is a result of watching one's speed.

Table 4.1: Table showing frequency and distribution of marks, words and phrases used in the campaign.

Mark, word or phrase	# of times appearing	# of locations featured	Mark, word or phrase	# of times appearing	# of locations featured
!	ten	seven	Carefully	two	two
Speed	eight	six	Arrive safely	two	two
And	eight	five	Drive carefully	two	two
Police	seven	seven	You	two	two
Kills	seven	five	Need(s) you	two	one
Your	six	six	Kenya police service	one	one
Drive	six	six	Overspeeding kills	one	one
Speed Kills	five	four	The Kenya Police	one	one
Slow Down	five	four	Perished all!	one	one
Don't Drink and Drive	four	three	better late than never	one	one
Kenya Police	four	four	Plan your journey	one	one
Your family	four	three	Driving	one	one
Traffic Base	three	three	Don't use your mobile phone while driving	one	one
Safely	three	three	Watch your speed and stay alive	one	one
Police warning	two	one			

'**Speed Kills**' and '**Slow Down**' appeared five times each at four different locations. This made them the most frequent complete phrases. The word '**Kills**' was used seven times at five separate places. '**Speed**' appeared eight times, including in the word '**overspeeding**', at six different locations. '**Overspeeding kills**' and '**Watch your speed and stay alive**' were each written once.

'**Drive carefully**' and '**Arrive safely**' each appeared twice. At Salgaa, they somehow stood as lone statements. At Kabete, they were part of longer statements, joined by a conjunction '**and**'. '**Reach home safely**' appeared once as part of a longer statement. '**Perished all!**' and the **idiom** '**It's better late than never**' were found only at the Safari Park fear appeal.

'**Don't**' featured six times at four fear appeal boards. '**Don't use your mobile phone while driving**' and '**Plan your journey**' each appeared once. '**Don't Drink and Drive**' appeared four times at three separate locations on the media texts.

The words '**Kenya Police**' and '**Police**' were some of the most frequently used. The statement '**Police Warning**' featured twice at the same location. '**Kenya Police Service**', '**The Kenya Police**' and '**Kenya Police**' was each used once at separate message boards. The word '**Police**' featureed seven times in as many locations while '**Kenya Police**' appeared four times at four different boards. Another display of Police presence was implicit in the use of '**Traffic Base**' at Dagoretti, Nakuru and Makongeni car wreckage texts.

The messaging used *pronouns* variably. '**You**' featured twice, while '**Your**' was used six times on the boards. On the surface, they are the appropriate *personal* and *possessive pronouns* to use in the context of delivering the message. Connotatively, they are intended to speak directly to the consumer, addressing them 'in person'. '**Your**' also gave a voice to their families. The words '**Your family**' were used four times at three different locations. In two cases, '**will be**' was

applied twice to enjoin '**Your family …**' with '**… waiting for you**'. This gave an element of anticipation into the future. In one case, '**is**' was used imply something that is already happening. '**Need(s) you**' features twice on one fear appeal board. '**Need**' speaks to basic primal human insticts. It makes one feel valued, appreciated and important.

The *adverb* '**safely**' was used thrice at three different boards. Another adverb '**carefully**' appeared twice on a similar number of message boards.

At four separate message boards, the *verb* '**drive**' featured six times. Its *continuous form* '**driving**' was applied once.

An element of *opposition* was also put to use in the messaging, e.g. '**Speed**' vs '**Slow Down**'.

4.2.5 Risk factors and behaviours targeted

Having analysed the frequency with which these words and phrases were used, this study came to the conclusion that the behaviours targeted were: **speeding**, **drink driving**, and the **use of mobile phones while driving**. The messaging pointed to these as the most common risk fators and behaviours the campaign sought to address. One can thus deduce that the tactic targeted motorists since these are actions and behaviours that identify with the control of mobility and velocity of motor vehicles.

A few of the displayed messages were more general and may have been applicable to other road users. For example, passengers reading these messages may be spurred into chiding drivers in the event the latter displayed reckless driving. This was aimed at spreading the responsibility of observing road safety to their passengers too.

4.2.6 Denotations and connotations of the car wreckages

A semiotic analysis of the car wreckage artefacts and message boards revealed several literal and literary meanings.

As presented earlier in this chapter under the analysis of individual campaign artefacts, each linguistic and non-linguistic text on the board could be seen literally as it appears to be written. Denotatively, a crashed car meant the results of a severe road crash. It denoted destruction, death and injuries. The message boards were more explicit in their information delivery with the words talking about speed, use of mobile phone and drink driving leading to death.

The connotative meanings may vary from one motorist to the other. These interpretations are guided by the consumers' socio-cultural backgrounds. While some may interpret the car wreckages and message boards as being signs of death through a road crash, others may read them as a testimony to the existence of a blackspot. Still, others may interpret them as a trigger or reminder to drive carefully. To some consumers, it may be an unpleasant reminder to a road crash they had witnessed or been involved in before.

Further connotations were explored under different semiotic codes and concepts discussed below. These included the application of Saussure's dyadic model of signifier-signified, signs as indexes, icons and symbols, metaphors, metonyms, myths, synecdoche, relations.

4.2.6.1 Signifiers and signifieds

Adopting Saussure's dyadic model of *signifier-signified*, various signifiers and signifieds were identified in the different texts analysed. Signifiers are the visual objects or written letters (words and phrases) displayed as individual units. Signifieds are the concepts for which the signifiers stand. The main signifiers are the car wreckages which represent fatal car crashes, with casualties and/or fatalities. The boards provided the audiences with the essential information for them to link the signifier and the signified. The texts on the boards were themselves also signifiers representing different signifieds as shown on the Table 4.3.

Table 4.2: Table showing signifiers and the signifieds on car wreckages texts

Signifiers – displayed text / visual / non-linguistic texts	*Signifieds*
Wrecked car	Accident, car crash, death, injury, permanent disability, accident black spot, police roadblock ahead, loss of asset/property, loss of income, loss of time, insurance claims, poverty, destitute family left behind, hospital stay, confinement to a wheelchair
Red paint	Blood of accident casualties / victims, death, injury, pain, blood donation, blood transfusion, hospital visit, medical expenses
Drawing of a coffin	Death, burial, agony, sadness, mourning, grief
Sign of the cross	Death, burial, grave, grief, Christian faith
Police emblem	Display of authority. Threat of arrest.

Table 4.3: Illustration of Signifieds on the message boards

Signifiers – Written / linguistic texts	Signifieds
RIP	**Death**, burial, agony, sadness, mourning, grief, **afterlife**.
POLICE WARNING, KENYA POLICE SERVICE	Display of power and authority. Threat of arrest, extortion, punishment, jail, time wasted, and license taken away
PERISHED ALL	Confirmation that **all** in the displayed wreckage **died**.
DON'T END UP LIKE THIS MAN	Confirmation that there was a **man**, now deceased or maimed, who was driving the displayed car wreck.
SPEED KILLS / OVERSPEEDING KILLS / WATCH YOUR SPEED AND STAY ALIVE	Statement confirming that speeding caused the death of the occupants of the displayed car wreck.
DON'T DRINK AND DRIVE	Statement indicating that drunk driving caused the crash of the displayed car wreck and death of the occupants.
DON'T USE YOUR MOBILE PHONE WHILE DRIVING	Statement indicating that the driver of the displayed car wreck was on his mobile phone, which resulted in the crash.
DRIVE CAREFULLY AND REACH HOME SAFELY	Statement confirming that careless driving caused the death of the occupants of the displayed car wreck. Careful driving shall deliver one home safely.
ARRIVE SAFELY YOUR FAMILY IS WAITING FOR YOU / YOUR FAMILY WILL BE WAITING FOR YOU / YOUR FAMILY NEEDS YOU	Statement indicating that the occupants of the displayed car wreckage had **families**, to whom they never made it to see.

4.2.6.2 Indexical, iconic and symbolic signs

According to Saussure, signifiers can be divided into three categories - indexes, icons and symbols. Semiotic analysis of the fear appeal signs identifies icons and symbols. This study unravelled the following icons and symbols:

The car wreckage was an **icon** as it was a signifier that bore direct, visible resemblance with the signified – the aftermath of an actual motor vehicle crashed in a RTA. The drawings of a coffin and a cross, and the inscription of the RIP acronym are **symbols.** They have arbitrary relationships with the signified through socially agreed convention. A coffin is associated with death or grief because they are used to bury the dead. Christians associate the cross with their faith and related rituals such as prayer and gravestone cross. RIP initials set on a coffin and cross are associated with death, funeral services, burials and belief in afterlife. The exclamation mark (!) is also a symbol conventionally associated with the warning on 'danger' or 'danger ahead'.

4.2.6.3 Paradigmatic analysis

A paradigmatic analysis further sought to unravel the whole frame within which meanings of the texts have been designed and displayed. A paradigm is a set of different but associated linguistic signs, all of which fall in the same category. The elements/patterns can be used to play mutually exclusive choices in a language structure (Mayr, 2013).

According to Chandler (2007), meanings can also be bound together by *paradigm* or by *syntagm* relations. A paradigmatic analysis examines of linguistic patterns embedded in a text as opposed to the surface structure (syntax) of a text. In paradigmatic associations, signs acquire meaning by way of association with other signs. Below were the outcomes of a paradigmatic analysis.

a) Police presence or authority

These texts were designed under certain paradigms, associated with Police presence or authority. The **police emblem** was displayed in many of the texts. It occupied the top corners of the message boards. This was a show of legitimate authority of an organ of the state. It is worth noting that it is illegal for non-authorised Police personnel to use the Police emblem. The **colours** navy blue, blue, maroon, and white, associated with the Kenya Police and the traffic department were used predominantly. They featured on the emblem, the message boards' backgrounds, frames and the texts.

Every message board bore the message '**Kenya Police'**. This was not only a display of authority, but also of police as sponsors of the advertisements. Mentioning the specific **Traffic Base** on the board was confirmation of the command jurisdiction within which the text was displayed. It was another subtle display of authority. It was an exhibition that local police were working on road safety. Many of the texts were displayed near **Police Stations** or close to **Police Roadblocks**. This was a sign that the police were present and watching the roads.

b) Car wreck, coffin, cross sign, RIP

Even though they were all very different signs, they were all, by association, referring to death through road crash. They symbolised pain, grief and great loss. Through other linguistic texts / writings on the boards, the displays confirmed the concept of death and grief by way of road crashes. They talked of '**perished all**', '**speed kills**', and '**watch your speed and stay alive**'. All these implied the death of motorists, their passengers or other road users.

c) Opposites

The media texts variously use speed and slow as opposites. Speeding is the opposite of slowing down. Contrasting these two on the same message boards – 'SPEED KILLS' 'SLOW DOWN' or 'SLOW DOWN' 'SPEED KILLS' was a tactical way of providing consumers with alternative ways to cope with the unwanted behaviours. They could simply undertake the exact opposite of the unapproved behaviour.

4.2.6.4 Syntagmatic analysis

A syntagmatic analysis looked at the format and structure of the car wreckage texts. A syntagm comprises three phases: equilibrium – disruption – equilibrium. These terms are used in reference to the beginning, the middle and the end of a story (Chandler, 1997). In *syntagmatic* relations, meanings of signs are drawn from their sequential order, for example, chronology of events or grammar that form a story. Syntagm is a unit of language consisting of sets of phonemes, words, or phrases arranged sequentially in the chain of speech or writing. Syntagmatic relations refer to the semantic relationship between two or more linguistic elements (words, expressions) used consecutively next to each other to form logical structures.

The car wreckages appeared to be the introduction. The graphic images were to acquaint motorists with the environment within which they were and the circumstances the road safety appeal sought to address. The graphic images were reinforced and explained by the texts written on boards. The messages addressed the three phase model of a syntagm as demonstrated on Table 4.5 below.

Table 4.4: Illustration of the equilibrium – disruption – equilibrium model of syntagm on the car wreckage texts (Adapted from Mayr (2013).

Introduction	Equilibrium	Disruption	Equilibrium
	Beginning of the story	*Middle of the story*	*End of the story*
Getting acquainted with the venue and the product	Tension setup Problem occurs	High tension Problem solving	Tension dispel Problem is solved
Sighting the car wreck	Reading the texts on the board		
Gruesome image of mangled wreckage	'Perished all!' 'Speed kills!'	'Watch your speed and stay alive', 'drive carefully and reach home safely'	'arrive safely your family is waiting for you'

By association to the car wreckage, the repeated mention of speed and conspicuous display of 'SPEED KILLS' implied that speed is the main cause of road crashes and resultant deaths. Its placement with 'SLOW DOWN' on the boards point to speeding as the principally targeted behaviour. Other texts were sequentially arranged to form a storyline. For example, 'Plan your journey', 'Drive carefully', 'Arrive safely' were written in that order to point that safe arrival is dependent on careful driving which is achieved when a journey is planned.

4.2.6.5 Metaphors, Metonyms, Similes, Myths, and Synecdoche

a) Metaphors

The car wreckages were used *metaphorically* in the road safety campaign to express fatal road crashes, death and injuries. Actual wrecks or their images appear to have been accepted conventionally as a symbol for the depiction of road crashes or warning about RTA blackspots. As the dominant ways of thinking about wreckages and related images dictate, their display

would therefore instigate motorists to link them to issues related to road safety (Lakoff and Johnson, 2003; Chandler, 2017). This '**man**' in 'Don't end up like this man!' message is a metaphor for a dead or maimed driver who was in the displayed car wreckage. '**Family**' and '**home**', used in several texts, are metaphors for people or places. They refer to persons of establishments with whom motorists share mutual love, attachment, concern, care, dependence, responsibilities, emotional and psychosocial support.

Metaphors are figurative words or expressions, shared through repeated exposure and conventionally agreed upon as linking readers to the dominant ways of thinking within our society (Lakoff and Johnson, 2003). In a metaphor, a text denoting one kind of object or idea in the literal sense is used to suggest to describe something else, in order to show that the two share same qualities. "Metaphorical images often imply that which advertisers would not express in words" (Chandler, 2017).

b) Metonym / Synecdoche

The sketches of a coffin, cross and RIP next to a crashed car were pieces referring to an entire narrative on grief. They could be a *metonym* or a *synecdoche* depicting death, a coffin, a cross, church, grave and burial.

In *metonymy*, a sign signifies or is substituted for another sign with which it is closely associated or directly related in some way. Based on indexical relationships between signifieds, metonyms evoke the whole by a connection, using something closely related, such as effect for cause. Synecdoche is a figure of speech by which a word, a phrase or a piece of thing is used to represent the whole, or the whole is used for a part. In *synecdoche*, a part is used for the whole. For example, the display of a part of a photograph serves to suggest that what is shown is a piece

of the whole, which exists in the real world outside the photograph. It is for the viewer to fill in the gaps left in the synecdoche (Chandler, 2017).

c) Similes

Similes were used in the car wreckage texts. For example, 'Don't end up *like* this man!' employed the word *like* to compare two situations. It assumed that consumers reading the text would not wish to end up dead or injured – the alternative alluded to in the '*man*'. *Similes* are metaphors which employ explicit comparison of two figures, using the words '*like'* or '*as ….. as….'*. A simile is a phrase or figure of speech that compares two items using '**like'** or '**by'**.

d) Myths

To reinforce the message of Christmas and the season of merry making, the car wreckage at Nakuru used the image of the mythical **Father Christmas** to express a myth. With a raised hand, and an index finger pointing upwards, the image alluded to a mythical old man who walks from house to house on Christmas, bringing good tidings, giving gifts and sweets to children, while punishing the naughty ones. This practice is common, especially in **Christianity** practicing societies, with actors hired or volunteering to pose as Father Christmas. In truth, it is just a myth and in reality, such a powerful, all knowing, kind, magical, mystical being does not exist. Christianity itself is a based on faith. Believers worship a deity and associate Jesus Christ's birth with blessings and salvation from their sins. *Myths* combine paradigms and syntagms to make up a common narrative, with intricate cultural associations.

4.2.6.6 Codes

Codes are specific semiotic systems, rules and conventions that govern the production of signs though organising them into meaningful systems which correlate signifiers and signifieds to communicate specific values to specific audiences in a set cultural pattern (Chandler, 2017).

One of the codes on the displayed car wreckages was the severe damage on the front part of the car. The severity was more manifest on the side of the driver. This coded message was best read by drivers as opposed to non-drivers. It implied that in the event of a crash, drivers were more at risk compared to their passengers. The severe damages also implied vehicle vulnerability. Motorists were more likely to feel the losses and pain associated with RTAs than non-motorists.

Another code is that of the use of **small cars** in the campaign. It denoted their vulnerability in the event of a crash. On further scrutiny, their use connoted that they are the leading cause of RTAs.

The messages on the boards were also coded to target activities associated with motorists. These included reckless driving, speeding, use of mobile phones while driving, and drunk driving. This implied that road safety predominantly depended on motorists. Their responsibility, speed, sobriety, and non-use of mobile phones would safeguard the well-being of the motorists themselves, that of passengers, and that of other road users.

The mention of Police on the fear appeal boards was a coded threat to motorists. It denoted the presence of the Police and connoted the risks motorists face they disobeyed traffic rules.

4.2.7 Car wreckage artefacts as fear appeals messages

The car wreckage texts met the threshold of being considered fear appeal communication objects. They were mostly strong fear appeals, combining high levels of threat with high levels

of self-efficacy. Of the nine artefacts studied, five comprised wreckages of cars and message boards carrying linguistic texts. Three of them featured only car wrecks, while one had a board with fear appeal messages, but no car shell. In the latter's case, the wreckage or the boards were removed before this researcher took pictures of them.

The purpose of the car wreckage messaging was to instil 'fear' of reckless driving and inculcate a culture of adherence to safety. The artefacts explicitly displayed gruesome spectacles of wrecked vehicles. This triggered in drivers the awareness that there is imminent danger on the roads. It was also intended to awaken in them that such an eventuality could happen to them as well. The use of actual car wreckages (as opposed to pictures or paintings) in the campaigns represented reality as closely as possible. It increased information credibility.

The artefacts at Safari Park, GM, Nakuru, Salgaa and Kabete were strong fear appeals. They combined strong elements of threat with self efficacy that was actionable, achievable, practical and relevant suggested remedies. The police, who made the appeals, is legitimate and knowledgeable authority. There was a link between the threat causing behaviour such as speeding, drink driving, using mobile phones while driving or reckless driving, and the fear arousing results. Not only was the threat of death, damage or injury expressed in explicit terms on the board, it was also implicit through the damaged vehicle which left little to imagination.

The artefact without a car wreck next to the message board conveyed a moderate threat. On the one hand, it bore a mild threat, dissuaded undesirable behaviour, recommended action, and legitimate author of the campaign. On the other hand, it lacked a strong explicit threat. The gruesome sight of a wrecked car would have lent it this character.

The car wreckages without any accompanying written texts complementing them were weak fear appeals. They relied on audiences' imagination and interpretation. As scary as the images of the wreckages were, motorists could interpret them in any way. The texts did not explicitly state the discouraged behaviour for which the wrecked car was displayed. Neither did they bear any self-efficacy messages.

Motorists who drove repetitively past the car wreck artefacts may have over time become 'familiar' with them. Even those upon whom they may initially have had effects may have begun to disregard them after prolonged period of frequent exposure. They might have altogether just become part of road infrastructure. They may not have even noticed the existence of the artefacts anymore. This may have manifested itself, especially if they continually drove by and nothing happened to them that relates to road safety adherence.

4.2.8 Statuses and management of the car wreckage artefacts

Most of the artefacts studied appeared to be under little or no maintenance at all. This was evidenced by the absence of parts or whole pieces of the campaign materials from the spots they were once erected. Vandalism and theft also led to parts of the displayed wreckages being yanked off. Neglect was also manifested by the coat wearing off, the red paint chipping off, while the remaining shells gathered dust and dirt. This also pointed to the lack of coordination or limitation of resources towards the implementation of the campaign. The state of the artefacts also reflected on the lack of appreciation for the role of traffic police in this campaign. While they are central in maintaining these artefacts, the fact that they were not recognised, rewarded or facilitated to keep the campaign alive may have led to them neglecting the artefacts. It is near impossible to credit any individual(s) with the implementation of the campaign. This researcher learnt that even informants authorised to speak on behalf of the Police Traffic Department would

not reveal the identities of those who initiated the campaign. There was no tracking of the performance of this campaign. It was, therefore, not easy to tell how effective the campaign was.

4.2.9 Conclusions of semiotic analysis of car wreckage texts

This study concluded that the car wreckages and affiliated message boards were designed as fear appeal type messages. Knowledge and expertise of a professional was involved in developing them. The messaging deployed signifiers or symbols in the form of actual cars from road crashes. This was augmented with linguistic texts on the message boards explaining more explicitly what the campaign was about. Comprising necessary components of fear, threat, and perceived self-efficacy, they made for strong and effective fear appeals at their launch. They symbolised accidents, death, pain, black spots and drive carefully. After continuous exposure, it was likely that motorists disregarded or got ignored them. Mismanagement, vandalism and theft rendered them ineffective. Speeding was identified as the behaviour targeted the most by the campaign. The other two risk factors were drunk driving and the use of mobile phones while driving. Adherence to road safety may have been as a result of this campaign or a combination of elements of this campaign and other things.

4.3 Meanings encoded and intended in the car wreckages texts

This researcher conducted in depth interviews with key informants to establish the types of meanings they intend to convey to consumers in the car wreckage texts. During the interviews with senior Police and NTSA officers, the background and philosophy informing the deployment of the car wreckage tactic was explored.

This researcher sought to find out the following about the car wreckage texts campaign: Why the they were displayed; What the implementers intended to achieve; What meanings were intended

to be conveyed in the texts; Whom it targeted; What effects the texts had on their intended consumers; The composition of the texts; When the texts were placed; Who placed them; Where they were placed; How many artefacts were displayed; Was it accompanied by any other campaigns such as publicity, education and information or enforcement; Were the texts maintained and by whom?

Sections 4.3.1 to 4.3.9 discuss in detail the information which emerged from this inquiry.

4.3.1 Background of the road safety campaign involving car wreckages

According to Police and NTSA informants, the road safety campaign tactic began some time towards the end of the year 2013. It was the initiative of an individual Traffic Base Commander. A Base Commander is a Police officer in charge of traffic within a Police Division. A few of his peers saw it and thought it was a good idea. They replicated it in their respective jurisdictions. The idea was not nationally launched and officially coordinated by the top Police leadership.

4.3.2 Objectives of the car wreckage texts campaign

The pioneer officer and the adopting colleagues were responding to a spate of fatal RTAs that resulted in many deaths. According to Police and NTSA informants, the artefacts were deployed, generally, to create public awareness on road safety. It was designed to sensitise drivers on dangers of speeding and careless driving. The implementers hoped that being warned by these texts would deter motorists from driving recklessly.

4.3.3 Characteristics of the car wreckage artefacts

Having analysed the words used by KIIs in the interview responses, this study deduced that the texts were indeed designed as fear appeals type campaigns. Repeated mentioning the display of

'**scary**' mangled car wreckages, '**fatal**' road accidents, '**influence of attitudes and behaviour**', invoking of '**fear**' and '**compliance**' to road safety, among other things, they alluded to a deliberate employment of fear appeals technique. These observations were in line with those of Spence and Moinpour (1972) showing that fear appeals are purposefully authored to stimulate angst in the target audience with the expectation that they take some action to ease that angst.

4.3.4 Composition and rationale for usage of car wreckage texts

Apart from the crashed cars, key informants did not candidly identify other components of the car wreckage texts campaign. The NTSA noted that the tactic featured wreckages of saloon cars. They observed that the bulk of these cars were utilised as private vehicles. They pointed out that private vehicles were the leading cause of road accidents. This was consistent with information published in Kenya's leading newspapers indicating that private vehicles were the leading causes of road accidents. Private vehicles contributed to 31% of fatalities, followed by commercial vehicles at 29%, and *boda bodas* at 21%. *Matatus* (The Standard, 2017, Nation, 2017). In addition, the NTSA revealed that saloon cars and sedans involved in road accidents were more likely to be written off due to their inferior mechanical strengths. In comparison, new lorries, buses, and *matatus* were costly to purchase and would be cheaper to repair as they did not suffer as much damage as small cars. They argued that insurers were also likely to compensate faster for small vehicles due to their comparatively lower costs. The NTSA also posited that the usage of car wreckages was a cost effective way to run a road safety campaign. As they were already written-off shells, using them saved on huge costs associated with advertising on mainstream media or on billboards. The above reasons partly justify why the tactic features small cars.

4.3.5 Distribution of the car wreckage artefacts

The Police stated that the artefacts were placed at specific accident black spots. However, they could not identify which black spots played host to the car wreckage texts. They also did not provide information on how many of these texts were still available on the sites.

4.3.6 Ongoing maintenance

The informants indicated that the texts are under the care and management of the Traffic Police. However, they did not identify, any specific officers charged with caring or securing the texts.

4.3.7 Target audience and targeted behaviour

Motorists were the target consumers in this campaign, according to the Kenya Police and the NTSA. The institutions asserted that the texts were meant to deter careless driving owing to their graphic form. Careless or reckless driving, according to KIIs include speeding, drunk driving and usage of mobile phones while driving. They claimed that the texts affect motorists' attitudes. They postulated that motorists react to the messages differently based on their ages. Youthful drivers, thought of the police upon seeing the displayed wreckages. They were then likely to slow down, even if only for a short while. Among drivers above the age of 50, seeing the car wreckage objects was likely to trigger them to drive slowly, possibly for the rest of their journey. These views were consistent with findings of Lewis, Tay and Watson (2008) who observed that gender and age determine how people respond to fear appeals.

4.3.8 Effects of the car wreckage text campaign

According to NTSA, the wreckages evoked fear and signalled motorists to take responsibility. They then took the desirable actions such as slowing down. KIIs could not confirm the extent to which the texts affected RTAs statistics. They argued that there were several factors that affect

RTA numbers. While some initiatives may play greater roles leading to reductions of RTAs, in many cases it is a combination of initiatives that has impact on RTA statistics. Alongside the campaign, the Police cited footbridges which had just been constructed on several sections along highways considered as hotspots as another possible contributor to the reduction of hit and run deaths. Their views were consistent with those of Hoekstra and Wegman (2011), who advanced that it is not possible to tell whether using a road safety campaign in isolation might accomplish the same effects as those by a combination.

NTSA informants also foresaw other possible inperpretations and/or misinperpretations. These included the likelihood that consumers would view the wreckages as artistic decorations, as abandonded shells after RTAs, or as dumped items for lack of space within police station yards.

4.3.9 Complementary campaigns

Informants confirmed that the campaign was not accompanied with publicity, education and information campaigns. It was also not clear, to what extent, if any, the creator(s) of the texts thought incorporated any techniques of social marketing in the campaign. However, by revealing that the tactic was part of a strategy to 'arrest and deter' runaway road carnage, the police ascertained that this campaign was accompanied by enforcement.

4.3.10 Conclusions of encoded meanings

According to KIIs, the texts were designed to arouse fear, deter reckless driving and scare motorists into adherence to road safety. They were embedded with fear rousing images. They were intended to trigger motorists to think of the presence of traffic police on the road ahead. This would make motorists slow down. The use of threats such as the risk of death, injury or arrests was intended to get audiences to comply with road safety. Saloon cars were deployed

because; one, they accounted for highest road crashes among automobiles; two, they were easily available; and three, they were a cheap way to run a road safety campaign. The campaign's target consumers constituted motorists of all types of vehicles, across all ages and gender. The targeted behaviour was described in general terms as reckless or careless driving, and broken down into specific risk behaviours of speeding, overlapping, drunk driving and usage of phones while driving. It was not clear to what extent the campaign had resulted in reduction of RTAs and fatalities. There were no official records, data or statistics relating to the car wreckage campaign.

4.4 Consumer readings of car wreckages

In line with the third objective of this study, this researcher conducted in-depth interviews with the consumers. An author's intended meaning is subordinate to the meaning interpreted by the reader of a text (Barthes, 1967). Investigating the meanings motorists make of car wreckage texts displayed on Kenyan roads as a tactic for road safety awareness shed light into the consumers' readings of the artefacts. The interviews sought to find out what the consumers feel, think, imagine about the texts. It also sought to establish how they react upon sighting the artefacts. Consumers gave this researcher their interpretations and opinions about the texts.

Motorists of different of vehicle types were interviewed, including boda boda riders, drivers of tuk tuks, saloon cars, minivans, matatus, minibuses and heavy commercial trucks. English, Swahili and Dholuo languages were used in the interviews. The data was collected at different locations – Kisumu, Eldoret, Salgaa, Nakuru and Nairobi. Participant interviews were undertaken within the period beginning August to September 2018. A total of 60 participants were interviewed. Most of the interviews were conducted with individuals. In a few cases, there were more than one motorist proactively participating in the same interview. In those instances, this researcher interviewed several participants, one after another, in the same sitting.

A tuk tuk is a three wheeler taxi.

Analysis of the interview transcripts did not reveal any obvious differences in interpretations by demographics. Women reported similar readings as men. The women, however, tended to recall and report their first encounters with the texts in more detail. They were also more detailed and descriptive about their reactions after sighting the artefacts. It is important to note that the women motorists sampled were more educated than their males interviewed. They were also all owning the cars they drove. This was not deliberate, but a result of the research not being able to secure any women participants operating within the public transport system. The male participants were mostly employed by others to drive. Some drove their own motor vehicles. Men, especially those who disagreed with the campaign, were more inclined to suggest alternatives to what they considered counterproductive or ineffective road safety campaign.

A textual analysis was done on 54 transcripts of the participant interviews. It includes transcripts of interviews with 48 men and four women. Swahili and Dholuo transcripts were translated into English for reporting purposes.

This study used Hall's (1973) encoding/decoding model to analyse consumer readings of car wreckage artefacts deployed for road safety awareness on Kenyan roads. It clustered the takeaways on consumer readings of the media texts under the three codes/positions; the hegemonic-dominant position, the negotiated position, and the oppositional position.

4.4.1 Hegemonic-Dominant Position

Most participants (39 motorists out of 52 interview transcripts analysed) fell in this category. They read the texts in a code consistent with the one **_preferred_** by the text designers/producers. They interpreted the artefacts as a sign of an accident in which people died. The texts were to

them an indication of a blackspot, a hotspot, risks to lives, and dangers on the roads. Consumers in this category were scared, afraid, surprised, horrified, or/and shocked. They construed the texts as a warning against reckless driving. It indicated to them the need to observe road safety by avoiding speeding, slowing down, driving carefully, being watchful/alert/keen, observing lane discipline, obeying traffic rules, driving within permitted speed limits, concentrating on the road, being confident on the wheels, and exercising caution. They felt that the campaign was a good and helpful initiative that reminded motorists whenever they were engaging in risky behaviours.

For most of the participants, the text was a poignant reminder of the existence and inevitability of RTAs. They observed that RTAs could occur at any time on the road without a warning. The texts were, hence, a call for the need to safeguard one's life as well as those of other road users. Looking at the car wreckages made participants question the fate of its occupants – whether they died, were trapped, hurt or survived. They associated the texts mostly with danger zones such as roundabouts, zebra crossings, junctions and bumps. Some readers cited the need to be alive to support their (young) families as the motivation triggered by the media texts.

Speed, drunk driving, use of mobile phones while driving, fatigue, lack of journey planning, overtaking, overlapping, racing, competing, arguing, and lack of defensive driving were mentioned as behaviours targeted in the campaign. They had different preferences on what worked best for them, between a car wreck and a message board. Their preferences notwithstanding, most of the motorists indicated that a combination of the two had complementarity and was the most effective.

Following is an excerpt of an interview transcript from a motorist reading the texts in the hegemonic-dominant position.

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"Interviewer: *Where have you seen it?*

Participant 45: *Outside Kabete police station.*

Interviewer: *And when you see it what does it mean to you?*

Participant 45: *It clearly shows, to limit our speed because, this shows that speed kills. And it's actually guiding us as drivers, to limit speed, to drive on the required speed [Participant 45 appeared to be reading the printout of the message board]*

Interviewer: *And so whenever you see it as a motorist, you are on the wheels, right? What actions do you take?*

Participant 45: *I immediately realise that my life is very important, so I have to take care of myself and passengers as well."*

…………....

Note: **Participant 45** refers to the 45th motorist this researcher interviewed. Their actual name

was concealed to safeguard the interviewee's real identity.

4.4.2 Negotiated Position

Out of 52 interviews analysed, 13 participants interpreted the texts within the negotiated code.

While they agreed with the message and its intent, most of them pointed out that they were

against the nature of the artefacts' display. Some disagreed with the use of a car wreck. They

claimed that it was too scary. Some pointed out that, since they communicate nothing, the car

wrecks should be taken off the roads. While others in this category felt that the message boards

told them what the campaign was about and what they could do to avoid risks, they voiced that

the wreckages did not communicate to them the message of road safety effectively.

Still, some participants argued that the texts were only temporarily effective, making them feel

sad or afraid initially and only momentarily. While some motorists 'blocked' the gruesome

images from their minds, others reported that after passing the site of their display, they would

soon drive 'normally'. After continued exposure, they would forget the texts existed on the road.

They noted that the texts urged caution or were signs of blackspots. They also intimated that the car wreckages were signs of accidents where one or more people died or were warnings to take precaution so that one doesn't cause a similar kinds of accident. These responses were in line with the meanings anticipated by the producers of the campaign, but with few departures. An example of a rider in their interpretations was the suggestion that the wreckages which had no accompanying message boards would be more effective with written warnings.

Some also felt that the texts were double edged. They not only had the potential to caution motorists against reckless driving, but were also capable of shaking motorists into causing accidents. They felt that the gruesome sights of car wreckages were too frightening for non-drivers who would be hesitant to learn to drive. They could discourage would be vehicle owners. Passengers too would be scared of boarding vehicles.

Below is an excerpt of an interview with a motorist who read the texts within the negotiated position.

> *…………….*
> *"Interviewer: What does it mean to you?*
> *Participant 22: It means to scare the driver*
> *Interviewer: You as XXXX, does it scare you?*
> *Participant 22: Mmm…personally it does not scare me*
> *Interviewer: What kind of reactions do you have when you see it? The first time you saw it, what did you think about it.*
> *Participant 22: I thought maybe it's a way they are using to educate people to be cautious about using the road properly.*
> *Interviewer: to you what does it mean to use the road properly?*
> *Participant 22: Yeah. Just be careful… and watchful*
> *Interviewer: so when you were on the road at that time, did it make you become more careful or more watchful?*

Participant 22: ok to me it does not add any sense to me because personally I feel like I need to be more careful and watchful because I believe that I'm on the road not to die, but because I want to live. I'm at work and I need to earn a living.

Interviewer: after seeing it for some time, you've said more than a year now. So after you've seen it what kind of reaction do you still have if any?

Participant 22: you know after seeing it for long, now the reaction is not there, it has become normal. You just look at it like a normal thing. Sometimes you can just pass by without looking at it because now it's a normal thing."

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Note: **Participant 22** refers to the 22ⁿᵈ motorist this researcher interviewed. To safeguard the interviewee's real identity, the code XXXX was used to conceal the actual name.

4.4.3 Oppositional Position

Textual analysis of the transcripts revealed that two out of 52 participants interpreted the media texts in the oppositional code, completely contrary to what was intended. They did not agree with the intent of the message, its content(s) or their authors.

One participant in this category described the campaign as ineffective and unhelpful. He opined that the artefacts looked like signage to an auto garage or an abandoned wreckage following a 'fresh' RTA. According to him, the texts were a form of blackmail, causing fear, discomfort and lack of confidence. He considered RTAs an attitude and temperament issue which cannot be solved by the display of car wreckages on the road but by talking to the people. The other dissenting motorist indicated that the texts evoked no feelings in him. He saw them as mere statues or decorations.

Below is an excerpt from one of the transcripts from interviews with participants reading the car wreckage texts in the oppositional code.

……………..

"Participant 13: My name XXXX, and I'm a taxi driver for the last 13 years. I've been majorly on small cars, the saloon cars. And on the road, I've had like four

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accidents, major accidents, on the road. And so, I'm much more experienced on road accidents, and I've seen what accident is."

"So coming back to your question, I'll tell you that personally I don't really like to see those wreckages. Or to see the wreckage stands or vehicles on the road. Because from my point of view, I've had nasty experiences on the road. And the last one that I had really flushed for so many months in my mind, that a week after the accident, whenever I would drive, it would flush. Even when there was nothing, the road is very safe, it would flush, the same accident. So it recurs in my mind all the time. But it faded by years. So, I mean, unfortunately when it was fading. That is when this thing were introduced on the roads. And so when I saw the first one, it reminded me of the accident that had in Kericho. And it brought back the fear. So to me I feel that it's not really helping. It is causing fear. On the drivers on the road, and that fear makes the driver now have what I would term discomfort and also lack of confidence on the road. Because you'd always feel that you're making a mistake, so much more if you had had an accident before. So to me, maybe it was a well thought idea, but I think this should have been done in a different way.

One is to have meetings and conferences, maybe per county, and drivers are brought on board. And the stakeholders on the road are brought on board in the communication so that they are being taught and being counselled concerning road carnages and accidents. These are fatal accidents and all these [pointing at the fear appeal printouts]. So that there is kind of a way of bringing them out of these, because majorly you will find that 60% of drivers have had or have been involved in an accident. Major or minor accidents. But all the same they are accidents. But in those levels, in their level, you'll find that there is a kind of fear that is being caused. Or there is some kind of discomfort or lack of confidence that it caused. Even if you knock a cyclist, it actually registers something in your mind. So that should not be the thing to be recurring in your life all the time."

………………

Note: **Participant 13** refers to the 13th motorist interviewed in this study. XXXX was used in place of the actual name to conceal and safeguard the interviewee's real identity.

4.4.4 Summary of consumer readings of car wreckage texts

Below is a summary of meanings of car wreckage texts according to consumers.

4.4.4.1 Summary of meanings according consumers

When asked what the car wreckage texts meant to them, motorists read different things. Commonly among those, they said that the texts were a '**sign**' of:

- Accidents
- Death
- Blackspot or hotspot

- Bumps ahead
- Roundabout ahead
- 'Sharp' junction

- Auto garage
- Proximity to the site of a recent/previous vehicle crash.

- Others thought the cars had been involved in accidents, but their owners were yet to be located. They were thus displayed in public reach their owners who'd go and collect them.

- The texts stood and spoke to motorists on road safety in place of the Police.

4.4.4.2 Summary of targeted behaviours and actions

Participants identified the following as actions which contribute to RTAs and crashes:

- Speeding
- Reckless driving
- Careless driving

- Drunk driving
- Road rage
- Anger

- Use of mobile phones while driving
- Arguing on the road, disrespect to others
- Lack of training in defensive driving skills

- Racing or competing
- Not qualified as a driver
- lack of patience

These responses showed that motorists were aware of the behaviours targeted in the campaign.

4.4.4.3 Summary of recommended behaviours and actions

From their responses, this study gathered that motorists considered the texts as telling them to:

- Be careful/ cautious
- Be watchful
- Drive safely

- Drive carefully
- Drive cautiously
- Be keen

- Approach spot keenly
- Approach with caution
- Check side mirror

- Mind other road users
- Safeguard lives
- Observe lane (discipline)

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4.4.4.4 Summary of effects on consumers

Different readers reacted differently to the texts at different times of exposure. Most participants revealed that the first time they spotted the texts, they felt shocked, surprised, afraid, fearful, and/or sad. Although these words were most commonly cited to describe elicited feelings and reactions, many also reported that the texts awakened them, boosted their caution, reminded them if they were about to undertake a road risky behaviour, and helped avert accidents.

Some consumers indicated that they reacted to the texts over a longer period of time, way after their initial sighting. They reported checking their speedometers, reducing speed or being courteous to other motorists whenever they saw the car wreckages and the associated billboards. For many, however, lengthy and repeated exposure resulted yielded no impact on their attitudes or behaviours. They ignored, did not notice the texts which had become redundant, boring and a part of the road infrastructure. Upon their first encounters, some motorists may have been touched by the plight of those who may have occupied the displayed wreckages. They continued with their journeys unaffected, a testament that the feelings did not affect the way they drove after passing the scene of text display.

Despite the 'direct' and 'hard' delivery of the message, some participants also pointed out that the texts were reassuring. This may be interpreted as a demonstration self-efficacy, a key ingredient of fear appeal communication.

Others opined that the texts were unhelpful, ineffective and/or akin to blackmail. This category of consumers found the texts discouraging and dissuading through the design of the car wreckages and in messages displayed on the boards. They considered the gory wreckages to be an unwanted reminder to motorists who may have been in fatal accidents. Such reminders could

destabilise motorists and result in avoidable accidents. They were of the view that the artefacts were equally destructive to motorists who had not had accidents. If aspiring motorists thought they would end up in road crashes such as the one of the displayed car, they would develop fear of driving. Those planning to buy cars or learn driving weren't spared either. The wreckages may have scared and dissuaded them from acquiring licenses or of buying vehicles.

Due to the nature of their display, some motorists considered the texts hazardous. A few wreckages were perched on wooden stilts. In Eldoret, people and motorists operated around and under the wreckages, oblivious of the risk that the wood could rot and the shell collapse on them.

There were also motorists who were not moved at all by the images of the texts, be it upon the first or consecutive sightings. They viewed the texts as statues, objects of decorations or salvaged car wreckages abandoned after a recent crash. While some motorists felt that the wrecks were sufficient, others felt that the boards were more effective in conveying of road safety message. Those opposed to the car wrecks felt that they were scary and meant nothing much. Proponents of the message boards considered them superior because they bore candid and direct instructions which could be read and followed. Still, most motorists felt that a combination of the two was the most effective since the two complement each other. One showed what happened, the other explained the cause and how to avoid it.

4.4.5 Conclusions of analysis on consumer readings of car wreckage texts

While the texts inspired fear, shock and sadness in most motorists at first sighting, others read them as warning signs placed to caution against reckless or risky driving. Others agreed with the intent of the campaign, but disagreed with the authors of the text or the manner of their displays. A few were indifferent to them, viewing them as objects of decoration. Prolonged periods of

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continuous exposure to the texts resulted in consumers getting not paying further attention to them. There was a relationship and complementarity between the car wreckage object and the linguistic texts on the boards. Whereas some motorists interpreted one component of the texts even in the absence of the other, having both the car wreck and the message board side by side was more impactful. A message board helped some motorists who did not understand the car shells to decipher their intended meaning(s). There were no obvious links between the nuances in readings and the genders or ages of consumers. Personality traits such as self-confidence, empathy for other road users, and family predisposition contributed to how individuals read and reacted to the media texts.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Overview

This is the final chapter. It provides a summary, conclusions and recommendations arising from the study. It highlights these in respect of the background, the objectives and the findings. The chapter begins with a summary of the main findings, anchored on the objectives and conceptual framework. It then presents the major conclusions drawn from the preceding summaries, before presenting the main recommendations from the study. Suggestions for further research are discussed at the end, incorporating challenges and limitations encountered during the study.

5.1 Summary of findings

In the previous chapter, the findings of this research were presented, analysed and discussed in detail. For each objective that guided this study, results were submitted. This section provides a summary of those results.

The main objective of this research was to study meanings of car wreckage texts deployed on Kenyan highways for road safety. It was guided by three specific objectives: first, to semiotically and closely examine car wreckage texts deployed on Kenyan highways for road safety campaign; second, to find out the meanings encoded in car wreckage texts deployed for road safety campaigns in Kenya; and third, to investigate meanings consumers read while interacting with the car wreckage texts displayed on Kenyan roads for safety.

The study found out that there was a strong link between meanings intended by the author and meanings read by the audiences. These meanings were consistent with the readings unravelled by

the semiotic analysis of the car wreckage texts. Most motorists read the texts within the hegemonic-dominant position, meaning that they read them as preferred by the police. There were a few interpretations that differed from those intended by the authors.

The last category of consumers interpreted the texts within the oppositional position. They disagreed with the messages, considered them as fear mongering, old fashioned means of road safety campaign, blackmailing, and too simplistic to address an issue as complex as RTAs.

In response to the first objective, a semiotic analysis of the texts unearthed that the texts were strong road safety fear appeal messages at their time of deployment. They demonstrated a clear and strong threat and strong perceived self-efficacy. The strength and effects of the artefacts diminished due to factors such as familiarity, neglect, vandalism and theft. They were displayed in urban areas, along hotspot highways, at blackspots, roundabouts and road junctions. They were elevated for better visibility. The campaigns main consumers were motorists. Speeding, drink-driving and mobile phone use while driving were the behaviours targeted in the campaign.

On the second objective, this study interviewed Police and NTSA to find out the meanings encoded and intended in the design and deployment of the car wreckage media texts. It emerged that the authors designed the messages as fear appeals. Fear was encoded in the artefacts. The intention was to send a message of threat and risk in order to caution and deter against careless driving. Motorists were expected to slow down whenever they spotted the texts. The targeted behaviours were speeding, overlapping, drink driving and usage of mobile phones while driving.

On the third objective of investigating readings of consumers, this study found that different motorists read the texts differently. They had multiple interpretations of the same text. Most motorists read preferred meanings such as fear, scare, shock, surprise, danger, blackspot, police

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presence, accident, or death. Upon sighting the texts, most motorists: slowed down, drove cautiously, became watchful or afraid of police, checked their speedometer, were courteous and mindful of other road users and overlapped with care. While the texts had an impact on motorists during initial encounters, they lost their strength and effect over time. The texts communicated best as a combination of car wreckage and linguistic message board.

5.2 Conclusion of the study

In conclusion, the study found that the texts largely elicited meanings and reactions consistent with the preferred meanings, thereby enhancing adherence to road safety in the short term. They designed and displayed as strong and effective fear appeals. These meanings mainly gravitated around thoughts of accidents, death, risks, fatalities, injuries, road safety, careful versus reckless driving, caution and black spot. Consumers found them repetitive, boring, weak, meaningless and ineffective over time due to prolonged exposure and familiarity, vandalism or theft.

Table 5.1 is a summary overview of the meanings the car wreckage, It shows that across the three domains of this study (close reading by this researcher, author intentions and consumer readings), meanings of the car wreckages texts were mostly consistent within a hegemonic-dominant code. There are outliers in interpretations, some of which had been anticipated by the producers or foreseen by the researcher. Consumers divulged diverse and many more meanings of the texts than had been mentioned by either road traffic safety personnel or generated by semiotic analysis.

Table 5.1: Meanings of car wreckage texts displayed on Kenyan roads for safety

	Semiotic analysis (close reading by researcher)	Author (police)	Audience / consumers (motorists)
Intended meanings vs consumer interpretations	Road safety campaign, fear appeals, caution for motorists to drive safely / observe road safety, fear, scare, abandoned car wreckages following RTA, presence of police, blackspot, hotspot, high risk, death, disability, blood, pain, agony, anguish, abandoned loved ones (family / home), expenses	Warning, drive carefully, observe road safety, fear, scare, deterrence, police presence, decoration, dumped car wreckages	Accident, death, injury, car written off, blackspot, danger, risky roundabout or junction with high number of accidents, representing Police (in their absence), reminder to past crashes, warning, caution, reminder, fear, scaremongering, disillusionment, statue, decoration, garage sign, business stall
Target consumers	Motorists, passengers	Motorists	Motorists/drivers, passengers, would be drivers/vehicle owners
Targeted behaviour vs behaviours motorists associate with the text	Speeding, driving under alcohol influence, using mobile phone while driving, careless driving	Speeding, overlapping, drink driving, mobile phone use while driving, reckless / careless driving	(Over)speeding, reckless or careless driving, driving while drunk, mobile phone use while driving, overlapping, inexperience / untrained drivers, hurrying, road rage, racing, disrespecting other road users
Expected effects vs reactions upon sighting texts	Observing road traffic rules, adherence to road safety, deterrence from reckless/careless driving, not speeding, slowing down, not using phone while driving, not driving under influence of alcohol	Adherence to road safety, deterrence from reckless/careless driving, slowing down, not use phone while driving, not drive while drunk, overlap carefully	Slow down, check speed, overlap with caution, not use phone while driving, drive while sober, discouraged from driving, afraid of buying a car, ignore, block, continue driving without any change

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5.3 Recommendations

This study recommends deployment of more car wreckages at more accident hotspots and blackspots. For future campaigns, these must be better planned, coordinated and financed to ensure the texts reach more consumers.

It also recommends improved management of the artefacts by providing security and maintenance to safeguard necessary components of the texts.

For better visibility, this study recommends the deployment of bright coloured texts such as white or silvery cars. The texts should be elevated at vantage points such as roadblocks, roundabouts, bumps or junctions to increase chances of sighting.

Such a campaign should incorporate publicity, education, information and enforcement in future in order to complement and avail other channels to raise awareness to road safety. Even though it targeted mainly motorists, road safety is the responsibility of all road users. While motorists may not see the texts for various reasons, such complimentary drives would also reach other road users who are more likely to watch TV, read newspapers, social media or interact with the Police. Future designs should consider messages that also target other stakeholders such as passengers and pedestrians more.

The study recommends further research in development of use of car wreckage texts (specifically) and fear appeals (broadly), that will result in long term effects on consumers.

5.4 Suggestions for future research work

From the findings of this study, focus on future research should be placed on investigating how much long the car wreckage texts affect consumers after their date of inception and on the kinds

designs have long term effects on consumers. This will provide insights into best practices, how long such texts should be displayed on the road before they are either modified, replaced or removed. Future research may also provide insights into what kinds of complementary campaigns or texts may be ideal to replace or supplement the car wreckage texts. Since the study of several artefacts countrywide yielded similar results, this researcher recommends studying fewer texts in future to save on resources, and shorten the duration of study.

REFERENCES

Adams, J. (1995). *Risk* (1st ed.). London: UCL Press.

Angle, H., Greggs, J., Buckley, K., & Goddard, E. (2008). Think! Road safety campaign evaluation post evaluation of the "personal consequences" drink drive campaign. Retrieved March 3, 2014, from Think! website: http://think.dft.gov.uk/pdf/332982/3329861/drinkdrivereport.pdf

Angle, H., Greggs, J., & Goddard, E. (2009). Think! Road safety campaign evaluation post stage: "live with it" speed campaign and motorcycle campaign. Retrieved May 5, 2009, from Think! website: http://think.dft.gov.uk/pdf/332982/3329861/0904-mc-speed.pdf

Awan, F. (2007). *Young People, Identity and the Media: A Study of Conceptions of Self-Identity Among Youth in Southern England* (Doctoral Dissertation). University of Bournemouth, Bournemouth.

Badam, R. T. (2016). Car-wreck sculpture carries vital message. Retrieved May 13, 2019, from The National website: https://www.thenational.ae/uae/transport/car-wreck-sculpture-carries-vital-message-1.216701

Barthes, R. (1967). *The Death of an Author*. Retrieved from http://www.tbook.constantvzw.org/wp-content/death_authorbarthes.pdf

Barthes, R. (1994). *Semniotic Challenge*. Berkeley: University of California Press.

Berger, A A. (2011). *Media Analysis Techniques*. Thousand Oaks: Sage Publishers.

Berger, Arthur A. (2000). *Media and Communication Research Methods: An Introduction to Qualitative and Quantitative Approaches* (3rd ed.). Thousand Oaks, California: Sage Publications.

Bignell, J. (2002). *Media Semiotics: An introduction* (2nd ed.). Machester: Manchester University Press.

Blaze, J. (2018). Car Wreckage Nyeri. Retrieved May 15, 2019, from Twitter website: https://twitter.com/search?q=car%20wreckage%20Nyeri&src=typd

Bouzida, F. (2014). The semiology analysis in media studies - Roland Barthes approach. *SOCIOINT14*, 1001–1007. Retrieved from www.ocerint.org/Socioint14_ebook/papers/293.pdf

Burke, B. (2018). *A Close Look at Close Reading*. 14.

Car wreckage displayed at Westminster in road safety campaign. (2016, July 11). Retrieved January 1, 2017, from STV website: http://stv.tv/news/uk/1360402-car-wreck-displayed-at-westminster-in-road-safety-campaign/

Car wreckage Nyeri. (2014, August 18). Retrieved June 19, 2019, from Twitter website: https://twitter.com/search?q=car+wreckage+nyeri

Chandler, D. (2017). Semiotics for Beginners. Retrieved May 13, 2019, from visual-memory website: http://www.visual-memory.co.uk/daniel/Documents/S4B/

Cohen, D., & Crabtree, B. (2006). RWJF - Qualitative Research Guidelines Project | Sampling | Sampling. Retrieved July 19, 2017, from Robert Wood Johnson Foundation website: http://qualres.org/HomeSamp-3702.html

Curran, J. (2005). Mass media and democracy: a reappraisal. In *James Curran & Michael Gurevitch (eds) Mass media and society*. London; New York: Hodder Arnold; Distributed in the U.S.A by Oxford University Press.

Deery, H. A. (1999). Hazard and risk perception among young novice drivers. *Journal of Safety Research*, *30*(4), 225–236.

Degroote, S., Zinszer, K., & Ridde, V. (2018). Interventions for vector-borne diseases focused on housing and hygiene in urban areas: A scoping review. *Infectious Diseases of Poverty*, *7*(96). https://doi.org/10.1186/s40249-018-0477-5

Delaney, A., Lough, B., Whelan, M., & Cameron, M. (2004). *A review of mass media campaigns in road safety* (p. 83). Retrieved from Monash University Accident Research Center website:

https://pdfs.semanticscholar.org/95e3/1bfea593f051f21bdefc248beb6d6d43132a.pdf

Delhomme, P., Dobbeleer, W. D., Forward, S., & Simões, A. (2009). *Manual for Designing, Implementing, and Evaluating Road Safety Communication Campaigns* (p. 329). Brussels: Belgian Road Safety Institute (IBSR-BIVV).

Doheny, K. (2014). Car Color Facts and Fictions. Retrieved May 14, 2019, from Edmunds website: www.edmunds.com/car-news/tips-advice/car-color-facts-and-fictions.html

Donovan, R., Henley, N., Jalleh, G., & Slater, C. (1995). *Road safety advertising: An empirical study and literature review*. Canberra: Federal Office of Road Safety.

Douglas, M. (1986). *Risk Acceptability According to the Social Sciences*. Retrieved from https://www.russellsage.org/publications/risk-acceptability-according-to-social-sciences

Douglas, M., & Wildavsky, A. (1982). *Risk and culture: An essay on the selection of technological and environmental dangers*. Berkeley: University of California Press.

Easterling, D. V., & Leventhal, H. (1989). Contribution of concrete cognition to emotion: Neutral symptoms as elicitors of worry about cancer. *Journal of Applied Psychology*, *74*(5), 787–796. https://doi.org/10.1037/0021-9010.74.5.787

Eco, U. (1976). *A Theory of Semiotics*. Bloomington: Indiana University Press.

Elliot, B. (1993). *Road safety mass media campaigns: A meta analysis*. Sidney: Department of Transport and Communication- Federal Office of Road Safety.

Gallix, A. (2010, January 13). In theory: The Death of the Author. *The Guardian*. Retrieved from https://www.theguardian.com/books/booksblog/2010/jan/13/death-of-the-author

Galvani. (2016). Barthes' The Death of the Author Analysis – FYWS: Community & Collaboration. Retrieved May 13, 2019, from FYWS: Community & Collaboration website: https://wp.nyu.edu/communcollab2016/2016/09/12/barthes-the-death-of-the-author-analysis/

Geurts, K., & Wets, G. (2003). *Black Spot Analysis Methods: Literature Review*. 30.

Global Road Safety Partnership. (2018). Our Purpose. Retrieved May 15, 2019, from Global Road Safety Partnership website: https://www.grsproadsafety.org/about/our-purpose/

gui2de Launches Zusha! Road Safety Campaign Nationwide in Kenya. (2015, May 5). Retrieved May 15, 2019, from Georgetown University Initiative on Innovation, Development and Evaluation website: https://gui2de.georgetown.edu/projects/zusha

Gulliver, P., & Begg, D. (2007). Personality factors as predictors of persistent risky driving behaviour and crash involvement among young adults. *Injury Prevention*, *13*, 376–381.

Habyarimana, J., & Jack, W. (2011). Heckle and Chide: Results of a randomized road safety intervention in Kenya. *Journal of Public Economics*, *95*(11), 1438–1446. https://doi.org/10.1016/j.jpubeco.2011.06.008

Hall, S. (1973a). *Encoding and decoding in the television discourse*. Retrieved from www.birmingham.ac.uk/Documents/college-artslaw/history/cccs/stencilled-occasional-papers/1to8and11to24and38to48/SOP07.pdf

Hall, S. (1973b). Encoding/Decoding. In *Centre for Contemporary Cultural Studies (Ed.) Culture, Media, Language: Working Papers in Cultural Studies* (Vol. 1972–1979). London: Hutchinson.

Hébert, L. (2011). Introduction to Semiotics / Signo - Applied Semiotics Theories. Retrieved May 15, 2019, from Theoretical Semiotics on the Web website: http://www.signosemio.com/elements-of-semiotics.asp

Henthorme, T. L., LaTour, M. S., & Nataraajan, R. (1993). Fear Appeals in Print Advertising: An Analysis of Arousal and Ad Response. *Journal of Advertising*, *22*(2), 59–69.

Hoekstra, T., & Wegman, F. (2011). Improving the effectiveness of road safety campaigns: Current and new practices. *IATSS Research*, *34*(2), 80–86.

Holloway, I. (1997). *Basic Concepts for Qualitative Research*. London: Blackwell Science.

Hornby, S. A., Cowie, A. P., & Lewis, J. W. (2018). In *Oxford advanced learner's dictionary*. London: Oxford University Press.

Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953). *Communication and persuasion; psychological studies of opinion change*. In *Communication and Persuasion; Psychological Studies of Opinion Change*. New Haven, CT, US: Yale University Press.

Iipinge, S. M., & Owusu-Afriyie, P. (2014). Assessment of the Effectiveness of Road Safety Programmes in Namibia: Learners' Perspective. *Journal of Emerging Trends in Economics and Management Sciences*, *5*(6), 532–537.

Ithula, M. (2009, October 12). Beware, here are the black spots of our highways. *The Standard*. Retrieved from www.standardmedia.co.ke/article/1144026208/beware-here-are-the-black-spots-of-our-highways

ITV. (2016). Car wreckage displayed at Westminster in road safety campaign. Retrieved May 13, 2019, from STV News website: https://stv.tv/news/uk/1360402-car-wreckage-displayed-at-westminster-in-road-safety-campaign/

Iversen, H., & Rundmo, T. (2002). Personality, risky driving and accident involvement among Norwegian drivers. *Personality and Individual Differences*, *33*(8), 1251–1263.

Johansson, R. (2009). Vision zero-implementing a policy for traffic safety. *Safety Science*, *47*(6), 826–831.

Jones, S. (2006). Teaching Media Text with the Key Concepts. *English Quarterly*, *25*, 2–3.

Kaburu, M. (2015a). *Use of image processing in drowsiness detection among drivers to reduce road traffic accidents in Kenya* (Doctoral Dissertation, University of Nairobi). Retrieved from pdfs.semanticscholar.org/4f2a/b8ecf62e3d653ef4663654995372a47fa6b4.pdf

Kaburu, M. (2015b). *Use of image processing in drowsiness detection among drivers to reduce road traffic accidents in Kenya* (Doctoral Dissertation, University of Nairobi). Retrieved from pdfs.semanticscholar.org/4f2a/b8ecf62e3d653ef4663654995372a47fa6b4.pdf

Kajilwa, G. (2016, December 24). NTSA lists over 50 blackspots across the country's major highways. *The Standard*. Retrieved from www.standardmedia.co.ke/article/2000227817/ntsa-lists-over-50-blackspots-across-the-country-s-major-highways

Kajilwa, Graham. (2016, December 24). NTSA lists over 50 blackspots across the country's major highways. *The Standard*. Retrieved from https://www.standardmedia.co.ke/article/2000227817/ntsa-lists-over-50-blackspots-across-the-country-s-major-highways

Kariuki, J. (2017, October 3). NTSA names major killers on roads. *Daily Nation*. Retrieved from
https://www.nation.co.ke/lifestyle/smartcompany/NTSA-names-major-killers-on-
roads/1226-4122636-8qtss2/index.html

Kates, S. M., & Shaw-Garlock, G. (1999). The Ever Entangling Web: A Study of Ideologies and
Discourses in Advertising to Women. *Journal of Advertising*, *28*(2), 33–49. Retrieved
from JSTOR.

Kenya Police Service. (2019). Accident Black Spots. Retrieved June 15, 2019, from
Kenyapolice.go.ke website: http://www.kenyapolice.go.ke/accident-black-spots.html

Ketcham, A., Wu, E. C., & Fitzsimons, G. J. (2012). How disgust enhances the effectiveness of
fear appeals. *Journal of Marketing Research*, *49*(3), 383–393.
https://doi.org/10.1509/jmr.07.0364

Kimumwe, P. (2012). *Audience reception of sexual behaviour change media messages in
Kampala - Uganda case study of get off the sexual network campaign.* (Masters
Dissertation). University of Nairobi, Nairobi.

Kiplagat, R. (2017, January 19). NTSA says road carnage reduced by 13pc in 2016. *The
Standard*. Retrieved from https://www.standardmedia.co.ke/article/2000230424/ntsa-
says-road-carnage-reduced-by-13pc-in-2016

Kitheka, G. K. (2014). *Influence of Implementation of the Revised Traffic Rules on Road
Accidents in the Transport Sector in Nairobi County, Kenya* (Masters Dissertation,
University of Nairobi). Retrieved from
http://erepository.uonbi.ac.ke/bitstream/handle/11295/74877/Kitheka_Influence%20of%2
0implementation%20of%20the%20revised%20traffic%20rules%20on%20road%20accid
ents.pdf?sequence=2

Koech, G. (2016, January 15). 3,057 killed in road accidents last year, says NTSA report. *The Star*. Retrieved from https://www.the-star.co.ke/news/2016-01-15-3057-killed-in-road-accidents-last-year-says-ntsa-report/

Koimur, I., Kangogo, L. K., & Nyaoga, R. B. (2014). Assessment of Commuter Preferences of 14-Seater Public Service Vehicles versus Alternative Modes of Public Service Transport in Nairobi City. *Journal of Business*, *3*(1), 115–131.

Lakoff, G., & Johnson, M. (2003). *Metaphors We Live By*. Retrieved from https://www.press.uchicago.edu/ucp/books/book/chicago/M/bo3637992.html

Lanir, L. (2012, December 27). Charles Sanders Peirce's Semiotics – The Triadic Model. Retrieved June 15, 2019, from Decoded Science website: https://www.decodedscience.org/charles-sanders-peirces-semiotics-the-triadic-model/22974

Leventhal, H., & Niles, P. (1964). A field experiment on fear arousal with data on the validity of questionnaire measures. *Journal of Personality*, *32*(3), 459–479. https://doi.org/10.1111/j.1467-6494.1964.tb01352.x

Lewis et al. - 2007 - The role of fear appeals in improving driver safet.pdf. (n.d.). Retrieved from https://files.eric.ed.gov/fulltext/EJ801198.pdf

Lewis, I. M., Watson, B. C., & White, K. M. (2008). Predicting future speeding behaviour: The appeal of positive emotional appeals for high risk road users. *High Risk Road Users - Motivating Behaviour Change: What Works and What Doesn't Work?* Presented at the National Conference of the Australasian College of Road Safety and the Travelsafe Committee of the Queensland Parliament, Brisbane. Retrieved from https://eprints.qut.edu.au/15390/

Lewis, I., Watson, B., Tay, R., & White, K. M. (2007). The role of fear appeals in improving driver safety: A review of the effectiveness of fear-arousing (threat) appeals in road safety advertising. *International Journal of Behavioral Consultation and Therapy*, *3*(2), 203–222. https://doi.org/10.1037/h0100799

Lewis, Ioni, Watson, B., & M. White, K. (2008). Predicting future speeding behaviour: The appeal of positive emotional appeals for high risk road users. *Proceedings High Risk Road Users - Motivating Behaviour Change: What Works and What Doesn't Work?*, *4*. Retrieved from https://www.researchgate.net/publication/27474471_Predicting_future_speeding_behavior_The_appeal_of_positive_emotions_appeals_for_high_risk_road_users

Lincoln, Y. S., & Guba, E. (1985). *Naturalistic Inquiry* (1st edition). Beverly Hills, Calif: SAGE Publications.

Lindlof, T. R., & Taylor, B. C. (2010). *Qualitative Communication Research Methods* (Third edition). Thousand Oaks, Calif: SAGE Publications, Inc.

Loo, R. (1984). Correlates of reported attitude towards and use of seat belts. *Accident Analysis & Prevention*, *16*(5), 417–421. https://doi.org/10.1016/0001-4575(84)90054-X

Lukyamuzi, A., & Friday, D. (2014). Road Communication Technologies and Road Safety Awareness in Uganda. *Researchjournali's Journal of Management*, *2*(5), 1–14.

Machin, M. A., & Sankey, K. S. (2008). Relationships between young drivers' personality characteristics, risk perceptions, and driving behaviour. *Accident Analysis and Prevention*, *40*(2), 541–547.

Manning, P., & Cullum-Swan, B. (1994). Narrative, content and semiotic analysis. In *N.K Denzin & Y.S Lincoln (eds) Handbook of Qualiatative Research* (pp. 445–477). Thousand Oaks: SAGE Publications.

Manyara, C. G. (2013). Combating road traffic accidents in Kenya: A challenge for an emerging economy. Retrieved July 23, 2017, from KESSA website: www.kessa.org/yahoo_site_admin/assets/docs/17_Manyara_KESSA_Proceedings_2013. 25183342.pdf

Manza, A. (2018, April 9). First Month of Accidents Mapped! Retrieved June 15, 2019, from The Blog website: https://ma3routeblog.wordpress.com/

Mayr, S. W. (2013). Reading culture in TV commercials: A semiotic analysis of a TV commercial for the purpose of teaching culture to foreign language students. *International Journal of Arts and Commerce*, *2*(1), 86–100.

McCormick, D, Mitullah, W., Chitere, P. O., Orero, R., & Ommeh, M. (2013). *Institutions and Business Strategies of Matatu Operators: A Case Study Report* (ACET Project 14: Paratransit Operations and Regulation in Nairobi No. Working paper 14-03; p. 70). Retrieved from ACET website: http://www.uct.ac.za/sites/default/files/image_tool/images/313/Publications/Project_Rep ort/2013/McCormick-et-al-2013.pdf

McCormick, Dorothy, Mitullah, W., Chitere, P., Orero, R., & Ommeh, M. (2013). Paratransit Business Strategies: A Bird's-Eye View of Matatus in Nairobi. *Journal of Public Transportation*, *16*(2), 135–152. https://doi.org/10.5038/2375-0901.16.2.7

McLeod, S. (2014). Sampling Methods. Retrieved June 15, 2019, from Simple Psychology website: https://www.simplypsychology.org/sampling.html

Media. (2009). Retrieved May 4, 2016, from Media & Literacy website: https://medialiteracylakehead.wordpress.com/2009/11/12/hello-world/

Meja, F. (2017, August 28). ntensified anti-drink driving campaign making roads safer. *Daily Nation*. Retrieved from www.nation.co.ke/oped/Opinion/-Intensified-anti-drink-driving-campaign-making-roads-safer-/440808-4073390-irv7od/index.html

Mitullah and Onsate - Formalising the Matatu Industry in Kenya.pdf. (n.d.). Retrieved from http://erepository.uonbi.ac.ke/bitstream/handle/11295/98621/Winnie_Formalising%20the%20Matatu%20Industry%20in%20Kenya%2C%20Policy%20Twists%20and%20Turns.pdf?sequence=1&isAllowed=y

Mitullah, W. V., & Onsate, S. S. (2013). *Formalising the Matatu Industry in Kenya*. Retrieved from http://erepository.uonbi.ac.ke/bitstream/handle/11295/98621/Winnie_Formalising%20the%20Matatu%20Industry%20in%20Kenya%2C%20Policy%20Twists%20and%20Turns.pdf?sequence=1&isAllowed=y

Mogambi, H., & Nyakeri, F. (2015). Media Priming of Road Traffic Accidents in Kenya: Praxis, Patterns, and Issues. *SAGE Open*, *5*(4). https://doi.org/10.1177/2158244015606491

Möller - Safety and decision-making.pdf. (n.d.). Retrieved from https://www.kth.se/polopoly_fs/1.132891.1550157545!/Menu/general/column-content/attachment/niklas-moller-lic-fulltext.pdf

Möller, N. (2006). *Safety and decision-making*. Retrieved from https://www.kth.se/polopoly_fs/1.132891.1550157545!/Menu/general/column-content/attachment/niklas-moller-lic-fulltext.pdf

Muli, N. (2013, July 16). *Safety First Operations*. Retrieved from http://www.ntsa.go.ke/images/docs/safety%20first%20press%20release.pdf

Muter, B. A., Gore, M. L., Riley, S. J., & Lapinski, M. K. (2013). Evaluating Bovine Tuberculosis Risk Communication Materials in Michigan and Minnesota for Severity, Susceptibility, and Efficacy Messages. *Wildlife Society Bulletin (2011-)*, *37*(1), 115–121. Retrieved from JSTOR.

Mwangi, W. (2017, May 25). "Boda boda" makes it to Oxford English Dictionary. *The Star*. Retrieved from www.the-star.co.ke/news/2017/05/25/boda-boda-makes-it-to-oxford-english-dictionary_c1567977

Mweresah, A. A. (2011). *Priming of road safety information by print media in Kenya: A study of The Nation Newspaper* (Masters Dissertation). University of Nairobi, Nairobi.

NTSA. (2018). Accident Statistics. Retrieved June 18, 2018, from NTSA website: www.ntsa.go.ke/index.php?option=com_content&view=article&id=213&Itemid=706

NTSA proposes tough rules in bid to tame heavy commercial vehicles and prevent road accidents : The Standard. (2016, July 26). Retrieved June 26, 2016, from The Standard website: https://www.standardmedia.co.ke/article/2000209823/national-transport-and-safety-authority-ntsa-proposes-tough-rules-in-bid-to-tame-heavy-commercial-vehicles-and-prevent-road-accidents

Nyamori, M. (2015, December 23). 160 black spots where you could die on Kenyan roads. Retrieved December 28, 2015, from The Standard website: www.standardmedia.co.ke/article/2000186070/160-black-spots-where-you-could-die-on-kenyan-roads

Nyanoti, J. N. (2015). *Media and the creation of self-identity: An assessment of how the Kenyan youth construct their self-identities through consumption of television advertisements.* (PhD Dissertation, University of Nairobi). Retrieved from www.standardmedia.co.ke/article/2000209823/national-transport-and-safety-authority-ntsa-proposes-tough-rules-in-bid-to-tame-heavy-commercial-vehicles-and-prevent-road-accidents

Nyantong'a, B. M. (2016). *Representation of child rights messages in information, education and communication materials in Kenya.* (Masters Dissertation). University of Nairobi, Nairobi.

Obwocha, B. (2015, October 28). Kenya road safety laws weak - WHO. *Daily Nation*. Retrieved from www.nation.co.ke/news/Kenya-road-safety-laws/1056-2933132-ormfx5/index.html

Odero, W., Khayesi, M., & Heda, P. M. (2003). Road traffic injuries in Kenya: Magnitude, causes and status of intervention. *Injury Control and Safety Promotion*, *10*(1–2), 53–61. https://doi.org/10.1076/icsp.10.1.53.14103

Oirere, S. (2013). World Highways - East African authorities trying to cut spiraling road death rates. Retrieved June 19, 2019, from World Highways website: www.worldhighways.com/sections/emergent/features/east-african-authorities-trying-to-cut-spiraling-road-death-rates/

Othaya Yetu News. (2014, August). Othaya Yetu News on Twitter: "The wreckage placed in Nyeri town by Kenya Roads Safety to warn motorists has been stolen and sold to scrap metal dealers @Ma3Route" / Twitter. Retrieved June 19, 2019, from Twitter website: https://twitter.com/othayayetu/status/501332113585881090

Patton, M. (n.d.). *Qualitative Research and Evaluation Methods* (2nd ed.). Thousand Oaks, California: SAGE Publications.

Phillips, R. O., Ulleberg, P., & Vaa, T. (2011). Meta-analysis of the effect of road safety campaigns on accidents. *Accident Analysis & Prevention*, *43*(3), 1204–1218. https://doi.org/10.1016/j.aap.2011.01.002

Punch, K. F. (2005). *Introduction to social research: Quantitative and qualitative approaches*. London: SAGE Publications.

Reading Media Texts. (2019). Retrieved June 15, 2019, from Literacy Today website: https://www.literacytoday.ca/primary/reading/reading-strategies/reading-media-texts/

Road traffic injuries. (2015). Retrieved May 14, 2019, from Bulletin website: https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries

Road traffic injuries. (2018a). Retrieved June 19, 2019, from World Health Organization website: https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries

Road traffic injuries. (2018b). Retrieved June 19, 2019, from World Health Organization website: https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries

Robinson, A. (2011a, September 23). An A to Z of Theory Roland Barthes and Semiotics. *Ceasefire Magazine*. Retrieved from https://ceasefiremagazine.co.uk/in-theory-barthes-1/

Robinson, A. (2011b, September 30). An A to Z of Theory Roland Barthes's Mythologies: A Critical Theory of Myths. *Ceasefire Magazine*. Retrieved from https://ceasefiremagazine.co.uk/in-theory-barthes-2/

Rubin, R. B., Rubin, A. M., & Haridakis, P. M. (2009). *Communication Research: Strategies and Sources* (7 edition). Belmont, CA: Cengage Learning.

Sangira, S. (2013, July 17). Government launches road safety campaign. *The Star*. Retrieved from www.the-star.co.ke/news/2013/07/17/government-launches-road-safety-campaign_c803208

Saussure, F. de, Bally, C., Sechehaye, A., Riedlinger, A., & Baskin, W. (1966). *Course in general linguistics*. New York: McGraw-Hill Book Co.

saving_millions_lives_en.pdf. (n.d.). Retrieved from www.who.int/violence_injury_prevention/publications/road_traffic/saving_millions_lives_en.pdf?ua=1&ua=1

Shackleton, C. (2007). *Research Methodology*. Retrieved from https://repository.up.ac.za/bitstream/handle/2263/24722/05chapter5.pdf?sequence=6&isAllowed=y

Sims, A. (2016, July 11). Dead driver's parents display son's wrecked car outside Parliament in call for tougher dangerous driving sentences. *The Independent*. Retrieved from www.independent.co.uk/news/uk/home-news/dead-drivers-parents-display-sons-wrecked-car-outside-parliament-in-call-for-tougher-dangerous-a7131041.html

Sleath, E. (2014, October 20). Fight to reduce road toll [Item]. http://www.abc.net.au/local/stories/2014/10/20/4110702.htm

Slovic, P. (2009). *The perception of risk*. London: Earthscan Publications Ltd.

Spence, H. E., & Moinpour, R. (1972). Fear Appeals in Marketing. A Social Perspective. *Journal of Marketing*, *36*(3), 39–43. https://doi.org/10.2307/1251038

Sternthal, B., & Craig, C. S. (1974). Fear Appeals: Revisited and Revised. *Journal of Consumer Research*, *1*(3), 22–34.

Tanner, J. F., Hunt, J. B., & Eppright, D. R. (1991). The Protection Motivation Model: A Normative Model of Fear Appeals. *Journal of Marketing*, *55*(3), 36–45. https://doi.org/10.2307/1252146

VerCauteren, K. C., Lavelle, M. J., & Campa, H. I. (2018). Persistent Spillback of Bovine Tuberculosis From White-Tailed Deer to Cattle in Michigan, USA: Status, Strategies, and Needs. *Frontiers in Veterinary Science*, *5*. https://doi.org/10.3389/fvets.2018.00301

WÅhlberg, A. E. A. (2001). The theoretical features of some current approaches to risk perception. *Journal of Risk Research*, *4*(3), 237–250. https://doi.org/10.1080/13669870152023791

Walubengo, D. (2014). Othaya Yetu News on Twitter: "The wreckage placed in Nyeri town by Kenya Roads Safety to warn motorists has been stolen and sold to scrap metal dealers @Ma3Route" / Twitter. Retrieved May 15, 2019, from Twitter website: https://twitter.com/OthayaYetu/status/501332113585881090

Wanjala, E. (2017, May 13). Road fatalities fall by 6.7% − NTSA. *The Star*. Retrieved from www.the-star.co.ke/news/2017/05/13/road-fatalities-fall-by-67-ntsa_c1560498

WHO. (2004a). Road Safety. Retrieved June 19, 2016, from WHO website: https://www.who.int/world-health-day/previous/2004/en/

WHO. (2004b). World Health Day. Road Safety. Retrieved August 8, 2016, from Bulletin website: www.who.int/world-health-day/previous/2004/en/

WHO. (2010). WHO | Road safety in Kenya. Retrieved May 29, 2017, from WHO website: https://www.who.int/violence_injury_prevention/road_traffic/countrywork/ken/en/

WHO. (2011a). *Global Plan for the Decade of Action for Road Safety 2011-2020*. Retrieved from https://www.who.int/roadsafety/decade_of_action/plan/plan_english.pdf

WHO. (2011b). *Saving Millions of Lives*. Retrieved from www.who.int/violence_injury_prevention/publications/road_traffic/saving_millions_lives_en.pdf?ua=1&ua=1

WHO. (2013a). Global status report on road safety. Retrieved April 5, 2015, from Bulletin website: www.who.int/violence_injury_prevention/road_safety_status/2013/en/

WHO. (2013b). WHO | Global status report on road safety 2013. Retrieved June 19, 2019, from WHO website: http://www.who.int/violence_injury_prevention/road_safety_status/2013/en/

WHO. (2018a). Road traffic injuries. Retrieved May 14, 2019, from Bulletin website: https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries

WHO. (2018b). WHO Global status report on road safety 2018. Retrieved May 14, 2019, from WHO website: www.who.int/violence_injury_prevention/road_safety_status/2018/en/

WHO | Global status report on road safety 2015. (2015). Retrieved June 19, 2017, from WHO website: http://www.who.int/violence_injury_prevention/road_safety_status/2015/en/

Williams, K C. (2012). *Fear appeal theory*. Retrieved from http://www.aabri.com/manuscripts/11907.pdf

Williams, Kaylene C. (2012). Fear Appeal Theory. *Research in Business and Economic Journal*. Retrieved from http://www.aabri.com/manuscripts/11907.pdf

Wimmer, R D, & Domminick, J. R. (n.d.). *Mass media research: An introduction* (10th ed.). Belmont: Wadsworth.

Wimmer, Roger D., & Dominick, J. R. (2013). *Mass Media Research: An Introduction* (10th edition). Australia: Cengage Learning.

Witte, K. (1994). Fear control and danger control: A test of the extended parallel process model (EPPM). *Communication Monographs*, *61*(2), 113–134. https://doi.org/10.1080/03637759409376328

Witte, K., & Allen, M. (2000). A Meta-Analysis of Fear Appeals: Implications for Effective Public Health Campaigns - Kim Witte, Mike Allen, 2000. *Health Education and Behavior*, *27*(5), 591–615.

World Highways. (2013). East African authorities trying to cut spiraling road death rates. Retrieved August 8, 2015, from www.worldhighways.com/sections/emergent/features/east-african-authorities-trying-to-cut-spiraling-road-death-rates/

Wreckage from fatal car accident "on show" in road safety campaign. (2017a, May 3). Retrieved May 14, 2019, from ITV News website: https://www.itv.com/news/meridian/update/2017-05-03/wreckage-from-fatal-car-accident-on-show-in-road-safety-event/

Wreckage from fatal car accident "on show" in road safety campaign. (2017b, May 3). Retrieved June 19, 2019, from ITV News website: www.itv.com/news/meridian/update/2017-05-03/wreckage-from-fatal-car-accident-on-show-in-road-safety-event/

Yakin, H. S. Mohd., & Totu, A. (2014). The Semiotic Perspectives of Peirce and Saussure: A Brief Comparative Study. *Procedia - Social and Behavioral Sciences*, *155*, 4–8. https://doi.org/10.1016/j.sbspro.2014.10.247

Zusha road safety campaign launched, passengers urged to speak out against rogue drivers. (2015, May). *The Star*. Retrieved from www.the-star.co.ke/news/2015/05/09/zusha-road-safety-campaign-launched-passengers-urged-to-speak-out_c1132836

APPENDICES

APPENDIX I: INTERVIEW GUIDE FOR KIS (KENYA POLICE AND NTSA)

Dear informant: This interview seeks to investigate meanings of car wreckage texts deployed as a tactic in road safety awareness in Kenya. It is purely conducted for academic purpose. The responses will be kept strictly confidential.

1. What is the history and philosophy behind the deployment of the car wreckage texts on Kenyan roads? Who came up with the idea, designed and implemented it? When were they deployed? How long was it intended to last?

2. What were the objectives of the campaign?

3. What meanings were encoded in the car wreckage artefacts by the designers / implementers?

4. What were the components of the texts?

5. Who were the target audiences/consumers? What were the expected effects of the texts?

6. In what ways have the media texts affected the conduct of motorists on the road and/or influenced RTA statistics?

7. Was the car wreckage texts technique accompanied by any other campaigns?

APPENDIX II: INTERVIEW GUIDE FOR PARTICIPANTS (MOTORISTS)

Dear Participant: This interview aims at investigating the meanings of car wreckage texts used in road safety campaigns in Kenya. It is purely conducted for academic purpose. The responses will be kept strictly confidential.

1. Have you ever spotted such car wreckage texts?

2. What do the car wreckage texts displayed on the roads mean to you?

3. Describe how/what you feel and react whenever you see a car wreckage artefact displayed on the road while driving / riding?

4. In what ways have the displayed car wreckage texts affected your conduct on the road?

APPENDIX III: CERTIFICATE OF FIELDWORK

UNIVERSITY OF NAIROBI
COLLEGE OF HUMANITIES & SOCIAL SCIENCES
SCHOOL OF JOURNALISM & MASS COMMUNICATION

Telegram: Journalism Varsity Nairobi
Telephone: 254-02-3318262, Ext. 28080, 28061
Director's Office: +254-204913208 (Direct Line)
Telex: 22095 Fax: 254-02-245566
Email: director-soj@uonbi.ac.ke

P.O. Box 30197-00100
Nairobi, GPO
Kenya

REF: CERTIFICATE OF FIELDWORK

This is to certify that all corrections proposed at the Board of Examiners meeting held on 25/07/2018 in respect of M.A/PhD. Project/Thesis Proposal defence have been effected to my/our satisfaction and the project can be allowed to proceed for fieldwork.

Reg. No: K50/76597/2009

Name: AMIMO ENOCK OMONDI

Title: INVESTIGATING MEANINGS OF FEAR APPEAL TEXTS DISPLAYED ON KENYAN ROADS FOR SAFETY

Dr Joseph Nyanoti

SUPERVISOR	SIGNATURE	15/10/2018 DATE

Dr Samuel Siringi

ASSOCIATE DIRECTOR	SIGNATURE	15/10/2018 DATE

Dr. Ndeti Ndati

DIRECTOR	SIGNATURE/STAMP	19.10.18 DATE

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http://jetems.scholarlinkresearch.com

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UNIVERSITY OF NAIROBI
COLLEGE OF HUMANITIES & SOCIAL SCIENCES
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Telegram: Journalism Varsity Nairobi
Telephone: 254-02-3318262, Ext. 28060, 28061
Director's Office: +254-204913208 (Direct Line)
Telex: 22095 Fax: 254-02-245566
Email: director-soj@uonbi.ac.ke

P.O. Box 30197-00100
Nairobi, GPO
Kenya

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This is to certify that all corrections proposed at the Board of Examiners meeting held on 05/04/2019 in respect of M.A/PhD. Project/Thesis defence have been effected to my/our satisfaction and the project/thesis can be allowed to proceed for binding.

Reg. No: K50/76597/2009

Name: AMIMO ENOCK OMONDI

Title: MEANINGS OF CAR WRECKAGE TEXB DISPLAYED ON KENYAN HIGHWAYS AS A TACTIC FOR ROAD SAFETY AWARENESS

DR. JOSEPH NYANOTI
SUPERVISOR
SIGNATURE
15/11/2019
DATE

Dr Samuel Siringi
ASSOCIATE DIRECTOR
SIGNATURE
25/11/2019
DATE

Prof. Ndeti Ndati
DIRECTOR
SIGNATURE/STAMP
25 NOV 2019
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