

**MULTIMODALITY IN PROTEST DISCOURSE ON TWITTER: A CASE OF
ANTI-POLICE BRUTALITY HASHTAG ACTIVISM IN KENYA**

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**A Research Thesis Submitted to Graduate School in Partial Fulfilment of the
Requirements for the Conferment of Doctor of Philosophy Degree in Applied
Linguistics of Laikipia University**

SEPTEMBER, 2025

DECLARATION AND RECOMMENDATION

Declaration

This thesis is my original work and has not been presented for conferment of a degree in any other university or any other award.

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Recommendation

We confirm that this thesis has been presented with our approval as university supervisors.

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DEDICATION

This work is dedicated to all victims of police brutality, whose lives were tragically cut short, and the twittersphere, who take their time to engage in digital activism. Your stories continue to resonate, fuelling the ongoing battle for reform and accountability.

To Emmanuel and Benson Ndwiga, whose tragic story and the subsequent hashtag activism form the backbone of this study, this work honours your memory. May justice be served for you and your family.

To my late brother, Davies, a victim of police brutality and whose untimely death remains a painful reminder of the need for justice, this work is a tribute to your memory. If only Twitter's hashtag activism had been robust back then, perhaps our family would have found solace in the collective power of digital voices rallying for your justice.

Finally, I dedicate this work to the enduring pursuit of social justice and police reforms. I am honoured to contribute to this important discourse through my academic endeavours.

#EndPoliceBrutality

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ABSTRACT

Twitter, a social networking site facilitating the sharing of user generated content and participatory interactions, has become a popular platform for hashtag activism. The platform presents a highly multimodal discourse in which diverse communicative modes, shaped by its technological affordances, co-occur within tweets. Understanding how meaning is constructed through multiple modes on this platform is critical to grasping Twitter's full communicative potential. This study investigates how Kenyans on Twitter deploy multimodal resources to construct meaning in anti-police brutality tweets, addressing a broader need to understand protest discourse in the digital age of global activism and social justice struggles. The specific objectives of the study were to analyse the meaning potentials communicated by textual resources; to examine the meaning potentials conveyed by visual resources; and to explore the relationships between textual and visual resources, all within the context of anti-police brutality hashtag activism tweets in Kenya. The research was conducted within the Multimodal Critical Discourse Analysis framework and the generalized System of Image-Text Relations model. A case study design, focusing on the 2021 alleged police killing of two brothers in Embu, Kenya, was utilized. Tweets tagged with the hashtags #JusticeForKianjokomaBrothers and #JusticeForEmmanuelAndBenson were collected using Mecodify, an open-source tool that integrates with Twitter's API. Purposive sampling, based on temporal, phenomena, individual, and thematic criteria was used, resulting in a dataset of 496 multimodal tweets. Data analysis employed automated annotation tools, natural language processing techniques, content analysis, and multimodal analysis toolkits for lexical, visual and video analysis. Textual resources analysed include tweet length, lexical features, orthography, hashtags, mentions, emojis, and hyperlinks. Visual resources examined comprise photographs, screen captures, posters, illustrations, drawings, memes, text images, videos, and GIFs. Key findings reveal that textual and visual resources were strategically deployed to humanize the victims, critique police actions, construct identities, express solidarity and emotionally engage the audience. Among the intermodal relations identified, equal-complementary status was predominant. Elaboration emerged as the most dominant logico-semantic relation, alongside a notable blending of multiple relations. The study concludes that tweets are hyper-modal, leveraging Twitter's technological affordances to integrate diverse modes that interact complementarily to create layered meanings. It advances the field of multimodality by extending analytical tools to include digital-specific technical resources and proposing refinements to visual-text relational models that better capture the dynamic, interactive character of digital discourse. The findings may hold implications for linguists and policymakers by highlighting the role of multimodality in interactive digital discourses and offering insights into opinions expressed in social justice campaigns. Further research is recommended on multimodal activism across diverse social justice contexts to deepen the understanding of evolving communication practices on digital platforms.

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ACRONYMS AND ABBREVIATIONS

AoIR	Association of Internet Researchers
API	Application Programming Interface
BLM	Black Lives Matter
CDA	Critical Discourse Analysis
CLL	Character Length Limit
CMC	Computer Mediated Communication
CMD	Computer Mediated Discourse
CMDA	Computer Mediated Discourse Analysis
CSV	Comma Separated Values
CTA	Call to Action
CS	Cabinet Secretary
DCI	Director of Criminal Investigations
DCOE	Discourse-Centred Online Ethnography
GIF	Graphics Interchange Format
ID	Identifier
IG	Inspector General
IMC	Internet Mediated Communication
IPOA	Independent Policing Oversight Authority
ISERC	Institutional Scientific Ethics Review Committee
JPG	Joint Photographic Group
KOT	Kenyans On Twitter
KWIC	Key Word in Context

LD	Lexical Density
MCDA	Multimodal Critical Discourse Analysis
MP	Mother's Photograph
NACOSTI	National Commission for Science, Technology and Innovation
NLP	Natural Language Processing
NPS	National Police Service
PNG	Portable Network Graphics
PS	Permanent Secretary
QCA	Qualitative Content Analysis
SARS	Special Anti-robbery Squad
SFL	Systematic Functional Linguistics
SMS	Short Message Service
SNS	Social Networking Sites
UGC	User-Generated Content
UGSV	User-Generated Short Video
URL	Uniform Resource Locator
VP	Victims' Photograph
WWW	World Wide Web

OPERATIONAL DEFINITION OF TERMS

The following terms are defined as they are operationalized within the specific context of this study. They are functional working definitions intended to clarify how each term is applied in the study's focus on multimodal protest discourse on Twitter.

Harvesting: An automated collection of data from the Twitter platform using specialized software and based on predefined parameters to build a dataset for analysis.

Hashtag: A combination of words or phrases with no spacing and preceded by the hash (#) symbol which provides a means of grouping messages on Twitter.

Images: Static visual content in the media part of the tweet.

Interactive resources: Twitter identifiers predefined by the platform's system design and used to connect the Twittersphere. These include hashtags, mentions, and hyperlinks.

Meaning potentials: The context-specific range of meanings that textual and visual resources on Twitter communicate, based on their features and how they are used or interpreted in protest-related tweets. These meanings may include literal, connotative, emotional, cultural, and ideological interpretations, as identified through a multimodal critical discourse approach.

Mode: A socially and technologically organized set of meaning-making resources available on Twitter. Modes are grouped into two broad categories based on the platform's design: the textual mode, which includes linguistic elements, emojis, and interactive features (such as hashtags, hyperlinks and mentions); and the visual mode, which consists of static and dynamic visuals like images, videos, and GIFs

Modal affordance: What a mode (such as text, image, or emoji) can do and is typically used for on Twitter, based on repeated user practices and platform conventions. It reflects the mode's communicative possibilities and limitations within the context of digital protest discourse.

Multimodal tweets: Tweets that integrate multiple forms of semiotic resources such as texts, interactive elements, and visuals.

Multimodality: An analytical approach that examines how meaning is constructed through the interaction of multiple semiotic resources such as text, mentions, emojis, hashtags, and visuals, within the technological and social affordances of Twitter. It involves identifying these modes and analysing how they combine to create to communicate protest messages in tweets.

Multimodal ensemble: A unit of analysis in this study referring to a tweet that brings together different types of semiotic resources into a single communicative whole. The focus is on how these components interact to convey protest messages.

Police brutality: The use of excessive and unjustified force by police officers on civilians resulting in physical harm or death to the victim(s).

Publish a tweet: To post a tweet on Twitter, thereby making it visible to other users in accordance with the account's privacy settings.

Populating: An automated process of filling in the tweet database.

Rehydration: An automated action of retrieving full tweets from Twitter live site using the tweet's ID.

Semiotic resources: The communicative tools shaped by social, cultural, and technological context of Twitter. These include lexical items, orthographic features, interactive elements (such as hashtags, mentions, and hyperlinks), and visuals such as images, videos, GIFs, and memes.

Technological affordances: The design features of the Twitter platform, such as character limits, hashtag functionality, and options for uploading visuals that enable and constrain how users compose, share, and interact with messages.

Tweet text: The written component of the tweet which includes lexical items, punctuations, hashtags, emojis, mentions, hyperlinks as they appear in the body of the tweet.

Trending topic: A hashtag on Twitter that many people are tweeting about and is deemed the most popular at a particular time.

Tweet: A micro post or message posted on Twitter / as a verb is the activity of sending out tweets.

Tweet ID: The unique identification number generated by Twitter for each tweet.

Tweeter: A person who posts messages on the Twitter platform.

Twitter API: A pre-defined interface with a set of instructions where the Twitter platform exchanges information with other programmes.

Twittersphere: Users of Twitter considered collectively.

Visuals: Media-based elements within a tweet, such as static images, videos, and GIFs, that contribute to the meaning being communicated alongside the tweet's text.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

In an era marked by rising social injustices and the increasing use of social media platforms for activism, digital spaces have become central to protest discourse. This study focuses on the multimodal dimension of protest discourse on Twitter, particularly in anti-police brutality hashtag activism tweets in Kenya. This background examines the evolution of social media communication, Twitter's techno-discursive features, hashtag activism, and multimodality in digital communication, situating the research within the broader context of digital communication.

1.1.1 Social Media Communication

The evolution of communication technologies has created new digital social networks which have significantly transformed how people communicate both at interpersonal and group levels. Digital communication has become integral to personal and professional lives, enabling interactions across various platforms. The proliferation of smartphones, described by Alfawareh and Jusoh (2017) as pocket minicomputers, has facilitated easy access to internet hence increasing the use of digital social platforms. These phones enable the convergence of different technologies into a single, portable and ubiquitous device which allows users to engage with diverse digital platforms conveniently (Álvarez, 2016). The technologies have revolutionized the platforms used, the nature of interactions, the scope of communication, and the dynamics of engagement, positioning social networking sites (SNS) as crucial communication platforms.

SNSs, operating within the broader framework of Web 2.0, refer to sites characterized by participatory information sharing, user generated content (UGC), collaboration, multiple modes and increased interactivity (Herring, 2019). These platforms include blogs, microblogs, wikis and SNSs. Through the UGC affordance, users become producers making the platforms an integral part of everyday life, shaping and transforming interactions in society (D'Ambrosio, 2019). Examples of SNSs include Tumbler, YouTube, MySpace, LinkedIn, Facebook, Instagram, WhatsApp, TikTok and Twitter.

These social media platforms have emerged as powerful tools for activism, providing spaces where people can mobilize, share information and exchange viewpoints at unprecedented speeds and with ease (Housley et al., 2018). Key features of social media, such as interactivity, UGC, and the lack of traditional gatekeepers, enable users to freely express their opinions on different issues of societal concern (Demata, 2018). The interactive nature of these platforms has encouraged users to experiment with new forms of activism, attracting like-minded individuals and fostering collaboration within broader communities (Suwana, 2020). These democratized and largely unmonitored spaces facilitate public conversations and help overcome geographical and social barriers, making social media a critical tool for activism and networking (Kharroub & Bas, 2016). Within these spaces, hashtags often emerge as tools for spreading awareness, mobilizing action, disseminating information, and demanding accountability for social injustices. This study focuses on protest discourse produced on Twitter, one of the most prominent platforms for digital protests.

1.1.2 Twitter's Techno-Discursive Design

Twitter, a social networking and microblogging service launched in 2006 and rebranded as “X” in July 2023, has gained a lot of popularity amongst internet users. In this study, the name Twitter is retained to reflect the platform's identity at the time of data collection and analysis. The platform has become an important source for sharing information, disseminating breaking news and updates in emerging situations (Shugars et al., 2021). As of September 2023, Twitter had over 400 million monthly active users worldwide, sending over 500 million tweets daily (Dixon, 2023). The platform can be accessed either via its website interface or a mobile phone device application, with the latter being the prominent one.

A platform's techno-discursive design refers to the interplay between its technical architecture and interactional affordances and constraints (Altahmazi, 2020). Altahmazi argues that these elements are inseparable and collectively shape communication practices on that platform. Thus, Twitter's design defines both the possibilities and limits of user interactions. Understanding its technical aspects is key to analysing discourse on the platform.

Twitter allows users to share 280-character posts, or tweets, fostering brevity and quick, impactful exchanges. Its design supports multimodal communication, dividing tweets into text and media components. The text accommodates words, hashtags (#), mentions (@username), emojis, and hyperlinks (URL), all within the character limit, while the media component supports up to four images, a video, or a graphics interchange format (GIF) per tweet. These affordances enrich tweets, enabling users to create multimodal content.

Interactivity is a core feature that creates a networked discourse structure on Twitter. The platform's mixed temporality (hetero synchronicity) supports both real-time and delayed interactions (Wikström, 2017). Additionally, algorithmically curated timelines amplify popular topics through trending hashtags, propelling local issues to global prominence (Altahmazi, 2020; De Cock & Pizarro Pedraza, 2018). This interactivity facilitates rapid information dissemination, real-time engagement, and collective mobilization, making Twitter particularly effective for activism.

Researchers agree that hashtag functionality is one of Twitter's most transformative techno-discursive features (Altahmazi, 2020; D'Ambrosio, 2019; Konnelly, 2015; Zappavigna, 2018). Hashtags are user-generated tags that foster conversations by connecting users with similar topics, interests, and perspectives (Lee, 2018). The hashtag system creates a dynamic and easily searchable form of online interaction enabling any user to see tweets posted by people they do not follow (Altahmazi, 2020). Additionally, by aggregating similar conversations, hashtags turn individual tweets into collective discourses, facilitating the formation of virtual networked communities (Zappavigna, 2012). This hash tagging affordance has positioned Twitter as a powerful platform with great potential for group advocacy, facilitating what is referred to as hashtag activism.

1.1.3 Hashtag Activism

Hashtag activism is a form of digital protest where many ideologically motivated tweets are clustered under a highly visible hashtag that conveys a sociopolitical stand (Altahmazi, 2020; Yang, 2016). The protest is defined by the number of micro-posts using the hashtag, often embedding arguments or opinions about a sociopolitical issue. Hashtag activism is

considered a distinct genre in digital protests, characterized by narrative agency, intertextuality, and emotionally charged language (D'Ambrosio, 2019).

Narrative agency refers to the ability to create micro-stories through hash tagging of personal thoughts, stories and emotions, either to legitimize the claims or as an appeal to authority (Yang, 2016). These micro-stories collectively give rise to a broader activism discourse (D'Ambrosio, 2019). Intertextuality on social media is based on referring to other texts using links or hashtags. Hashtags enable this intertextual potential by facilitating a wide range of diverse 'voices' to converge and participate in uncoordinated or even contentious discussions (Zappavigna, 2018). Finally, the emotionally charged language plays a role in shaping public opinion and prompting action, since the ambient audience is likely to be influenced by emotionally driven discourses (D'Ambrosio, 2019).

Hashtag activism involves mobilizing ideologically motivated users to perform self-expressive acts of resistance with the aim of highlighting social injustices and initiating change (Altahmazi, 2020). Through hashtag activism, many unknown or neglected social issues can be brought to the attention of other internet users (Li et al., 2021), who in turn perform actions that increase popularity of the posts (Yang, 2016), making the information spread widely within a very short time.

Twitter has played an important role in hashtag activism worldwide. Viral hashtags such as #BlackLivesMatter, which protests systemic racism and police brutality in the United States (D'Ambrosio, 2019), #FeesMustFall, a student protest in South Africa (Bosch & Mutsvairo, 2017) and #EndSARS which calls for the disbandment of a brutal police unit in Nigeria (Aboh, 2024), illustrate Twitter's capacity to amplify citizen voices. These campaigns demonstrate how social media can challenge dominant power structures and influence public conversations and policy. This global pattern provides a backdrop for studying digital protests within the Kenyan socio-political context.

The Kenyans on Twitter (KOT) community have used hashtag activism to protest various social and political issues ranging from corruption, consumer exploitation, gender-based violence, poor governance, environmental destruction, constitutional reforms, high cost of living to police brutality among many others. Some cases of online agitation have

compelled the government to act, achieving a degree of success. For instance, the #IStandWithKDF, that was used to express strong opinions about soldiers who died in the line of duty in Somali, made the government review policy and hold a memorial service for the fallen Kenya Defence Forces soldiers (Munuku et al., 2017).

This study collected tweets using the hashtags #JusticeForKianjokomaBrothers and #JusticeForEmmanuelAndBenson, tags that exemplify a hashtag activism campaign against police brutality in Kenya. These hashtags emerged after two brothers from Kianjokoma village in Embu, Kenya were allegedly killed while in police custody. The two brothers Benson Njiru Ndwiga aged 22 and Emmanuel Mutura Ndwiga aged 19 were arrested at Kianjokoma trading centre on 1st of August 2021 for flouting curfew rules. Their bodies were later found at the Embu level 5 hospital mortuary on the 3rd of August 2021. Reports about the deaths sparked public protests in Embu town on 4th and 5th of August 2021.

According to a police report, the two jumped out of a moving police vehicle while being taken to the police station. However, a post-mortem examination carried out on 5th of August, indicated the two succumbed to multiple head and rib injuries inflicted by a blunt object. The physical demonstrations triggered social media protests and using the hashtags, thousands of KOT members mounted an anti-police brutality campaign that trended for close to a month. The hashtags became a rallying cry for justice, highlighting the public outrage and facilitating conversations on police accountability. The brothers were laid to rest on 13th August 2021, an event that propelled the hashtag to the top position. The public outcry led to action from some government institutions with the Office of Director of Public Prosecutions (ODPP) issuing an order to arrest and arraign in court the six officers implicated in the incident on 16th August 2021. Similarly, the Inspector General (IG) of police announced their suspension to make room for investigations instituted by the Independent Police Oversight Authority (IPOA).

Despite the popularity of hashtag activism in Kenya, a review of existing literature suggests that the phenomenon remains underexplored from a multimodal perspective. Twitter's multimodal nature coupled with its potential for group advocacy, creates a unique platform

for activism discourse. The platform's techno-discursive design influences how people construct, negotiate, and disseminate meaning in this digital space. To this end, an approach such as multimodality, which accounts for the interplay of different semiotic modes, is essential for a fuller understanding of protest discourse on the platform.

1.1.4 Multimodality in Digital Communication

Multimodality is a theoretical perspective that recognizes communication as inherently multisemiotic, hence attending to the full range of resources used in communication to express meaning. Scholars in multimodal studies state that every communicative event combines different semiotic resources, each with specific potentials and affordances for meaning making (Jewitt et al., 2016; Ledin & Machin, 2020). Jewitt et al. (2016) emphasize that the premise of multimodality is acknowledging that meaning making involves the integration of different semiotic resources to produce a multimodal whole. To fully understand the meaning-making process, the analysis must move beyond the linguistic resources to attend to all other resources used in the context.

Digital discourses have demonstrated a shift from language centred texts (monomodal texts) to multimodal texts (Álvarez, 2016; Herring, 2019; Ledin & Machin, 2020). Consequently, multimodality plays a central role in how meaning is created and conveyed within digital communication. On platforms like Twitter, where space and time are constrained, users rely on a variety of semiotic resources to construct meaning. Twitter's techno-discursive design, including its 280-character limit, encourages the integration of text with hashtags, emojis, hyperlinks, images, and other resources, making communication on the platform inherently multimodal.

Incorporating multimodal resources on social media platforms like Twitter not only offers new opportunities for meaning making but also presents analytical challenges. To understand how these diverse resources work together to create meaning, an approach that goes beyond the traditional linguistic analysis of texts is required. As Calhoun (2019, p. 28) notes, "online linguistic performance and discourse genres cannot be fully understood without multimodal and interdisciplinary analytical frameworks". All these point to the significance of adopting a multimodal approach in the analysis of digital discourses.

In this study, multimodality provides a lens for examining how semiotic resources are deployed in hashtag activism to construct meanings, shape opinions, and mobilize for action and change. By analysing the textual and visual resources used in the anti-police brutality tweets, the study elucidates the semiotic strategies tweeters employ to navigate and exploit Twitter's affordances for social justice advocacy. It also highlights how multimodality contributes to the formation of impactful messages in digital activism, particularly in the context of police brutality.

1.2 Statement of the Problem

Twitter, a user-generated digital platform, has become central to digital activism, especially through hashtag campaigns. Its technological affordances such as the 280-character limit, hashtags, emojis, hyperlinks, and the ability to attach visuals (images, videos, GIFs) encourage concise multimodal forms of expression. This creates a unique form of discourse where diverse modes work together to create cohesive messages. However, existing studies on Twitter discourse have largely focused on individual modes, textual or visual, overlooking how these modes integrate to create meaning. This monomodal focus lacks a holistic examination, leaving a gap in understanding the full communicative potential of Twitter's multimodal discourse, particularly in protest discourses. Considering the rising prevalence of hashtag activism, it is essential to explore how the platform is used in such campaigns. Additionally, Twitter's dynamic and interactive nature challenges traditional multimodal analytical frameworks, underscoring the need for innovative methodologies. To address these gaps, this study examines the integration of textual and visual modes in Twitter's protest discourse, offering insights that extend existing theories and methods in multimodal digital discourse analysis.

1.3 Aim and Objectives of the Study

This study aimed to investigate how diverse semiotic resources are deployed to construct and shape meaning in Twitter's protest discourse, with a focus on hashtag activism against police brutality in Kenya.

Specific objectives of the study were to:

1. Analyse the meaning potentials communicated by the textual resources in anti-police brutality hashtag activism tweets in Kenya.
2. Examine the meaning potentials conveyed by the visual resources in anti-police brutality hashtag activism tweets in Kenya.
3. Explore the relationships between the textual and visual modes in anti-police brutality hashtag activism tweets in Kenya.

1.4 Research Questions

1. What meaning potentials are communicated through the textual resources in anti-police brutality hashtag activism tweets in Kenya?
2. What meaning potentials are conveyed by the visual resources in anti-police brutality hashtag activism tweets in Kenya?
3. What relationships exist between the textual and visual resources in anti-police brutality hashtag activism tweets in Kenya?

1.5 Significance of the Study

The rise of social networking sites has transformed communication, making multimodality central to digital interaction. As a convergent platform, Twitter combines concise text with visual and technological resources to construct meaning. This study engages with the ‘multimodal turn’ by examining how Twitter’s platform-specific semiotic features interact with linguistic forms. It contributes to multimodality research by providing empirical insights into how meaning is constructed, negotiated, and disseminated in real-time, interactive, user-generated digital protest discourse.

From a disciplinary perspective, the study extends the scope of linguistic inquiry beyond verbal texts to include the interplay between language, visuals, and platform affordances. It highlights how meaning is not just produced through words but through a range of semiotic strategies that include images, design elements, and digital conventions. In doing so, it extends the scope of digital discourse studies to better accommodate platform-specific semiotic ecologies.

Theoretically, the study contributes to the adaptation and refinement of existing multimodal frameworks to better address the complexities of digital platforms. Although

multimodality has been widely theorized across educational, print, and advertising contexts, existing frameworks often fall short in addressing the interactive, platform-specific complexities of digital discourse (Bou-Franch & Garcés-Conejos, 2019; D'Angelo & Marino, 2023; Herring, 2019). This study addresses that concern by adapting and extending multimodal frameworks to account for distinctive semiotic practices platform-specific that emerge on platforms like Twitter. In doing so, it advances digital multimodal theory by offering empirically grounded insights into how meaning is co-constructed across modes platform-specific communicative contexts.

The study holds potential for stakeholders beyond academia. By analysing how Kenyans on Twitter articulate evaluative stances, emotions, and collective demands through semiotic resources, this research offers insights into public sentiment towards policing. Such insights may be valuable for policymakers, human rights organizations, and civil society actors seeking to understand the role of digital platforms in shaping discourse and public opinion on police brutality. While not prescriptive, the study contributes to evidence-based discussions around public accountability and institutional reform

Lastly, this study is timely in the Kenyan context, where social media has emerged as a critical space for activism, particularly in response to rising cases of police brutality. Twitter is one of the platforms that has become influential in shaping public discourse, contesting state narratives, and mobilizing resistance. By focusing on protest communication on this platform, the study highlights how ordinary Kenyans use multimodal resources to amplify dissent, foster solidarity, and engage in symbolic resistance against systemic injustices.

1.6 Scope and Limitations

This section outlines what this research covers in terms of content, time frame, and data selection, while also acknowledging the limitations that arise from methodological choices and contextual constraints.

1.6.1 Scope

This study focused on the analysis of multimodal tweets shared under the hashtags #JusticeForKianjokomaBrothers and #JusticeForEmmanuelAndBenson, which were part

of an online activism campaign against police brutality in Kenya. This campaign was selected because it generated the highest volume of tweets against police brutality in Kenya's Twitter space in 2021. The dataset exclusively consists of authored tweets with a typographic text and a media (image, video or GIF). Tweets without a media component, retweets and quoted tweets were excluded to ensure the analysis focused on user-generated multimodal content. Additionally, the tweets' contents needed to be directly related to the killing of the two brothers. Furthermore, the focus was on tweets authored by members of Kenyans on Twitter (KOT) community as identified through the metadata.

The temporal scope of the study was limited to tweets published between the 5th and 15th of August 2021. This period represented a time when the hashtag was trending at the top position in Kenya, indicating heightened online activism and public outcry for justice. The analysis was confined to textual and visual resources, examining how they were used to construct meaning within the protest discourse. Other user metadata such as engagement metrics (likes, retweets and replies) and user profiles, fall outside the scope of this study. This approach ensured a detailed and contextualized analysis of multimodality in Twitter's hashtag activism campaigns.

1.6.2 Limitations

One of the limitations of this study lies in the dynamic and ephemeral nature of Twitter data, which can result in data loss during the collection and analysis process. Unlike traditional secondary data, tweets are not static since account owners can delete tweets, deactivate their accounts, or adjust privacy settings, making the tweets inaccessible. As a result, some tweets initially included in the dataset may become unavailable at later stages of data analysis, potentially leading to gaps in the data. In this study, eight tweets (approximately 1.6 percent of the total dataset) harvested could not be retrieved during data analysis. However, this data loss was minimal and did not significantly affect the comprehensiveness of the dataset. To limit the impact of this challenge, the study employed additional data capture methods, such as taking screenshots of tweets, to ensure the preservation of crucial data. Furthermore, all tweets cited as examples in the thesis were periodically rehydrated throughout the writing process to verify their continued availability.

The second limitation of the study emanates from the use of a third-party tool (Mecodify) and Twitter API for data collection. While the tools provide access to publicly available historical tweets and are useful for automating the data collection process, the API has restrictions that may affect the completeness of the data. Twitter API only avails a percentage of the tweets published through the public endpoint, and the algorithm used is not known. Consequently, the data retrieved may not be fully representative of the discourse on the platform. Nonetheless, since this was a qualitative study where comprehensiveness of the data was more important than completeness, the data collected was sufficient to offer meaningful insights into the multimodal nature of Twitter protest discourse. To minimize the impact of this limitation, the study clearly defined the inclusion criteria for the tweets, ensuring the tweets harvested had the necessary elements.

The third limitation stems from the use of a case study. This research design limited the sample to a single hashtag activism campaign within a defined timeframe. While this focused approach allowed for an in-depth examination of the communicative practices surrounding a specific case of police brutality in Kenya, it may not fully capture the diversity of Twitter activism outside this context, hence may affect the generalizability of the findings. To mitigate this limitation, the study contextualizes its findings within the specific hashtag examined. It suggests future research to explore additional hashtags or comparative case studies across diverse contexts to enhance the generalizability and applicability of its conclusions.

Finally, the technological changes on the platform, such as Twitter's rebranding to 'X' platform in July 2023 posed another limitation. This change occurred after the data collection process and while data analysis was underway. Although the rebranding did not affect the techno-discursive design of the platform, the change may impact how future research on the platform is conducted. This represents a shift in the broader social media landscape, which could affect the interpretability of the study's findings. However, since the study used tweets collected when the platform was still Twitter, the name is retained throughout the thesis to reflect the platform as it was at then. This allows for an accurate and contextually grounded interpretation of the findings in relation to the platform's affordances.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of relevant literature and outlines the theoretical frameworks that guided the study. The review is organized in line with the objectives of the study. The chapter begins by examining the literature on textual and visual resources employed in digital platforms, focusing on their unique communicative functions and the meanings they produce within digital contexts. The review then explores the different approaches to understanding the relations between text and images and how these modes interact to convey meaning in different contexts. Thereafter, the chapter introduces the theoretical frameworks guiding the study: Multimodal Critical Discourse Analysis (MCDA) and the generalized System of Image-Text Relations. An overview of each framework is provided, highlighting the key concepts and their relevance to the study. Additionally, the limitations of the frameworks are discussed. The chapter's structure provides a foundation for understanding the meaning-making potential of semiotic resources in digital communication. It establishes the theoretical bases that guided this study's analysis of protest discourse on Twitter.

2.2 Textual Resources

This section reviews literature related to semiotic resources found in the textual part of the Tweet. Semiotic resources refer to the various tools for meaning making organized within specific modes of communication. In technologically mediated environments, the affordances and constraints of both software and hardware significantly shape these resources. As such, many technological affordances in social media environments, such as Twitter, also serve as meaning-making resources (Zhao & Zappavigna, 2018). Thus, the process of assembling meaning (semiotic assemblage) is directly shaped by these affordances and is unique to each digital platform (Tagg & Lyons, 2021), with constraints that both guide and limit communicative actions. This focus on platform-specific affordances informs the study's categorization of textual resources to include design features such as character length, linguistic features, orthographic features, and technical features such as hashtags, mentions, hyperlinks and emojis, whose related literature is reviewed in this section.

2.2.1 Character Length Limit

Character length limit (CLL) is an important design feature on Twitter that can have an impact on the meaning-making potential of semiotic resources on the platform. One of the outstanding characteristics of Twitter, brevity, is brought about by CLL. In Twitter-specific studies, scholars have opined that the character limit affects both content and language usage making authors alter their tweets in terms of word forms used, sentence structures and content (Boot et al., 2019; Gligorić et al., 2018; Hu et al., 2013; Jalbuena, 2012). Studies conducted during the 140-character limit period (before November 2017) argue that CLL shaped user behaviour in terms of orthographic, lexical and grammatical features used. For instance, Jalbuena (2012) in her study of linguistic features of English in Twitter noted that there were fewer functional words (pronouns, prepositions, articles, conjunctions and auxiliary verbs) in the tweets.

Similarly, Gligorić (2018) findings indicate that users tend to write more tersely using fewer articles, fewer hashtags and more abridged forms of words such as abbreviations, contracted auxiliary verbs and symbols such as the ampersand (&) in place of the word ‘and’. Additionally, Hu et al. (2013) found that tweets contain a higher proportion of information-carrying words, like verbs, nouns, adjectives, and adverbs, compared to other forms of communication with character limits, such as text messages. This higher lexical density (LD) suggests that tweets can convey more information within their limited character count.

CLL not only influences linguistic choices but also the overall structure of communication on Twitter. Crystal (2011) concludes that the initial 140-character limit made users adopt creative strategies such as logograms, emojis and punctuation marks to add layers of meaning without exceeding the CLL. Boot et al. (2019) compared tweets collected during the 140-character limit and those collected at the start of the 280-character limit period. Their findings indicate less use of text message abbreviations and a higher use of articles, conjunctions and prepositions in tweets collected during the 280-character limit period as compared to the earlier ones. This demonstrates that with the introduction of a higher character limit, users have more room to make the communication more detailed and contextually richer.

Additionally, other findings indicate that paralinguistic elements such as emojis and emoticons are used to complement the verbal content by providing interpersonal and textual functions ultimately enriching the meaning (Logi & Zappavigna, 2023). These findings reveal that CLL is not just a design feature and mechanical constraint but a tool for shaping discourse on Twitter, hence justifying the need to include the tweet length in the analysis of meaning potentials in the current study.

Despite the insights gained from the existing research on CLL and its impact on meaning production, several gaps that require further investigation arise. First, these studies did not consider the actual length of the tweets sampled. There seemed to have been an assumption that tweeters used of all the available characters. On the contrary, studies have indicated that users hardly maximize the use of all allocated character space. Crystal (2011) reported an average of 100.9 characters from his sample during the 140-character limit period while Rosen (2017) reported that only 5 percent of tweets exceeded 140 characters with only 2 percent having over 190 characters during the test release of the 280 characters. Consequently, there still exists a gap on how the actual average length correlates to the linguistic choices made by the users. This study creates a modal picture that highlights both the actual tweet length and the grammatical structures to help contribute to the insights on the impact of CLL on meaning-making.

Second, while the studies showed the increase in CLL from 140-280 characters led to an increase in use of formal language elements (Boot et al. 2019), the long-term effects of this change on language and user practices remains unclear. Boot et al. (2019) collected their data shortly after Twitter corporation increased the character limit for tweets. The change was relatively new at the time, and its effects were still being observed. Therefore, the influence of other extrinsic factors such as users' excitement about the new limit cannot be ruled out. Consequently, it is important to examine if these linguistic adjustments were maintained over time or if tweeters reverted to concise forms as they became accustomed to the new limits. The current study is thus important to help either augment or weaken the conclusion since data for this study was collected at a period when the 280-character limit had long stabilized and settled in as part of the Twitter affordances.

Lastly, it is still unclear how the constraint influences meaning making in multimodal contexts. While the impact of CLL on linguistic resources has been studied, the use of visual resources in character constrained environments like Twitter remains underexplored (Li & Yang, 2018; Marchal et al., 2021). To address this gap, it is important to examine the use of multimodal resources and their meaning potentials to give insights into how users adapt the textual and visual resources within the character limits of Twitter. Findings on how CLL shapes the relationships between the textual and visual modes will offer insights into how protest discourse is constructed and communicated on Twitter.

2.2.2 Orthographic Resources

Orthographic features such as capitalization, punctuations, spellings and spacing have been identified as resources that have a communicative potential in digital communication. Scholars like Crystal (2011, 2015), Heath (2017, 2018), Tarasova (2016), Wikström (2017) and Zappavigna (2012) postulate that deviations from standard orthography are not random but intentional resources serving distinct communication purposes. Additionally, Crystal (2011) points out that unconventional orthography in digital communication is influenced by a variety of factors which include a conscious choice to deviate for stylistic reasons. This points to the importance of treating orthography as a semiotic resource to allow for an understanding on how orthographic choices contribute to the broader communication goals of the authors. However, limited studies have analysed Twitter's orthography and as Heath (2017, p. 15) states, "non- standard orthography on social media is a frequently referenced but a largely understudied phenomenon". Some of the work done has identified nonstandard capitalizations, nonstandard punctuation marks and non-conventional spellings as nonstandard orthographic features on Twitter.

Punctuation marks such as ellipses, exclamation marks and question marks serve as both grammatical and pragmatic features. Studies have reported the use of punctuation that deviates from the traditional grammatical rules in digital discourses (Albritton, 2015; Crystal, 2011, 2015; Tarasova, 2016; Wikström, 2017; Zappavigna, 2012). Tarasova (2016) and Wikström (2017) conclude that the use of punctuation in digital discourses allows for a dynamic and expressive form of communication.

Tarasova's (2016) study sheds light on the evolving role of punctuation in digital discourses drawing from net texts written in Tartar, Russian and English. The study identifies parcelling, doubting, admiration, combinations of different marks, extra spacing between mark and final word and functional modification of the punctuation marks as techniques used in the texts. These techniques are used to enhance the expressivity and emotional content, making the text more engaging to the readers. On the other hand, Wikström (2017) demonstrates that the use of punctuation marks on Twitter aids in creating a more spoken like style highlighting the hybrid nature, blending features of both spoken and written language. These studies provide insights to the current study on the communicative role of punctuation marks.

Similarly, Crystal (2011) identifies the use of unusual combinations of punctuation marks, and multiple punctuation marks in digital texts. Crystal concludes that the nonstandard use conveys additional affective content, adding that repetition is not a significant factor for the reader's understanding. However, Jackson (2016) in exploring the broader theme of repetition and its effect on communication, suggests that repetition can convey emotional or expressive elements beyond the literal meaning. This suggests that repeated punctuation marks might similarly serve to express heightened emotions or emphasis contrary to Crystal's (2011) conclusion on repetition of punctuation marks. This informs the current study on the need to analyse the communicative functions of repeated punctuation marks.

Regarding ellipsis, Crystal (2011) observes that the number of dots in ellipsis marks on digital platforms is often erratic, a phenomenon he attributes to stylistic choices by the author. Expanding on this, Crystal (2015) introduces the concept of "extended ellipsis" (p.137) where additional dots may serve as an expression of personal style, playful intent, or even carry a specific semantic value. According to Crystal, the length of the ellipsis can convey degrees of attitude or implication. Albritton (2015) further examines ellipses in digital contexts, noting that they may indicate various types of pauses or act as substitutes for other punctuation marks or conjunctions, thereby enhancing the conversational tone. This use of ellipses in digital discourse goes beyond the traditional roles of ellipses such as omission, iterative, connection, suggestion, and hesitation commonly identified in non-digital texts (Meibauer, 2020). Collectively, the literature suggests that ellipses function as

a dynamic punctuation element in digital spaces, carrying communicative functions that warrant further exploration across varied contexts.

Scholars acknowledge that the use of question marks in digital discourses frequently deviates from traditional grammatical norms. Crystal (2015) states that excessive question marks are common in digital contexts, often conveying heightened emotional intensity such as surprise, disbelief and urgency. Crystal, however, notes that the interpretation of multiple question marks varies by context and culture, sometimes signalling aggression or impatience, while in other cases expressing curiosity or enthusiasm. Additionally, Crystal points out that the excessive use of question marks can introduce ambiguity in a text.

Expanding on this, Tarasova (2016) identifies three communicative functions of excessive question marks in digital discourses. Firstly, the marks serve to highlight the emotional intensity of the message conveying feelings such as surprise, curiosity and evaluation of the attitude expressed in the text. Secondly, is creating a sense of emergency, prompting readers to actively engage with the content. Lastly, they add depth to the communication by conveying complex emotions especially when combined with other punctuation marks such as dots and exclamation marks.

Both Crystal's (2015) and Tarasova's (2016) findings emphasize the importance and versatility of excessive question marks in enhancing expressivity and active reader engagement in digital discourses. These insights underscore the importance of analysing the use of multiple question marks in the current study. However, there are differences in data contexts between the reviewed studies and the current study. While Crystal's findings draw from general English texts across different digital platforms and Tarasova's from a multilingual comparison of different social media platforms, this study focuses specifically on Twitter protest discourse. Thus, the study will shed light on whether the functions of multiple question marks on Twitter differ from their general digital uses.

Crystal (2015) concludes that the use of excessive exclamation marks serves as visual cues for emphasizing specific sections, heightening the emotional state expressed in the text. Tarasova (2016) notes deviations in the use of exclamation marks which include multiple exclamation marks and combination of the mark with other marks. Tarasova concludes that

the deviations serve to enhance expressivity, convey a wide range of emotions and highlight certain parts of the text. Moreover, when combined with other punctuation marks, the marks give additional connotations and convey mixed emotions. These studies provide insights on the dynamic role of exclamation marks in digital discourses emphasizing their importance in conveying meaning and emotions.

On the aspect of non-standard capitalization on Twitter, Heath (2017) concludes that the deviations from standard capitalization are intentionally used to convey meaning and emotional intensity. The study explains how different emotions might be represented orthographically through the capitalization patterns. Heath (2018) further identifies four capitalization patterns; namely, all caps, single-word, word-initial and alternating capitalization, all which highlight the innovative ways social media users manipulate orthography. Heath's (2017, 2018) findings suggest that social media users manipulate capitalization to enhance emotional expression hence indicating a relationship between orthography and prosodic features. The conclusions further highlight the complexity and potentials of non-standard capitalization as a tool for conveying emotional nuances in digital communication. These studies lay a foundation for systematically determining the interpretations that the use of non-standard capitalizations may contribute to protest tweets.

Spelling variation is another orthographic feature that has been identified as part of the linguistic features in digital discourses. Scholars note that length restrictions and input efforts can lead to unconventional spellings. For instance, in the past, length restrictions gave rise to the telegraphese register, a form of elliptic style that was used in telegrams (Barton, 1998; Tesak & Dittmann, 1991) while in short message service (SMS), character length restrictions gave rise to textspeak, the language used in writing text messages (Crystal, 2008; Galita, 2021).

SMS users incorporate strategies such as the use of initialisms, accent stylizations, non-conventional spellings, logograms, shortenings, contradictions and omission of punctuation, letter omissions and omissions of parts of speech to conserve space and reduce typing efforts (Crystal, 2008; Ling, 2005; Ling & Baron, 2007; Thurlow & Brown, 2003). These studies demonstrate the need to analyse the unconventional spellings in communication genres with length restrictions. Since Twitter is also a form of

communication with length limitations, these findings shed light on some strategies communicators might use to overcome this constraint.

The studies on nonstandard orthography demonstrate that deviations in digital discourses are not random but intentional stylistic choices employed to convey meaning. Additionally, when the resources are used, they are multi-functional, and their interpretation is context based. This informs the current study on the need to identify instances of nonstandard orthography as meaning-making resources and further examine the meaning potentials conveyed by the resources in the context of hashtag activism tweets.

2.2.3 Linguistic Resources

In reviewing studies on the linguistic resources used on Twitter the review is divided into two. The first part deals with literature that gives an overview of the linguistic resources as used on Twitter in general, while the second part narrows down to studies on protest discourses on Twitter. In addressing the general linguistic features on Twitter, scholars have focused on the formal or informal nature of Twitter and the linguistic features of English in Twitter (Crystal, 2011; Hu et al., 2013; Jalbuena, 2012). On the aspect of formality and informality, Hu et al. (2013) and Jalbuena (2012) conclude that tweets utilize formal language.

Hu et al. (2013) goes further to compare language on Twitter to SMS and other online chats. They note that Twitter exhibits a more conservative linguistic style making it more formal and standard. Hu's et al. (2013) study uses the lexical density (LD) measure, revealing that Twitter has a higher LD than SMSs and online chats. Johansson (2008, p. 61) defines LD as "a measure that provides the proportion of lexical items (i.e. nouns, verbs, adjectives and some adverbs) in the text." Therefore, LD serves as a metric for information packaging in written texts. Texts with a higher LD suggest the use of more content words, conveying more information (Halliday & Matthiessen, 2004; Johansson, 2008). While Hu et al. (2013) provide insights into LD and pronoun usage, they do not comprehensively cover other linguistic resources used on Twitter. Moreover, their emphasis on formality overlooks the creative aspects of language use on the platform.

The linguistic features of tweets have been examined using different approaches, with studies identifying a wide range of lexical and grammatical features (Clarke, 2022; Jalbuena, 2012). For instance, Jalbuena (2012) explores the lexical, grammatical and rhetorical characteristics of tweets across five thematic categories. Jalbuena identifies verbs as the most used in the lexical category followed by nouns, adjectives and finally adverbs. On the grammatical features, the study identifies the use of prepositions, pronouns, conjunctions, articles and interjections in that order. Jalbuena's study provides useful insights on the usage patterns of lexical and grammatical features of English on Twitter. However, the current study moves beyond Jalbuena's description of the usage patterns of the lexical items to analyse their meaning potentials within a specific context.

Clarke (2022) identifies a wide array of linguistic variations on Twitter, which is indicative of the diverse communicative functions and style of the platform. The features identified include basic parts of speech such as nouns, verbs, pronouns and adjectives, sentence structures such as imperatives and processes which included nominalisation, modification and voicing, which are all interpreted as having a communicative function. Clarke's study offers insights into the platform's complex linguistic landscape while highlighting its role in facilitating diverse communicative practices, identity management and social interaction. However, one major limitation in Clarke's study is the inclusion of all types of tweets without acknowledging that the purpose of the tweet determines the choice of the linguistic features. Since tweeters use hashtag(s) they affiliate around to guide the purpose of their communication, analysing random tweets might lead to a very wide array of linguistic variations. The current study also differs from Clarke's (2022) study in terms of scope and the methodological approaches used. Clarke's study uses the multi-dimensional analysis (MDA) approach which primarily focuses on identifying patterns of linguistic variation and their statistical co-occurrence within a corpus while this study uses MCDA which considers the broad range of communication modes and how they construct meaning.

Scholars have examined protest discourses on Twitter with some treating hashtag activism as a distinct genre characterized by specific linguistic features (D'Ambrosio, 2019; Hanafy, 2021). This recognition supports the decision to treat protest discourses as distinct from

other forms of communication on Twitter in the current study. For instance, D'Ambrosio (2019) examines the linguistic resources in the #BlackLivesMatter movement, focusing on how the resources are used to convey emotions, judgments, and evaluations. The study identifies lexical choices that negatively portray police brutality, expressions supporting the protests, items expressing strong emotions, and the strategic use of active and passive voice to evaluate the police and victims. D'Ambrosio's work offers valuable methodological insights on data collection and analysis. However, while D'Ambrosio's work employs the appraisal approach, leaning more on the linguistic resources, the current study departs from this by adopting a multimodal approach, examining how both linguistic and visual resources work together to construct meaning.

In examining the lexical features of the Black Lives Matter (BLM) hashtag activism, Nartey (2021) identifies nouns, verbs and adjectives as key linguistic elements that have communicative functions. Nartey concludes that nouns play important communicative roles such as the identification and categorization of key elements, framing the narrative, fostering solidarity and group identity, for emotional appeal and legitimization of the movement. On the use of verbs, Nartey concludes that they are tools for expressing actions and urgency, mobilizing supporters, articulating resistance and constructing the narrative. Nartey also concludes that adjectives add to the communicative power of protest movements by providing vivid descriptions that can evoke emotions, acting as persuasive tools that influence public perception and opinion, adding specificity and clarity to the message and aiding in identity construction. Nartey's study provides critical insights into the communicative functions of the key lexical items in protest discourses on Twitter. However, considering that the BLM movement deals with the emancipatory agenda for the black community, it would be enlightening to examine police brutality tweets in a context devoid of the racial dimension (Kenyan context) to see if the lexical items have the same or different communicative functions.

Scholars point out that the use of features that bring out a personalized frame and group identity is key to collective action. Bennett and Segerberg (2013) argue that personalized action frames in digitally mediated social movements lead to faster mobilizations. Additionally, van Zomeren et al. (2012) state that group identity dynamics play a role in

collective efficacy. When participants feel a sense of belonging to a social movement, they are likely to be motivated to participate. Considering the role of pronouns in creating a sense of group and personal identity (Machin & Mayr, 2023), it is paramount to examine the use of pronouns in any protest discourse. Hu et al. (2013) observes that one of the unique linguistic styles on Twitter is the extensive use of both the first person and third person pronouns compared to other mediums that tend to favour one type of pronoun. There seems to be a consensus that pronouns play a key role in Twitter's protest discourses (Aboh, 2024; Hanafy, 2021; Nartey, 2021; Walker & Kaye, 2022).

Research has further revealed that pronouns are used to serve specific purposes in protest discourses. For instance, the use of first-person pronoun can be used to engage readers (Hanafy, 2021) and create an emotional connection (Nartey, 2021), with the first-person singular often associated with a personal or introspective engagement with the topic while the plural suggests a sense of collective identity (Aboh, 2024; Nartey, 2021; Walker & Kaye, 2022). Additionally, the third person pronoun is used to distinguish between different groups (Hanafy, 2021; Nartey, 2021), helping delineate the adversarial relationship between protesters and victims and/or authorities (Aboh, 2024). Moreover, the second person pronoun directly addresses the audience, personalizing the message and making them feel empowered (Hanafy, 2021; Nartey, 2021). These findings demonstrate that in protest discourses pronouns are not mere grammatical elements but are instrumental in shaping the narrative and mobilizing collective action. This underscores the necessity of examining the use of pronouns in the current study.

The reviews demonstrate how protest movements leverage on linguistic features to construct compelling narratives, mobilize support, foster solidarity, raise awareness and challenge oppressive systems. The insights underscore the importance of analysing the nuanced use of linguistic resources, to fully understand the dynamics of digital activism. Considering no study has analysed the use of linguistic resources in Kenyan digital activism, this study will provide insights that can be compared with other digital social justice movements such as the #BlackLivesMatter and #EndSARS.

2.2.4 Hashtags

Hashtags are among the most flexible and dynamic technical resources on Twitter. They serve a variety of communicative functions that extend beyond their original role of categorization. Lee (2018) describes hashtags as a form of user generated metadata that reflects intentional language choices hence functioning as meaning-making tools that foster conversations by connecting like-minded users. Scholars acknowledge hashtags as a form of linguistic innovation in the twenty-first century (Bibian & Anthonia, 2019; Blommaert, 2019; Cunha et al., 2011) that has evolved over time to meet the needs of social media users and has the potential for widespread adoption. Since hashtags are user generated metadata, multiple tags can emerge and circulate simultaneously from one social event. Like any linguistic innovation, if a particular hashtag is widely accepted and adopted by a broader audience, then it can achieve significant reach, but if it is restricted to a few messages, it may fade away (Cunha et al., 2011). This shows that hashtags are flexible and context-dependent, highlighting their capability to adapt to the dynamic nature of social media discourse. These insights informed the current study on the need to select a widely used hashtag to capture the discourse around police brutality comprehensively.

Research into the structural patterns of hashtags illustrates their complexity and diversity. Structurally, hashtags are marked by the # symbol, a convention that emerged from internet relay chats (IRC) conventions (Zappavigna, 2015), which indicates their status as metadata. Mahfouz (2020) argues that the hashtag formation process, which allows users to string several words together, represents a new morphological process that can lead to the expansion of the traditional speech categories hence making it linguistically significant.

Hashtags may be formed from a word (#Justice), abbreviations (#BLM), concatenated phrases (#EndPoliceBrutality) or an entire clause (#WeDemandChangeNow). However, hashtags of compound words are more popular than single word tags (Tsur & Rappoport, 2012), with complete sentence structure hashtags being more influential in hashtag activism (Yang, 2016). In protest discourses, the structural patterns of hashtags can be ideological since they express positions that facilitate discussions (Altahmazi, 2020). This plays a crucial role in shaping public discourse, enabling the formation of issue publics and affective communities that come together around shared events (Giaxoglou, 2018). These

studies offer insights into the variability of hashtag formation and how it influences their spread in online communication, forming the basis for analysing the structural patterns of hashtags in the current corpus.

The placement of hashtags within the tweets is another important dimension of hashtag functionality. Mahfouz (2020) and Zappavigna (2018) argue that the location of a hashtag in the tweet affects its syntactic role and can provide insights into the role it plays within the tweet. Hashtags can appear at the beginning, middle or end of a micropost, what Tsur and Rappoport (2012) refer to as the prefix, infix and suffix positions. The position a hashtag occupies in a tweet serves as an indicator of whether the tag is used as part of the syntactic structure of the sentence or merely as a metadata tag (Tsur & Rappoport, 2012). Additionally, Wang et al. (2012) found that there is a relationship between the patterns of hashtag formation and the position of placement in the tweet. These findings on positional variations offer insights for understanding the broader linguistic functions of hashtags, making it an important aspect of analysis in this study.

The multifunctionality of hashtags is well documented in literature. Bibian and Anthonia (2019), Bruns and Burgess (2015), Lee (2018) and Zappavigna (2018) underscore the dual role of hashtags as technical and semiotic resources. On one hand they help users annotate posts, and on the other, they serve as tools for meaning making. This dual functionality supports the categorization of hashtag functions into technical, linguistic and social domains. As technical resources, hashtags serve as metadata that facilitates the aggregation of tweets under a common label, thereby enhancing their searchability and visibility (Laucuka, 2018; Zappavigna, 2018). This helps users identify and follow conversations around specific themes or issues, making it easier for them to navigate the large amount of information on the platform effectively.

Beyond their technical function, hashtags also serve as social facilitative devices, making them instrumental in the formation of virtual communities and creating connections among users. Through hashtags, users can create ambient affiliation (Zappavigna, 2012), facilitating the formation of ad hoc communities which coalesce around the shared hashtags. This allows for social connections without explicit, direct interactions. Additionally, hashtags enable collaborative tagging where users link their individual posts

to a larger network of ideas from others who share similar interests, thereby fostering a sense of community and belonging (Cunha et al., 2011; Laucuka, 2018; Mahfouz, 2020). Hashtags also allow users to engage with broader social ideologies and identities hence supporting visibility and organization of social interactions (Zappavigna, 2016).

In activist contexts, the ability of hashtags to mobilize collective action and facilitate community engagements is exemplified by the prevalent global activism hashtag #BlackLivesMatter (D'Ambrosio, 2019). Beyond America, tweeters have used hashtags such as #FeesMustFall movement in South Africa (Bosch & Mutsvairo, 2017) and #EndSARS in Nigeria (Aboh, 2024) for collective action. Furthermore, hashtags are instrumental in forming and maintaining collective identities and political affiliations as seen in activists' discourses where hashtags such as #YesAllWomen and #HeForShe are used to assert collective identity (Konnolly, 2015). For the current study, this social facilitation function is important for understanding the potential of hashtags to mobilize collective action, hence the need to investigate the resources used for collective identity formation.

From a linguistic perspective, hashtags are notable for their syntactic flexibility. They can serve as adjuncts to the main content or be embedded seamlessly into the body of the tweet enhancing the tweet's meaning (Zappavigna, 2018). This flexibility allows them to play a metalinguistic role, functioning as connectors between the tweet's message and a larger discursive trend across the platform (Giaxoglou, 2018). This function permits users to categorize content into areas of interest thereby creating searchable and linkable updates. Additionally, integrated hashtags enhance the semantic content by marking topics of evaluation and engagement (Konnolly, 2015; Zappavigna, 2018). When used this way, they help in structuring the post, almost acting as a form of punctuation that organizes information within the text. Moreover, hashtags contribute to supporting ambient intertextuality by presupposing the existence of other texts out there with the same hashtags (Zappavigna, 2018). This means they not only relate to the content of the post but also connect to broader conversations happening across the platform. This intertextuality is important in protest discourses, where activists may reference and link to broader social movements to create a cohesive narrative across multiple tweets.

The metalinguistic function of hashtags further underscores their role as communicative devices. While initially conceived as metadata, hashtags have evolved into tools that guide discourse by organizing and shaping how information is interpreted (Wikström, 2014). The integration of Metadiscourse directly into the message helps coordinate activity and commentary, especially in character constrained environments like Twitter (Zappavigna, 2018). This study builds on this understanding to analyse how hashtags influence the broader discursive strategies employed in tweets about police brutality, showing how they contribute to thematic continuity and cohesion across multiple tweets.

Hashtags have become dynamic communicative tools that operate across the structural, linguistic, social, and metalinguistic levels. Their flexibility allows them to adapt to various functions, from organizing content and facilitating community building to expressing collective stances and engagements in protest discourse. This multifunctionality makes hashtags an essential resource in digital communication, as they not only organize content but also influence the dynamics of the online interactions. By examining the communicative functions of hashtags in a specific context, this study aims to shed light on how these technical resources contribute to the overall meaning-making process on Twitter protest discourses.

2.2.5 Mentions

The mention, indicated by the standardized sign @ preceding a username, is a feature that contributes to interaction and information flow on Twitter. Primarily, mentions are used to address specific users, ensuring they receive notifications (Wang et al., 2013). Mentions can occupy different positions in the tweet. Clarke (2022) identifies the initial mentioning and the non-initial mentioning positions. The initial mentioning is when the feature is placed at the beginning of the tweet and is used to direct a tweet to a specific user, facilitating direct interaction. In this case, it is deployed as a vocative to directly address the tweet to the mentioned users hence functioning as an addressivity marker (Clarke, 2022; Honeycutt & Herring, 2009; Zappavigna, 2015). Twitter treats such a tweet as a reply and only the mentioned user and any other users that mutually follow the sender and recipient will see the tweet.

In non-initial mentioning, the mentions are placed in the middle or at the end of the tweet. Here, the mention is used as a reference marker since the user is not directly addressed but is referred to, in third person (Wang et al., 2013). The non-initial mentioning also serves as engagement marker to integrate the mentioned users in the discourse as they will receive a notification about the tweet and see it in their timeline (Blommaert, 2019; Wang et al., 2013; Zappavigna, 2012). This position increases the tweet's visibility because the tweet is posted to the timelines of all the followers and not just the mentioned user. These studies inform the present study on the importance of the feature's position in the tweet, hence the need to examine which users are mentioned and the positions the mentions occupy in the hashtag activism tweets.

The mention feature on Twitter performs several communicative functions, making it an integral part of the platform's interactional and information flow dynamics. Scholars widely acknowledge that mentions are primarily used to address specific users, thereby incorporating them into discussions and ensuring they receive notifications, which can increase user engagement and amplify the reach of tweets (Luzón, 2023; Luzón & Albero-Posac, 2020; Wang et al., 2013). On Twitter, this targeted approach to user engagement is crucial for initiating content diffusion because a mention can prompt the notified user to interact, retweet, or reply, creating a cascade of content dissemination (Wang, 2013). Such diffusion mechanisms make mentions critical in enhancing the visibility of tweets thereby ensuring the content reaches a wider audience. The notification of users when they are mentioned in real-time also supports rapid information flow, an aspect that is crucial in fast-paced platforms like Twitter (Wang et al., 2013). Considering the quick turnover of tweets on the platform, this function helps tweets from getting lost and ensures the mentioned individuals are aware of the postings.

Beyond their technical functionality, mentions also serve as conversational devices that contribute to discourse construction (Luzón & Albero-Posac, 2020). This is achieved through the feature prompting reactions, responses or retweets from the mentioned user thereby sustaining the conversation. Mentions are also key in audience targeting and expanding the tweet's reach. Wang et al. (2013) argues that mentioning several users

enhances the tweets visibility hence providing an opportunity for discourse expansion across multiple online user groups.

In academic and professional contexts, mentions serve as networking tools. Luzón and Alberro-Posac (2020) note that in academic contexts, mentions function as acknowledgement markers which facilitate users to recognize contributions or opinions from other users. They can also be used to initiate relationships between individuals or groups thereby promoting networking and collaboration (Luzón, 2023). These are key in creating professional bonds and enhancing reputation within the networks. Mentions also contribute to discourse management by embedding tweets within multiple ongoing conversations. For instance, in conference settings, mentions allow users to engage with presenters and participants, thus broadening the conversations around the presentations (Luzón & Alberro-Posac, 2020). This way the mentions serve as tools that position the tweet within a larger conversational context, making them a strategic tool for managing online engagements.

The use of the mention feature in specific contexts has not received much scholarly attention, except for Luzón (2023) and Luzón and Alberro-Posac (2020) who have examined the feature's use in research groups and academic conferences respectively. While the existing literature provides insights into its characteristics and role, gaps remain in understanding its role in other contexts. Considering professional contexts are different from social contexts such as protests discourses which are highly mobilizing, there is need for more studies on the feature. The current study will build onto this literature by providing empirical evidence on how the feature contributes to shaping protest narratives.

2.2.6 Hyperlinks

Hyperlinks are a key interactive feature of social media and have attracted scholarly interest. On Twitter, researchers have highlighted hyperlinks as a valuable communicative resource that extends the platform's discursive space, compensating for its character limitations (Clarke, 2022; Jakob, 2022; Wessler, 2018). Beyond their functional role, hyperlinks are also viewed as semiotic resources that enable users to share, reference, and

interconnect external content, central practices in Twitter's retweeting and information-sharing culture (Yang, 2016; Zappavigna, 2018).

Patterns in the linking practice on Twitter vary across cultures and communities (Moe & Larsson, 2013) and relate to the underlying themes of the tweets (Bruns et al., 2013; Bruns & Stieglitz, 2012). For instance, Bruns et al. (2013) noted that 50-60 percent of crisis relevant tweets contained links while hashtags that focused on original commentary had a very low percentage of links. Similarly, Moe and Larsson (2013) found that only about 27 percent of tweets in their data related to political discourse included hyperlinks. The current study will shed light on the linking practices in hashtag activism by the KOT community, thus contributing to the existing literature on hyperlinking patterns.

While frequency and thematic use vary, scholars also emphasize that hyperlinking on Twitter is not merely a technical feature but a strategic communicative choice. Users embed links to achieve specific rhetorical and discursive goals, depending on the context (Jakob, 2022; Morales-i-Gras, 2020; Wessler, 2018). For instance, Jakob (2022) analysed tweets from Twitter debate hashtags and identified two key functions of hyperlinks: a truth-based informative function, where links provide empirical support for truth claims, and a norm-based function, where links justify normative stances taken in tweets. This aligns with Morales-i-Gras (2020) argument that links enhance credibility by supplying supporting evidence or justification. Additionally, in contexts such as scientific conferences, hyperlinks help overcome Twitter's character constraints by directing readers to extended resources (Luzón & Albero-Posac, 2020; Weller et al., 2011).

Research on sources of the hyperlinks reveals that users primarily link to established news websites from both traditional media outlets and online-only publications (Bruns et al., 2013; Himelboim et al., 2013; Yi et al., 2016). These platforms provide credibility and a basis for information dissemination, especially in news-sharing contexts. However, a significant portion of hyperlinks also direct users to user-generated content platforms, including personal blogs and government or organizational websites, while a very limited number of links direct users to video sharing platforms and those identified as spam (Himelboim et al., 2013).

Interestingly, links to other social networking platforms and discussion forums are less common (Moe & Larsson, 2013). Twitter users tend to favour mainstream news sources for sharing verified information, while alternative media and social networking content are more prevalent for opinion-sharing and commentary (Bruns et al., 2013). This distinction indicates that hyperlinking practices may vary based on tweet context and topic, reflecting user intention and the desired reception of the shared content.

These findings outline the semiotic role of hyperlinking in Twitter discourse, but studies have yet to examine hyperlinking within hashtag activism. Given the ideologically driven nature of activism, this study aims to fill this gap by investigating linking practices within Twitter-based protest discourse. This will contribute to understanding how hyperlinks function as resources in ideologically charged conversations, shedding light on their role in protest discourses.

2.2.7 Emojis

Emojis have become a significant component of digital communication, attracting considerable scholarly attention. Danesi (2017), defines emojis as picture-words, noting that the term originates from the Japanese words ‘e’ (picture) and ‘moji’ (letter). Initially emerging as emoticons, emojis have since evolved into a vast repertoire that includes facial expressions, gestures, animals, objects, and various symbols (Alshenqeeti, 2016). Unlike conventional images, emojis are composed of characters, which technically classifies them as text-based elements (Herring & Dainas, 2017; Pohl et al., 2017). This dual nature allows them to function as both visual and linguistic resources within digital texts. Moreover, emojis are unique among visual elements in that they are standardized within the Unicode system, enabling consistent use across platforms and devices (Gibson et al., 2018). On Twitter, for instance, emojis are treated as textual characters and are included in the tweet’s character count, further reinforcing their status as hybrid semiotic resources.

On whether emojis are a new language or not, Alshenqeeti (2016) highlights the correlation between early pictographic representation and modern emojis arguing that emojis are an evolution of the early visual symbols. She argues that the Unicode standard facilitates the technical aspects which support the role of emojis in expanding linguistic capabilities,

making communication more visual reminiscent of ancient pictographic systems. Conversely, Seargeant (2019) argues that the standardization of emojis has enabled them to be a shared means of expression, akin to a new writing system, where conventions concerning their use and interpretations can develop. This debate notwithstanding, the Unicode standard provides the necessary technical infrastructure for emoji usage while context and culture remain significant in influencing their use and interpretation. This integration brings to the fore the complex interplay between technology and communication in the digital discourses.

Scholars have classified emojis using various perspectives. Na'aman et al. (2017) categorized emojis into function, content, and multimodal uses. Function emojis are those that act as stand-ins for function words, while content emojis replace lexical words or phrases acting as direct conveyers of meanings. Multimodal emojis enrich text with affective markers or stance, expressing emotions, attitudes or intent of message. This categorization allows for a more nuanced interpretation of the emoji functions in a text. Nonetheless, it presents a challenge of accurately sub-classifying multimodal emojis into specific classes such as gesture, topic or attitude.

Another approach by Johnsson (2020) categorizes emojis into face emojis, heart emojis, gesture emojis and object emojis. The category of face emojis depicts various facial expressions. Heart emojis include symbols in different colours and styles that represent heart-related emotions. Gesture emojis cover hand and body gestures that convey specific actions. Finally, the objects category encompasses all other emojis that do not fit into the previous three categories, such as images of artifacts, animals, plants, flags, and more. This categorization has the advantage of capturing the pragmatic and paralinguistic roles that constitute the emotive meaning. However, it may not fully capture the complexity and evolving nature of emojis, hence limiting the full range of their potential.

Grosz (2022) also categorizes emojis using a formal semantic typology that distinguishes between face emojis and activity emojis. Activity emojis are those that denote events and involve anaphoric properties, while face emojis are emojis that express attitude and often reflect the author's emotions. Grosz et al. (2023) add that face emojis comment on a target proposition, reflecting the author's desires or priorities hence making them propositional

modifiers. Grosz's (2022) approach presents a systematic attempt to categorize emojis based on their interaction with the co-text, rather than treating them as isolated symbols. The approach also emphasizes on the importance of context, suggesting emoji meaning is dependent on the surrounding text. However, the approach does not explicitly state the precise nature of mapping between emojis and their meanings, limiting its applicability in diverse communicative contexts.

Despite the weaknesses of the various classification systems, they present foundations for analysing emoji use and highlight the linguistic and paralinguistic functions of emojis. This duality of functions presents the complexity and context-dependency of emoji semantics, bringing out the need for further research to refine the categories and understand emoji meanings across different contexts and online communities.

Emojis perform a variety of functions beyond the mere visual representations. Studies have shed light on the potential of emojis to take up grammatical, semantic and pragmatic roles within digital communication. Scholars who advance the claim that emoji is developing into a language have highlighted a variety of structural linguistic roles that emojis fulfil. These include substituting words and letters (Dürscheid & Siever, 2017), replacing punctuation marks (Arafah & Hasyim, 2019; Jonsson, 2020), and as semantic entities that can substitute entire propositions (Crystal, 2015; Herring & Dainas, 2017). Additionally, because of their predominant mid and final positions in the texts, they serve to delineate clause and sentence boundaries effectively replacing punctuations (Cramer et al., 2016). Pohl et al. (2017) further contend that despite the absence of a phonetic interpretation, emojis represent a form of text expression.

Moreover, sequences of emojis can demonstrate properties akin to grammatical structures, such as a subject-or stance-initial word order (Danesi, 2017). The connection between emojis and emoji sequences to the text they accompany can also be articulated using syntactic terminologies such as text replacement (Danesi, 2017), repetition of text (McCulloch & Gawne, 2018) and text complementary (Cramer et al., 2016). Danesi also concludes that certain sequences of emojis such as calquing, which involve the translation of verbal expressions into emojis, possess an iconic conceptual structure, characterized by

a complex interplay of syntactic mirroring. These arguments support the notion that emojis possess their own syntactic and conceptual structures.

Conversely, other scholars argue against classifying emojis as an operational language. For instance, Ge and Herring (2018) argue that as much as emojis denote objects, human-like facial expressions and actions, they lack symbols for most abstract concepts, lack certain grammatical categories and do not inflect for tense and number. Additionally, McCulloch and Gawne (2018) claim emojis lack structural regularities which are typical in languages. In examining the structural features of emojis, Zhao et al., (2018) conclude that emojis typically supplement nouns and adjectives rather than verbs hence their limited syntactic ability.

In relation to emoji sequences, Dainas and Herring (2021) posit that emoji sequences do not accommodate the possibility of embedding propositions within other propositions or referring sequences of events in any other manner apart from a temporal sequence. Additionally, Cohn et al. (2019) report that emoji sequences exhibit simplistic levels of patterning, indicating that they do not possess a complex grammatical system. They also point out that most users make use of linear sequences such as repeating the same emoji or listing semantically related emojis without a structured order.

McCulloch and Gawne (2018) further make significant conclusions on emoji sequences. Their study reveals that most emoji sequences feature high levels of repetition and lack structural complexity, hence can be compared to beat gestures in spoken language. A methodological contribution of their work is the application of N-gram analysis, a method commonly used to study sequences of words in a text, to explore the structure of emoji sequences. Through this method, they found that over half of the sequences contained identical repetitions, while many others exhibited internal repetition or thematic similarity. The study concludes that emoji repetition often serves an emphatic function and aligns with the accompanying text rather than forming an independent grammatical system. Thus, emojis are more accurately understood as digital gestures than as components of a stand-alone language system.

Dainas and Herring (2021) offer a balanced perspective on emojis, suggesting they are neither a stand-alone language nor purely paralinguistic. They argue that emojis lack the standardized meanings and structural consistency required of a separate language system. While emojis can function like paralinguistic, their uses are broader and more complex, given that they are text-based, finite in number, and can replace words or punctuation. Consequently, Dainas and Herring suggest that emojis should be regarded as a unique component of online language. Logi and Zappavigna (2023) further emphasize the role of emojis as visual paralinguistic that interacts with the linguistic text to convey meaning. Their model of emoji-text relations details emojis' dependency on written co-text, reinforcing their role as supportive, rather than stand alone, communicative elements.

Perspectives from the two sides of the debate contribute to the comprehension of emojis as versatile meaning-making tools in digital communication. All the views depict a framework that positions emojis as visual resources with certain grammatical properties, while also functioning as paralinguistic. This conceptual foundation supports further investigation into how emojis contribute to meaning on platforms like Twitter.

Semantically, emojis have an inherent meaning based on their visual representation. Studies postulate that emojis serve as pictographs that represent emotions, concepts and actions (Danesi, 2017). While they function somewhat like words, emojis allow for flexible interpretations shaped by surrounding text and cultural context (Alharbi & Mahzari, 2023). Studies indicate that emojis have an intrinsic semantic structure enabling them to perform various communicative functions (Kejriwal et al., 2021; McCulloch & Gawne, 2018), showing that they are not random visuals but symbols with recognizable meanings. However, their meanings are not always clear due to their inherent ambiguity (especially face emojis) and the varied rendering across digital platforms (Annamalai & Salam, 2017; Jaeger & Ares, 2017; Miller et al., 2017). Additionally, Arafah and Hasyim (2019) and Danesi (2017) observe that, while emojis may denote specific meanings, their connotative power is influenced by context, highlighting the importance of pragmatic meanings in understanding their full communicative potential.

To understand emoji meanings pragmatically, scholars have developed various taxonomies for their communicative functions across digital contexts. Herring and Dainas (2017) conducted a study on how graphicons (emojis, GIFs, images and videos) are used in Facebook threads. They identified six key functions: tone modification, mention, riffing, reaction, action, and narrative sequence. Although the study offers foundational insights, its focus primarily on a specific Facebook group, limits broader applicability. Moreover, interpretations were researcher-driven without direct input from users, which raises questions about their generalizability.

Expanding on this work, Dainas and Herring (2021) surveyed how users on social media interpret the pragmatic functions of emojis. They refined their taxonomy by adding categories like softening, physical expression, and decoration. Their findings validate Herring and Dainas (2017) taxonomy of pragmatic functions of graphicons, with tone modification being the most popular usage. The study plays a critical role in furthering the argument in favour of analysing emoji meaning from a pragmatic perspective. However, by focusing on popular emojis only, the findings did not fully capture the diverse range of emojis and their uses.

In a different cultural context, Li and Yang (2018) analysed emojis in Chinese digital communication and identified seven functions. They include signalling attitude or emotions, intensifying attitude or emotions, modifying illocutionary force, humour, irony, turn-taking, and backchanneling. Their study enriches understanding by highlighting unique emoji functions in a non-Western environment and examining their role in conversational management, such as turn-taking and backchanneling, which are often underexplored in Western-based research.

Similarly, Alharbi and Mahzari (2023) investigated the pragmatic functions of emojis in Arabic tweets. Using a mixed-methods approach, they focused on how emojis convey speaker and contextual meanings. The data was analysed with the help of Herring and Dainas (2017) taxonomy. Their findings align with Herring and Dainas's taxonomy and add insights into specific functions like softening and tone modification in Arabic-speaking

contexts. Methodologically, the study offers insights on examining emoji positions in tweets, identifying the common emojis and analysing the author and contextual meanings.

These studies collectively underscore the importance of the pragmatic perspective in interpreting emoji meanings. The insights provide a framework that emphasizes the influence of cultural context and methodological considerations, laying a foundation for the current study's exploration of emoji functions in online protest discourse.

2.3 Visual Resources

Visuals have become an integral part of contemporary discourse, serving both explicit and implicit roles in meaning construction. This has prompted scholars in linguistics to acknowledge the communicative potentials of visuals beyond merely illustrating. Lyons (2016) states that visual resources are now being recognized as having a meaning-making potential and worthy of analysis across a variety of contexts. In response to this growing recognition, scholars such as Kress and van Leeuwen (2008, 2021) have proposed foundational frameworks grounded in social semiotics to systematically analyse how visual elements construct meaning. Their approach emphasizes the semiotic resources available within visuals and the kinds of meanings these resources can produce in different contexts. The framework has a structured grammar for interpreting visuals which categorizes image elements according to the representational, interactive and compositional metafunctions. The representational function refers to the 'story' told by the image, examining how ideas, objects or participants are depicted within a broader context through actions, processes and relationships. Interactive meaning deals with the relationship between the viewer and the image, considering factors such as gaze, social distance, perspective and modality. Lastly, compositional meaning explores the arrangement of visual elements such as information value, framing, salience and layout, which collectively influence the meaning produced by the image. This approach highlights the potential of visuals to tell stories, create connections and structure information, making it ideal for examining visual meaning. However, as Aiello (2020) notes, integrating Halliday's metafunctions into visual analysis can be problematic as it risks the establishment of a rigid 'grammar' of visual communication that is based on linguistic principles.

Ledin and Machin (2018a) also build on the social semiotic foundations to introduce an approach that focuses more on the practical application of visual analysis techniques. They present a toolkit that can be applied to various forms of visual communication. Their toolkit breaks down visual elements into categories such as settings, participants, objects, actions, colour and viewer positions, helping to reveal the communicative power of images. Ledin and Machin's categories parallel Kress and van Leeuwen's (2008, 2021) metafunctions. Both approaches share a commitment to prioritizing how meaning is constructed through visual elements, though they are different in their emphasis. Kress and van Leeuwen's approach is more theoretical while Ledin and Machin's toolkit provides a practical guidance on how to analyse visuals systematically while emphasizing on the canons of use and materiality.

Aiello (2020) offers an integrated approach to visual analysis that combines Kress and van Leeuwen's metafunctions, Ledin and Machin's materiality and canons of use, with aspects of style and use. Through the analysis of a stock photograph from Getty images, Aiello illustrates how all these dimensions can be applied in a practical context to provide an understanding of the visual's communicative potential. The study emphasizes the relevance of the cultural and social context in which the images are shared, reused and transformed, a crucial perspective for contemporary semiotic analysis. Using a methodology that combines semiotic analysis with empirical methods such as interviews and historical research, Aiello's study provides a comprehensive understanding of image meanings. The study provides insights on the evolution of visual semiotics by integrating the social dimensions, refining analytical tools and advocating for a more holistic approach to understanding images.

Kress and van Leeuwen's visual grammar, Ledin and Machin's practical toolkit and Aiello's integrated context-sensitive approaches underscore the importance of a multifaceted approach to the analysis of visuals. Together, they demonstrate the strength of the social semiotic perspective in understanding not only what is communicated by images but also how these meanings are constructed and why they resonate in specific social and cultural contexts. These approaches provide a foundation that informs the

current study's methodology. By incorporating insights from each approach, this study examines how visuals in hashtag activism tweets function as meaning-making resources.

2.3.1 Images as Semiotic Resources

Various studies have categorized the images used on Twitter into distinct types based on their content, function, and form. The categorization varies slightly depending on the focus and approach of each study, reflecting how visuals are tailored to fit into specific communicative purposes. For instance, Yoon and Chung (2016) in their study of the Boston marathon tweets, classify the images into direct photographs, captured pictures, computer graphics, maps and text images. This functional grouping is echoed in Thelwell et al., (2016) who identified photographs, selfies, collages, captioned pictures, text-based images, screenshots, memes and images for advertisements as types commonly shared on Twitter in the UK and USA. Okoth (2020) classified visuals used in political protest tweets in Kenya into documents, editorial cartoons, screenshots, user photos and memes. Similarly, Marchal et al., (2021) identified the visual formats used in political campaign tweets as photographs, illustrations, screen capture, infographics, composite, quotes, and poster images. Allen et al., (2021) applied a machine learning technique to classify images from a large database of racial protest tweets. They came up with seven categories namely infographics, photographs with text or graphics, photograph, illustration with text, illustrations, texts, and screenshots.

Despite the differences in classification labels, the mentioned studies reveal recurring core categories such as photographs, screenshots, text-based images, illustrations and composite images. However, the basis of categorization has not been fully explained in the existing studies hence a gap still exists in the consistent description and categorization of Twitter images. Nevertheless, these findings provide the current study with a foundational basis for categorizing visuals by offering both established categories and methodological insights that can guide the classification. Identifying the image categories used in hashtag activism may contribute towards establishing a consistent description and categorization that can be used across all Twitter discourses.

Studies have analysed the images used on Twitter in contexts such as humanitarian crises, political campaigns and racial protests. For instance, Chung and Yoon (2013) analysed the use of images on Twitter, by examining tweets posted during the Boston marathon bombing. Their findings indicate that images on Twitter serve specific functions which include information dissemination, illustration, emotive/persuasive and information processing. Chung and Yoon observed that data-driven images use (such as information dissemination and processing) is more prevalent on Twitter than object-driven uses (such as aesthetic purposes, idea generation and emotive appeal). These findings contrasted with previous research on image use in other contexts such as journalism, a trend they attributed to Twitter's real time, informational nature. This contrast marks an important insight into how the Twitter platform shapes image usage which this study will examine further to either confirm or challenge.

Chung and Yoon's study also offers valuable insights to the current study, particularly in terms of the methodological approach. They limited their corpus to the tweets collected from a single event, the Boston Marathon bombing, to maintain a unified context. Following a similar approach, the current study focuses on tweets related to the killing of two brothers in Embu, Kenya, to examine image use within a specific context of police brutality. However, the difference between the two studies is on the type of tweets and user types analysed. While Chung and Yoon analysed influential and favourite tweets across all user types, this study examines general tweets exclusively from individual accounts without filtering by popularity or influence. By defining the scope this way, the current study captures tweets from ordinary Twitter users, hence offering a more authentic perspective on how images are used in activism discourse on the platform.

Research on the role of visuals in digital protests demonstrates the impact of images on mobilization, engagement and framing of the online protests. Casas and Williams (2019) demonstrate the effect of images on online protest mobilization. Their study, which examines an extensive dataset of tweets from BLM movement, reveals that images which trigger emotional responses such as anger and enthusiasm help in boosting tweet visibility and diffusion. However, images associated with sadness reduced the likelihood of the

tweet's spread. Their findings show that visuals can trigger emotional responses that may either promote or inhibit online engagement in protest discourse.

Similarly, Bosch and Mutsvairo (2017) investigate the use of images in the #FeesMustFall protests in South Africa, focusing on how visuals contribute to framing the protests and reinforcing solidarity. Their findings reveal that protestors use images to visually construct narratives centred around unity and advocacy for equality which helps shape the public's understanding of the discourse. Additionally, images depicting solidarity increase public support and participation thereby revealing the power of visuals to enhance emotional and interactive aspects of activists' movements. This demonstrates that visual representations can articulate complex issues in society. The study employs a hashtag analysis methodology using the Mecodify tool for data extraction. This approach allows for an in-depth understanding of how online communities form around specific issues hence providing insights into the dynamics of digital activism.

Okoth (2020) examines the use of visuals in Kenyan political protests on Twitter. The study focuses on how the KOT employ visuals to critique corruption in government. Using qualitative content analysis of the most retweeted visuals, Okoth identifies key protest themes showing how the KOT strategically use visuals to amplify dissent. The study identifies memes as the most prevalent visual format while humour, condemnation and mockery are the primary rhetorical strategies used to highlight grievances in the protests. The study uses the Mecodify tool to harvest tweets associated with three prominent political hashtags.

These studies make evident that visuals have a role in Twitter based protests, not only to capture attention but also to evoke emotions, foster solidarity and shape narratives around social issues. The findings suggest that visuals are resources for constructing meaning and influencing social media engagements in activism, hence the need for the current study to investigate the semiotic potentials of visuals in the police brutality context. Additionally, methodological insights from these studies provide a basis for the current study's methodological approach. By incorporating hashtag analysis, the current study provides a deeper understanding of the police brutality issue. Furthermore, using the Mecodify tool aligns this study with proven data extraction tools for tweets. This ensures a data collection

process that captures both the text and the visuals. This alignment with established methodologies for Twitter studies, affirms the reliability of the current study's methods.

Delving into photographs, scholars contend that this type of visuals have become an important social media currency. In studying photo-sharing associated with death and funeral on Instagram, Gibbs et al. (2015) identifies funeral photos such as images of the caskets, grave, hearses, flowers and vehicles in funeral processions, photos of family and friends, old photos featuring the deceased, landscape images and photographic montages. Gibbs et al. argue that each type of photograph is used to communicate a distinct meaning. For instance, they point out that selfies are used to express emotions, signify togetherness, mark presence and communicate the emotional atmosphere to the wider social media network. Additionally, photographs that show the funeral events and processes are used to communicate the materiality of death while photos of the deceased serve memory and memorialization purposes.

These findings are supported by Cupit et al. (2021) who reports the use of the deceased photographs on social media as a visual expression of grief. Cupit et al. findings point to a preference for photographs with a strong emotional connotation or those that make an important statement about the deceased. Combined, the findings demonstrate that the meaning of each type of photograph is closely linked to the context of use. The studies provide insights for the current research on analysing the meaning potentials of the photographs, particularly those of the deceased and their funeral, shared in tweets. However, a point of departure is that the motive for the photo-sharing differ. While users in Gibbs et al. (2015) and Cupit et al. (2021) studies shared images for purposes of grieving and memorialization, the photographs in the current study are shared for activism purposes. Exploring these contrasts will help inform whether the communication intent affects the choice and interpretation of photographs used in each context.

Digitization and technological advances have altered the form and function of photographs on social media, with various forms of manipulation and digital filters now widely used to communicate nuanced meanings. Researchers argue that these manipulations extend beyond aesthetics to reshape photographic meaning, influencing how images are perceived

and understood within social media contexts (Boeriis, 2024; Peng, 2017; Wong, 2019). Using the social semiotic approach, Boeriis (2024) examines how digital manipulations impact on the meanings of photographs by influencing the interpersonal, ideational, and textual metafunctions. The study demonstrates that different manipulation techniques (such as filters, framing, and compositional adjustments) affect the relationship between the viewer and the image, the content and themes represented, and the structural coherence of the photograph. Similarly, Peng (2017) asserts that image filters often distort the reality depicted, thereby increasing psychological distance between the viewer and the subject and defamiliarizing the photograph from the original. Peng notes that this defamiliarization not only changes a photograph's aesthetic qualities but also shifts its potential for authentic representation, thereby altering viewer perceptions.

Wong (2019) discusses how photo manipulation tools, now readily available on smartphones, enable users to transform photographs to suit an individual's preferred representation. These manipulations, which are categorized as semiotic resources, have transformed photographs from recordings of reality (image as a record) to tools for identity formation and communication (image as construct). By allowing users to alter and frame reality, photographs on social media move from passive representations of events to active constructions of preferred identities and narratives. Wong demonstrates how collages, art filters, and borders can convey connotative meanings, enabling users to strategically shape visual content for ideological or personal expression.

These studies highlight the importance of considering the role photographic manipulation plays in constructing meaning on social media, as these alterations often carry implications for identity, perception, and ideological framing. These insights inform the current study's focus on analysing the semiotic potential of manipulated photographs in hashtag activism, recognizing that each manipulation technique contributes uniquely to the meaning-making potential of visuals on Twitter.

2.3.2 Videos as Semiotic Resources

Videos have been identified as one of the meaning-making resources in digital discourses. Multimodal studies highlight the dynamic and complex nature of videos where different

modes such as the visual, audio and verbal are co-deployed and integrated to create meaning (Han & Zappavigna, 2023; Yao & Zhuo, 2018). Yao and Zhuo (2018) in their multimodal discourse analysis of a promotional video, demonstrate how these modes work synergistically to convey meaning and construct a compelling narrative. Their analysis reveals how the visual, audio and verbal resources interact to engage viewers and align them to the intended message. While their study is based on a promotional video, its findings contribute to the broader field of multimodal discourse analysis, particularly on how complex media formats achieve coherence and engagement through multimodal interaction. These insights offer a useful foundation for analysing videos in the current study.

Similarly, Han and Zappavigna (2023), focusing on a video from the Tik Tok platform, examine the role of rhythm in the construction of meaning in digital videos. They conclude that Tik Tok videos often draw on intertextual resources from various sources to function as multimodal collages. The study demonstrates that rather than simply repurposing content, these videos engage in a process of resemiotization, generating new meanings from pre-existing texts. Although Han and Zappavigna's study centred on a video from Tik Tok, it provides relevant insights for the current study because some videos on Twitter originate from TikTok, creating inter-platform dialogues. The two platforms share content as tweeters often attach videos picked from Tik Tok. The current research builds on their conceptualization of videos as multimodal collages that recontextualize pre-existing texts and create new meanings, hence enriching the analysis of the meaning potentials of the videos.

In digital discourses, videos serve multiple functions, from offering explanations to exploring identity and persuasion. The ease of video creation and sharing in the digital era has transformed activist engagement, enabling more dynamic and immediate contributions to public discourse. Thorson et al. (2013) investigates the use of video content in the Occupy Wall Street movement, focusing on how the videos are created, shared and perceived within the protest context. They categorize their videos into distinct genres such as testimonials, cut and mix, cut and paste, tagging and jamming, public speech, news

footage and protest footage. Their findings reveal diversity of content in the video clips which include both borrowed and original content.

A significant portion of video clips in Thorson et al.'s dataset contain borrowed content featuring news footage, images and music from other sources while others were self-produced music videos, remixes and street journalism capturing police actions. This mixture of sources and styles illustrates the multifaceted nature of protest video content, serving a range of purposes from documentation and critique to community building. Thorson et al. conclude that the videos serve as communicative resources that raise awareness, mobilize support, hold authorities accountable through sousveillance, foster a sense of community among protestors and create a shared narrative among protestors. The insights from Thorson et al.'s study underscore the multifunctional role of video content in digital protest movements, illustrating their meaning-making potential. Building on these insights, the current study investigates not only the types of video content, but also the different semiotic functions achieved through the videos used in the digital activism.

User-generated short-form videos (UGSV) have become prevalent on social media platforms, prompting the need for analytical methods that go beyond traditional videography approaches. Wang (2021) addresses this need by proposing a multimodal analysis method that prioritizes the medium of expression and communicative practices of short-form videos. To effectively manage the data presented by the short form videos, Wang's method treats videos as a sequence of moving images. The method employs a structured five step process for multimodal analysis: sampling data, transcribing data, mode-specific analysis, cross-modal analysis, and theoretical integration. This framework not only facilitates the analysis of short-form videos but also contributes to the broader field of video analysis by emphasizing the interaction of modes within this media type. Given that Twitter videos are typically short-form, insights from Wang's framework provide a practical methodological basis for analysing video content in the current study.

2.3.3 GIFs as Semiotic Resources

Graphic interchange format (GIF) files have emerged as popular visuals widely used on social media platforms because of their distinct capacity to convey meanings in brief,

looping animations. Gradinaru (2018) categorizes GIFs into two primary types: art GIFs and reaction GIFs. Art GIFs are those that utilize famous artworks or artistic collages to create an animation with a new meaning while reaction GIFs capture bodily and emotional responses enabling users to express reactions that mimic face-to-face interactions.

Veszelszki (2015) describes GIFs as short moving images frequently drawn from popular media, depicting gestures and facial expressions that convey complex emotions. This aspect of GIFs helps substitute for the lack of non-verbal cues in digital exchanges, intensifying emotional communication, as widely acknowledged in studies (Glynn & Brown, 2023; Gradinaru, 2018; Miltner & Highfield, 2017; Veszelszki, 2015). However, as Veszelszki notes, GIFs can shift the tone of conversations toward infotainment, and excessive use risks trivializing serious topics, thus underscoring the need for contextually appropriate use.

The communicative potential of GIFs extends beyond emotional expression to include cultural signalling and community building. Miltner and Highfield (2017) suggest that GIFs often rely on shared cultural references, which can foster a sense of community among users who understand the context behind the references. The use of specific GIFs drawn from popular films or viral moments can create an instant sense of community, aligning users around familiar symbols and shared experiences. Miltner and Highfield highlight the polysemic nature of GIFs which allows them to convey various meanings depending on the context of use. Their decontextualization enables users to remix and repurpose GIFs, creating new layers of meaning and transforming them into versatile communicative tools.

GIFs also serve as tools for humour and social commentary, allowing users to communicate critique subtly, embedded within humorous visuals. Gradinaru (2018) demonstrates how GIFs capture natural reaction complexities, making them suitable for conveying social critique in a relatable, entertaining format. Similarly, Glynn and Brown (2023) state that GIFs are often used in banter to lighten conversations or introduce comic relief. This humour can provide a sophisticated means of drawing attention to specific social issues embedded in the discourse hence serving as a subtle form of social critique.

Communicating social commentary within an entertaining format opens possibilities of layered interpretations. Insights from these studies reveal that GIFs are versatile communication tools that can reflect user's emotions, cultural knowledge and humour. This informs the current study on how to interpret the meaning potentials of GIFs within the context of protest discourses.

2.4 Approaches to Image-Text Relations

In the evolving landscape of communication, the interplay between modes has become central to multimodal research, underscoring the need to examine how different semiotic resources interact to form cohesive messages. Intermodal relations focus on how the semiotic elements across different modes interact to construct meaning within a multimodal ensemble. Jewitt et al. (2016, p. 25) describe this as “multimodal grammar,” noting that “elements in a multimodal whole are mutually modifying making it highly problematic to attend to one mode in isolation.” This mutual influence underscores the importance of assessing intermodal relations in multimodal digital discourses to fully capture the meaning-making processes. Thus, understanding intermodal relations is essential for any multimodal researcher aiming to analyse complex discourses that rely on the synergy of different semiotic resources.

Scholars widely agree that when multiple modes are combined within a text, there are inherent relationships that shape how meaning is created. In examining relationships between texts and images, scholars have come up with different text-image combinations that exist by assessing the roles each mode plays in the eventual creation of meaning. In one of the pioneering approaches to image-text relations, Barthes (1977) introduced three primary relations, anchorage, illustration and relay, that characterise the functions served by each mode. Anchorage describes a relationship where the text supports the image, helping the viewer reach a fine-grained interpretation. Illustration involves an image supporting the text by simply reproducing the information already presented in the text without altering it. Finally, relay refers to a balanced relationship where the text and image are equal with each conveying different but complementary information. Barthes categorization provided a foundation for subsequent analysis of image-text relations. However, the classification is limited and does not capture the full complexity of the

interactions, as later studies point out. For example, Martinec and Salway (2005) observe that Barthes' model does not account for the full range of possible image-text interactions while Unsworth (2007) highlights that it lacks specifics in defining how images and text interact in complex multimodal texts. These observations underscore the need for frameworks that capture the diversity and depth of intermodal relations in multimodal discourse.

Scholars have built on Barthes' categorization, integrating input from linguistics to develop different approaches to analysing image-text relations. For instance, Martinec and Salway (2005) propose a taxonomy that merges Halliday's analysis of clause relations in grammar and Barthes's categorization of image-text relations. This approach has two levels: the status and logico-semantic relations. The status level addresses the relative importance of each mode, classifying them as either equal or unequal relations. On the other hand, the logico-semantic level refers to the semantic relations between the modes subdivided into projection and expansion. This taxonomy forms a foundational aspect of this study and will be examined in detail in the theoretical framework section.

In a related approach, Unsworth (2007) draws from Halliday's account of logico-semantic relations and further expands Martinec and Salway's model to develop an analytical approach tailored for image-text relations in science textbooks. Unsworth differentiates between three main relations: concurrence, complementarity and enhancement, all within the broader category of expansion. Concurrence is characterized by equivalence of meaning between modes with subcategories such as of clarification, exposition, exemplification and homospatiality. Unsworth appears to have relabelled Martinec and Salway's elaboration category as concurrence and introduced new subcategories of clarification and homospatiality. The relation of complementarity occurs when each mode presents distinct meanings, adding new dimensions to what is expressed in the other mode. Subcategories under complementarity include augmentation, where one mode extends the meaning of the other by providing additional information and divergence, where the information in the text and image are different. Augmentation aligns closely with Martinec and Salway's concept of extension. The final relation, enhancement, involves one mode adding supplementary information related to condition, manner, place, time and cause. This

category resembles Martinec and Salway's enhancement relation, though Unsworth further refines it by adding the subcategories of condition and manner.

Unsworth's (2006) model relabels and expands upon Martinec and Salway's (2005) categories to allow for a more detailed analysis of image-text relations, especially in scientific diagrams within the education context. While originally developed for scientific texts, Unsworth's detailed distinctions provide valuable insights that can complement Martinec and Salway's model, especially for analysing short, multimodal texts like tweets. The refined subcategories in Unsworth's framework may offer subtle perspectives useful for interpreting image-text interactions within social media discourse.

Liu and O'Halloran (2009) move beyond the purely grammar-based approaches to image-text relations, by introducing a discourse-based approach for inter-semiotic cohesion. They argue that inter-semiotic cohesion facilitates the manifestation of inter-semiotic texture. Liu and O'Halloran propose that inter-semiotic texture not only links the two modes but integrates them into a unified semantic unit, making the meaning in multimodal texts cohesive and interconnected. The model emphasizes the importance of inter-semiotic cohesive devices in achieving this integration. Using texts from different genres such as advertisements, news reports and posters, Liu and O'Halloran identify four logical relations between texts and images, namely; comparative, additive, consequential and temporal relations.

In Liu and O'Halloran's approach, comparative relations refer to situations where there is similarity of meanings between the modes, with each reformulating the other. Additive relations involve one mode contributing new information that complements the primary message, hence enriching the meaning. Consequential relations are characterized by a cause-effect relationship, with one mode facilitating the interpretation of the other. The relation has two subtypes: consequence, where a causal connection is evident, and contingency, where there is a potential influence but no guaranteed outcome. Lastly, temporal relations describe procedural steps that establish a logical sequence, with images and text working in tandem to convey a sense of progression over time.

While Liu and O'Halloran suggest that their framework addresses limitations in existing grammar-based models, particularly those proposed by Martinec and Salway (2005) and Unsworth (2007), there appears to exist parallels among these models. For instance, Liu and O'Halloran's comparative relation aligns with Martinec and Salway's elaboration, additive with extension, and consequential and temporal with enhancement. Despite these overlaps, Liu and O'Halloran's model offers discourse-based insights that enhance the understanding of intermodal relations. Such a perspective can complement the analysis of intermodal dynamics in short, multimodal texts like tweets, where discourse-based relations may offer a more adaptable approach to examining the interplay of visual and textual elements.

In examining intermodal relations within social media, Morin et al. (2019) analyse text-image interactions during humanitarian crises, focusing on tweets about the Ebola pandemic. Their study introduces a four-category classification of image-text relationships: illustration, commentary, repetition, and complementarity. Illustration involves images that visually represent the text, with both elements working together to form a coherent message. Under commentary, the text provides an interpretive perspective on the visual. Repetition occurs when the image and text convey the same message, reinforcing it through both modes. Lastly, complementary refers to where the image provides additional information, which the text alone may not convey, leading to a fuller understanding of the message. This categorization highlights the diverse ways in which visual and textual elements can interact within tweets, to shape and convey meaning.

While Morin et al.'s framework offers a discourse centred approach that captures the ideological dimensions often present in social media content, it is somewhat limited in scope and may not comprehensively cover the full range of image-text relationships across varied contexts. The four categories may miss less overt ideological interactions, such as instances where one mode challenges or subverts the other's meaning for irony or ideological emphasis. Additionally, the approach does not account for cases in which multiple images within a single tweet work together to construct a layered message in conjunction with the text. Moreover, Morin et al.'s framework advocates for the simultaneous analysis of texts and images, an approach that can lead to a skewed

interpretation as it permits the researcher to selectively focus on modes when elucidating the meaning. To address these limitations, the current study incorporates insights from Morin et al.'s framework and Unsworth (2007) extensions, alongside Martinec and Salway's (2005) model, which provides a more flexible approach to capturing image-text relationships. By integrating these frameworks, this study aims to develop a comprehensive approach to analysing ideologically complex hashtag activism tweets, where intermodal relationships are essential to the expression of meaning.

In reviewing the literature, it is evident that substantial research has been conducted on textual resources, but limited research on the visual resources used on Twitter. However, these studies often adopt a monomodal perspective, focusing on individual resources, but not much on how these resources collectively contribute to meaning. This fragmented approach has provided valuable insights into the specific functions of different semiotic resources but falls short of capturing the full complexity of multimodal communication on Twitter.

The current study addresses this gap by offering an analysis of semiotic resources within a collection of tweets, specifically within the context of protest discourse on Twitter. The findings on how textual and visual elements interact to create meaning, will contribute to the body of literature on multimodality in digital discourse. Examining Twitter posts through a multimodal lens, not only sheds light on why users choose the semiotic resources but also reveals how these resources combine to enhance or shift meaning. Such insights may enable predictions into the types of semiotic resources likely to be deployed in digital activism, ultimately contributing to the development of a multimodal framework for analysing digital discourse. Therefore, this study addresses a scholarly gap by providing a comprehensive multimodal analysis of protest discourse on Twitter, illuminating how different semiotic resources intersect to shape meaning in social media activism.

2.5 Theoretical Framework

The study was guided by two theories, the Multimodal Critical Discourse Analysis and the generalized System of Text-Image Relations.

2.5.1 Multimodal Critical Discourse Analysis

Multimodal Critical Discourse Analysis (MCDA) propounded by Machin and Mayr (2012) and further refined in Machin and Mayr (2023) offers a framework for examining how meaning is constructed in discourses that employ multiple semiotic resources. This framework provides a systematic way of not only analysing language but also other semiotic modes such as images, photographs and graphics, embedded within a text. MCDA posits that all communication, whether linguistic or visual, is achieved through a range of semiotic resources, options, and choices, and it explores how these modes work in concert to produce meaning. In doing so, MCDA marks a departure from earlier linguistic research that considered language in isolation by focusing on the semiotic resources used in multimodal texts to reveal how meaning is constructed, how perceptions are influenced, and how audiences may be manipulated while communicative intentions remain obscured. Moreover, MCDA presents a comprehensive approach to analysing both visual and textual perspectives by integrating elements from several theoretical frameworks

MCDA builds on and extends the principles of Critical Discourse Analysis (CDA) by incorporating the analysis of multiple semiotic modes beyond language. While CDA focuses on how linguistic choices communicate social meanings, power relations, and ideologies, MCDA broadens this scope to include visual and other semiotic resources. It integrates CDA's attention to lexical and grammatical structures with tools for analysing visual elements, enabling a more comprehensive account of how meaning is constructed across modes. By doing so, MCDA highlights that meaning making is a multimodal process, shaped by the interplay of linguistic, visual, and technological choices. This expanded framework allows for a deeper understanding of how communicative resources are strategically employed and the social functions they perform in context.

The theory is based on three core principles, the first being that communication occurs through a system of choices. Drawing from the Social Semiotic perspective, which views language as a flexible set of resources rather than a fixed system (Machin & Mayr, 2012), this principle holds that all communication involves deliberate selection from available semiotic options. These choices reflect an awareness of their potential effects within

specific social contexts. In MCDA, this forms the basis for documenting semiotic choices as a key step in analysis, examining the resources used, why they were chosen, and their communicative impact. Given that different modes offer distinct affordances, the focus lies in how communicators strategically use these resources to achieve their goals, always in relation to the context and available alternatives.

The second concerns discourse, semiotic choices and signification. Drawing on CDA, where discourses are viewed as the broader ideas communicated by a text (Fairclough, 2003; van Dijk, 2008), this principle is based on the notion that communication is shaped by social practices. The principle stems from the understanding that communication is shaped by social practices and the semiotic choices made in each communication context are purposeful and reflect broader social meanings. Additionally, each discourse shapes how communicators perceive and construct reality. Moreover, the choice of meaning-making resources is shaped by cultural, social and ideological factors. Therefore, in MCDA, every semiotic choice carries significance, and the analysis should uncover the values, ideologies or social realities being communicated. Signification is also connected to social and cultural contexts. As Machin and Mayr point out, to fully interpret meaning communicated by a semiotic resource, both the connotative and denotative meaning must be considered. In MCDA, discourse shapes the available semiotic choices while the semiotic choices communicators make contribute to the broader processes of signification. This makes MCDA a valuable tool for analysing multimodal texts like activism tweets which use semiotic resources to produce socially and ideologically charged meanings.

The third principle addresses social semiotics and identity. Rooted in social semiotics, this principle posits that meaning-making resources are intrinsically linked to the construction and representation of identity within specific social and cultural contexts. As such, MCDA is founded on the examination of representations of self and other as constructed through language and other semiotic resources. By analysing the selection of these resources, MCDA can reveal how social identities are formed and negotiated. Moreover, the choice of semiotic resources may implicitly suggest the types of identities that communicators wish to promote or construct.

These principles are fundamental to MCDA as they provide a basis for describing the meaning- making resources, analysing how the choices shape social realities and how they construct identities within a multimodal discourse. Furthermore, they render MCDA a suitable theoretical approach for examining the semiotic choices employed by tweeters engaged in ideologically driven discourses, such as hashtag activism. Given that the tweets examined in the protest discourse were produced within a specific social context and crafted to reflect the interests of the social actors involved, MCDA is instrumental in uncovering the social realities, ideologies, and identities conveyed through the utilized semiotic resources.

Machin and Mayr also present a toolkit designed to enhance the analysis of semiotic choices within texts. When applying MCDA, researchers choose tools that are suited to the discourse under examination and aligned with the study's specific objectives. The first tool focuses on the analysis of both lexical and visual semiotic elements in the text. In the lexical domain, Machin and Mayr (2012, p. 11) recommend examining "lexical fields that can be used to signify meanings not made explicit in speech and text, and how these can be used to foreground and background different kinds of discourses and associations.". This analysis also involves identifying what is expected but absent and exploring the structural oppositions established by lexical choices. For visual analysis, the emphasis is on the iconological features present in images and how these visuals articulate broader discourses.

The second tool involves examining the semiotic resources for representing the speaker's attitude, identity and character. This is achieved by analysing the words used to evaluate social actors alongside visual resources that interpret identity, attitude, and character. In terms of language, the analysis of 'quoting verbs' is employed to reveal the evaluative stance that the author promotes, which can shape the overall text. Additionally, visuals are analysed using the framework provided by Kress and van Leeuwen (2008), focusing on elements such as pose and gaze to uncover the potential meanings behind the speaker's attitude.

The next tool addresses representational strategies, specifically the linguistic and visual semiotic resources referred to as 'naming strategies', used to depict people. The way in which participants are presented in text or images influences how they are evaluated,

thereby either encouraging or discouraging identification with them. Moreover, the deliberate choice of semiotic resources can either foreground or obscure certain aspects of identity, ultimately serving to legitimize or delegitimize the participants. Machin and Mayr further incorporate a classification for describing social actors adopted from van Leeuwen (1996) which includes categories such as personalization versus depersonalization, individualization versus collectivism, specification versus generalization, nominalization versus functionalism, use of honorifics, objectivization, anonymization, aggregation and suppression.

Another tool deals with the analysis of linguistic and visual resources for representing people's actions. This involves examining the words and images used to depict what individuals do. These semiotic choices influence how participants and events are interpreted, even when not explicitly stated. The representation of action through various verb processes and visual imagery shapes perceptions of those involved. Machin and Mayr ground their analysis of verb processes in Halliday's (1985) six categories of verb processes namely material, mental, relational, behavioural, verbal, and existential processes.

The fifth tool focuses on the analysis of metaphorical tropes in discourse. Metaphors are fundamental to how we describe and understand the world, as we constantly use them to conceptualize our surroundings. They enable us to highlight certain aspects of a subject while backgrounding others (Machin & Mayr, 2012). This analysis examines how authors deploy metaphors and other rhetorical tropes as both ideological instruments and pragmatic devices to shape understanding while omitting specific details.

The sixth tool addresses concealment strategies evident in both language and visual resources using nominalisation and presuppositions. Nominalisation can conceal the actor, the action, and its timing, while presuppositions allow authors to imply meanings without direct expression. Analysing the strategic employment of these features is crucial in MCDA, as it reveals underlying ideological dimensions within the texts.

The final tool in the MCDA framework examines modality and hedging in linguistic and visual elements. In language, modality encompasses forms that indicate levels of truth commitment and signal authority. In visual communication, modality concerns the extent to which an image reflects reality, and the various truth claims it enables. Machin and Mayr note that visual modality can be combined with linguistic semiotic resources to generate multiple layers of meaning. Moreover, hedging involves linguistic devices that allow speakers to avoid making direct assertions, thereby mitigating potential negative consequences. Evaluating the use of modality and the effect of hedging is an integral part of MCDA analysis.

MCDA is well-suited for this study because Twitter discourse is inherently multimodal, combining text, images, audiovisual elements, and platform-specific technological features to construct meaning. Analysing such a complex environment requires a multilayered approach that accounts for the diverse semiotic resources involved. MCDA offers a robust analytical toolkit for systematically examining both linguistic and visual elements, focusing on how they create meaning and the meaning potentials they carry. This makes it particularly effective for investigating the communicative strategies and meaning-making processes in hashtag activism tweets

Another strength in using MCDA to analyse hashtag activism lies in the theory's ability to unearth the ideological messages embedded in the multimodal resources. In analysing the visual resources, MCDA combines visual and semiotic analysis with critical discourse analysis. This combination facilitates the establishment of a functional connection between visual grammars and the ideologically and strategically motivated intentions of the creators and distributors of the visuals. Consequently, the theory enables a detailed examination of how both linguistic and visual resources are strategically deployed to galvanize support and shape the collective understanding in the protest discourse. The framework also emphasizes on power relations making it an ideal tool for exploring how the resources reflect the discourse of justice and authority.

MCDA is also appropriate for its focus on how semiotic resources interact to construct meaning. When meanings derived from the visual resources are placed next to the

meanings of the accompanying texts, they aid in showing how the communicative choices made by the authors seek to perform certain functions for them. MCDA helps in revealing and identifying these functions through the careful process of description guided by the toolkit provided.

Despite the strengths of the theory, MCDA has limitations particularly when applied to digital discourses like Twitter. Given that the digital environment is variable and open to manipulation, the existing multimodal frameworks cannot fully account for semiotic resources deployed in contemporary interactive digital discourses (Bateman, 2018; Bou-Franch & Garcés-Conenjos, 2018; Herring, 2018; Ledin & Machin, 2018). Since MCDA was not designed for digital discourses, it does not have a theoretical grounding for handling some of the semiotic resources introduced by the digital technology. For instance, tweets involve technological features such as hashtags, mentions, hyperlinks and emojis which are not traditional semiotic resources and may require new categories for analysis. Technology also facilitated the creation of new, reconfigured and dynamic visual resources whose analysis may not be fully captured by MCDA's visual analysis toolkit. To address this limitation, the framework was modified by adapting and expanding the toolkit to accommodate technical and reconfigured meaning-making resources identified in the digital discourse corpus.

Another limitation arises from the nature of Twitter as a fast-paced and dynamic platform, which means tweets are not always curated to communicate a specific ideological agenda. Consequently, using MCDA, which overly focuses on uncovering ideological messages can potentially lead to an over-interpretation of the tweet's content which in most cases is spontaneous in nature. Furthermore, Twitter's brevity, characterized by a 280-character limit, can make the analysis of the linguistic resources constrained, compared to larger forms of texts. To overcome this limitation, MCDA's focus on detailed critical analysis involved a dynamic approach to discourse. This approach not only accounted for how meaning was constructed through individual tweets but also through interaction with the larger Twitter threads on that discourse. These modifications enabled MCDA theory account for the unique communication characteristics on the Twitter platform.

MCDA focuses on understanding the meanings conveyed by the different semiotic resources and how they work together to convey meaning. Consequently, the theory implicitly deals with the intermodal relations but does not have a structured way or toolkit dedicated to analysing the kinds of intermodal relations in a discourse. To explore the specific semantic connections between the modes, the MCDA framework was supplemented with Martinec and Salway's model of image-text relations.

2.5.2 System of Image-Text Relations

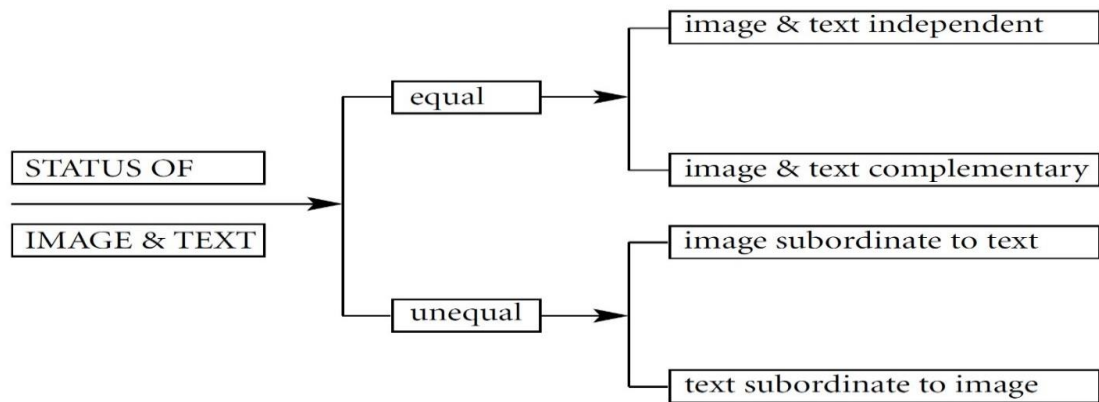
Martinec and Salway (2005) system of image-text relations is a generalized framework for understanding the relationship between texts and images across various genres of multimodal discourse. The model is grounded in Halliday's systemic functional linguistics' relationship between clauses and Barthes (1977) classification of image-text relations. Martinec and Salway build their framework on two primary types of relations: the relative status of images and texts and their logico-semantic relationships. This dual approach allows for a comprehensive analysis of image-text relations in both new and old media (Martinec & Salway, 2005). Status relations refer to the relative hierarchy that the text and image hold in terms of the communicative weight borne by the modes. On the other hand, logico-semantic relations are concerned with the meaning-making relations that exist between the two modalities.

In this model, the notion of status relations helps in highlighting the relative dominance of either of the modes. Martinec and Salway identify equal and unequal status relations. Images and texts are considered to have unequal status when one of the modes modifies the other resulting in either image subordinate or text subordinate status relations. Under the image subordinate, the image does not add any new information but simply supports the text while in the text subordinate the text supports the image by clarifying or elaborating on the visual content. The model further subdivides the equal status into complementary and independent. Images and texts joined on an equal footing and with no signs of modifying one another are considered independent. Additionally, the information provided by the images and texts in this category exists in a parallel manner and "does not combine to form part of a larger syntagm" (Martinec & Salway, 2005, p. 343). Images and texts are in an equal complementary status relation when they are joined equally but modify one

another. Here, one mode needs the other for successful communication. The status relations are captured in Figure 2.1

Figure 2.1

System of Image-Text Status Relations



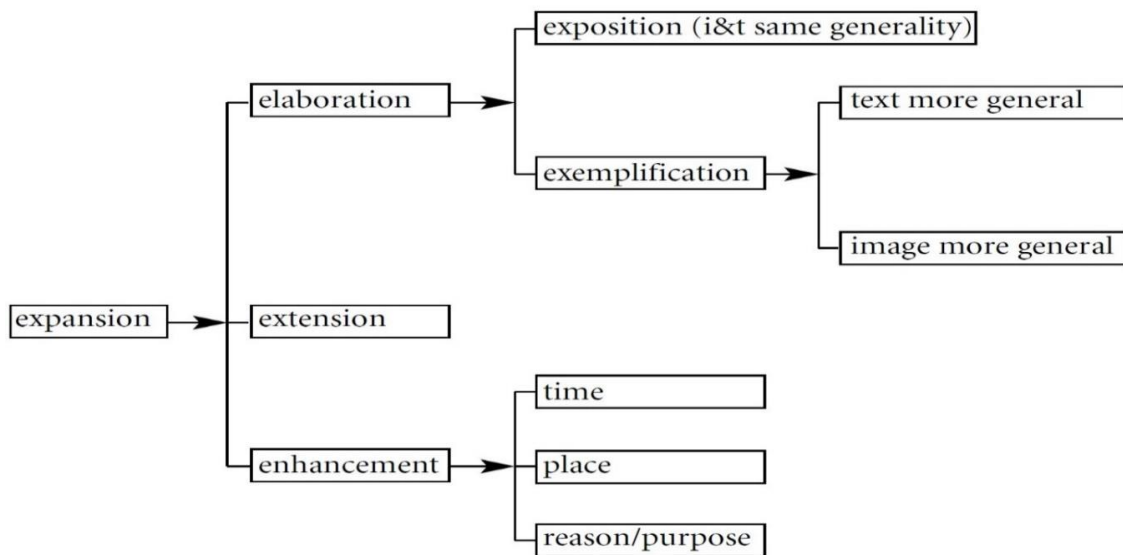
Note. From “System for image-text relations in new (and old) media,” by R. Martinec and A. Salway 2005, *Visual Communication* 4(3), p. 349. Copyright © 2005 by SAGE Publications. Used under fair use for educational purposes

The logical-semantic relations are modelled on the expansion and projection relations. Under expansion, the logico-semantic relations of elaboration, extension and enhancement are used to describe the relations between the meanings communicated by the texts and images. Elaboration involves one mode providing a restatement or clarification of information provided in the other mode through exposition or exemplification. Exposition is when the two modalities convey the same information, and their level of generality is the same. On the other hand, exemplification is realised when the level of generality of the texts and images is different. Additionally, one mode elaborates on the other creating a kind of superordinate-hyponym relationship. Secondly, extension occurs when one mode provides new information beyond what is represented in the other mode. This leads to augmentation of information that establishes an extended relationship. Lastly,

enhancement means either image or text provides background information to clarify the causal, temporal or spatial aspects linked to what is presented in the other mode. The expansion logico-semantic relations are summarised in Figure 2.2.

Figure 2.2

System of Expansion for Image-Text Logico-Semantic Relations



Note. From “System for image-text relations in new (and old) media,” by R. Martinec and A. Salway 2005, *Visual Communication* 4(3), p. 352. Copyright © 2005 by SAGE Publications. Used under fair use for educational purposes.

Martinec and Salway’s model is appropriate for analysing multimodal texts because its focus on status and logico-semantic relations can help in exploring ways in which texts and images interact to create meaning. In analysing tweets, the status relations can be used to determine whether it is the tweet’s text or the visual that is dominant. Similarly, logico-semantic relations can highlight whether the visuals elaborate, extend or enhance the textual contents of the tweet.

Despite its robust nature, Martinec and Salway’s (2005) model has limitations when applied to digital microposts like tweets. The platform’s technological affordances such as hashtags, mentions, and the sequential display of text and visuals introduce complexities

the original model does not fully address. For instance, hashtags function as metatextual cues that influence the interpretation of both the tweet and its associated visual. Additionally, the linear structure of tweets, where text precedes the visual, complicates the analysis of status and logico-semantic relations. Tweets also often operate within broader conversations, making it difficult to analyse intermodal meaning without considering the surrounding discourse.

In response, this study modified Martinec and Salway's framework to better accommodate the affordances of digital protest discourse. Drawing on their own suggestion that the model should adapt to new genres, the study refined and expanded the subcategories of status and logico-semantic relations based on patterns observed in the tweet corpus. The integration of the MCDA toolkit, used to first examine the meaning potentials of textual and visual resources, further supported a nuanced analysis of intermodal relations within the broader context of hashtag activism.

Combining the two theories in the current study offered depth and breadth in understanding the meaning potentials of semiotic resources and how they combine on multimodal platforms like Twitter. MCDA provided tools for analysing how meaning is constructed and the critical interpretations of those meanings while Martinec and Salway's image-text relations model provided a structured way of exploring how the two modes relate to clearly define the relationships.

2.6 Summary of the Chapter

Chapter two has reviewed the existing research on the textual and visual resources commonly found in digital discourses and examined literature on the interplay between these modes, thereby providing a foundation for the analysis of multimodal tweets in protest discourse. By integrating insights from both MCDA and the generalized system of image-text relations, this study is positioned to investigate how tweeters construct cohesive and impactful messages within the context of hashtag activism. The literature review and theoretical frameworks established in this chapter offer a lens through which the study can examine the meaning potentials of multimodal resources in digital protest movements. The next chapter builds on this literature review grounding to detail the research methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology employed in this study. The study investigates multimodality on Twitter using a case of hashtag activism on police brutality in Kenya. The chapter opens with a description of the research design, followed by an overview of the study location and target population. Next, it examines the sampling procedures, data collection methods, coding process, and techniques for data analysis. The chapter concludes with a discussion of the ethical considerations underlying the study. Methods discussed herein were driven by the research aim, objectives and the nature of the data used in the study.

3.2 Research Design

The study adopted a case study approach to analyse naturally occurring tweets produced by users for their own purposes. According to Yin (2018), a case study is an empirical inquiry that investigates contemporary phenomena in depth and within its real-life context. Given the vast scope of hashtag activism on Twitter, the design allowed the research to focus on a specific case, enabling an in-depth examination of multimodality in Twitter discourse. It also made it possible to manage the complexity of studying multimodality in a technologically mediated context by selecting a focused dataset for detailed analysis.

The hashtag-based case study design ensured a shared cultural, social, and political context for all analysed tweets, eliminating context as a confounding factor in meaning-making. Given the platform-specific nature of digital discourse, the case study enabled contextualization within Twitter's technological affordances. It also supported a holistic analysis by focusing on broader patterns rather than isolated tweets, as all tweets used the same hashtag and addressed the same issue. This had ethical implications, discussed in section 3.9 of this chapter.

A hashtag-based case is a case composed of tweets that use the same hashtag. Hashtags are an important resource on Twitter because they unite individual tweets into a socially constructed corpus providing the researcher with a valuable chunk of linguistic data about the public thoughts on a particular social issue. Since hashtags are used to mark tweets,

they allow the users to follow and contribute to conversations centred around the topical keyword(s) in the hashtag. Having a case around hashtagged tweets helps in achieving what Androutsopoulos (2013, p. 496) refers to as “thematically organized streams of online discourse”, which is an important aspect when researching digital contexts.

Although the study was qualitative, in some instances simple descriptive statistics such as simple frequency counts of the main types of semiotic resources in the tweets, was employed to establish the usage patterns. Data on usage patterns are of value as they directly reflect the overall communicative nature of the messages. Consequently, the quantitative analysis served as a baseline for qualitative analysis, helping to support the interpretations. This was done as a preliminary and foundational step towards the qualitative analysis of the data.

3.3 Study Area

Data for this study was collected from Twitter, a widely used social networking site known for its dynamic, user-generated content on public discourse. The platform functions as a digital public sphere where individuals from diverse backgrounds engage in discussions on matters of public interest. Its real-time nature and widespread accessibility make it a valuable space for gauging public sentiment and societal responses to current events. Moreover, Twitter’s high volume of daily posts offers a rich source of data for examining contemporary communication practices and digital interactions.

Compared to other social media sites, Twitter corporation provides access to their data by disseminating it through several official application programming interfaces (APIs). The corporation also offers an academic research product track which allows academic researchers free access to Twitter data. This access enables researchers to collect real-time and historical tweets with additional features and functionalities that support comprehensive and unbiased datasets. Furthermore, public tweets can be viewed by everyone with or without a Twitter account. This makes it easy for data verification and replication of the study. Tweets are also short and can be clustered around a hashtag resulting into a relatively homogeneous and balanced corpora. Finally, the data collected from Twitter provides different kinds of metadata such as username, geolocation and date among others that aid in the sampling process.

3.4 Target Population

Twitter is a global platform that facilitates interactions among users worldwide. To establish a clearly defined and manageable population for this study, the assertion by Herring (2019) that online users can form communities that share common characteristics, like physical populations, was considered. Accordingly, the study focused on a specific social group known as Kenyans on Twitter (KOT), a community characterized by shared cultural and social contexts. The KOT community was selected because the case study hashtags addressed police brutality in Kenya, making KOT members the most likely group to engage more with the discourse geolocation.

Twitter's supplementary metadata, such as username, tweet language, user , and time zone, was utilized to identify tweets originating from the KOT community. This approach ensured the inclusion of users closely connected to the socio-cultural and offline context of the selected case. Additionally, limiting the target population to the KOT community minimized variability in cultural and social background contexts, which are likely to influence the selection and interpretation of semiotic resources. By focusing on this specific online community, the study aligned its scope with the cultural and contextual dimensions essential for analysing multimodal resources in protest discourse.

3.5 Methods of Sampling

Sampling in this study was done at two levels. The first was to sample the activism case to be part of the study while the second level involved sampling the tweets to be analysed from the selected case.

3.5.1 Case Selection

In the first phase, purposive sampling was used to select a hashtag activism case that trended the most in Kenya during the year 2021. The process of case selection involved the use of discourse-centred online ethnography (DCOE), proposed by Androutsopoulos (2008). DCOE is a method that “uses ethnographic insights as a backdrop to the selection, analysis and interpretation of log data, in order to illuminate relations between the digital texts and their production and reception practices” (Androutsopoulos, 2008, p. 2). The study specifically used the first pillar of DCOE, which is systematic observation over time.

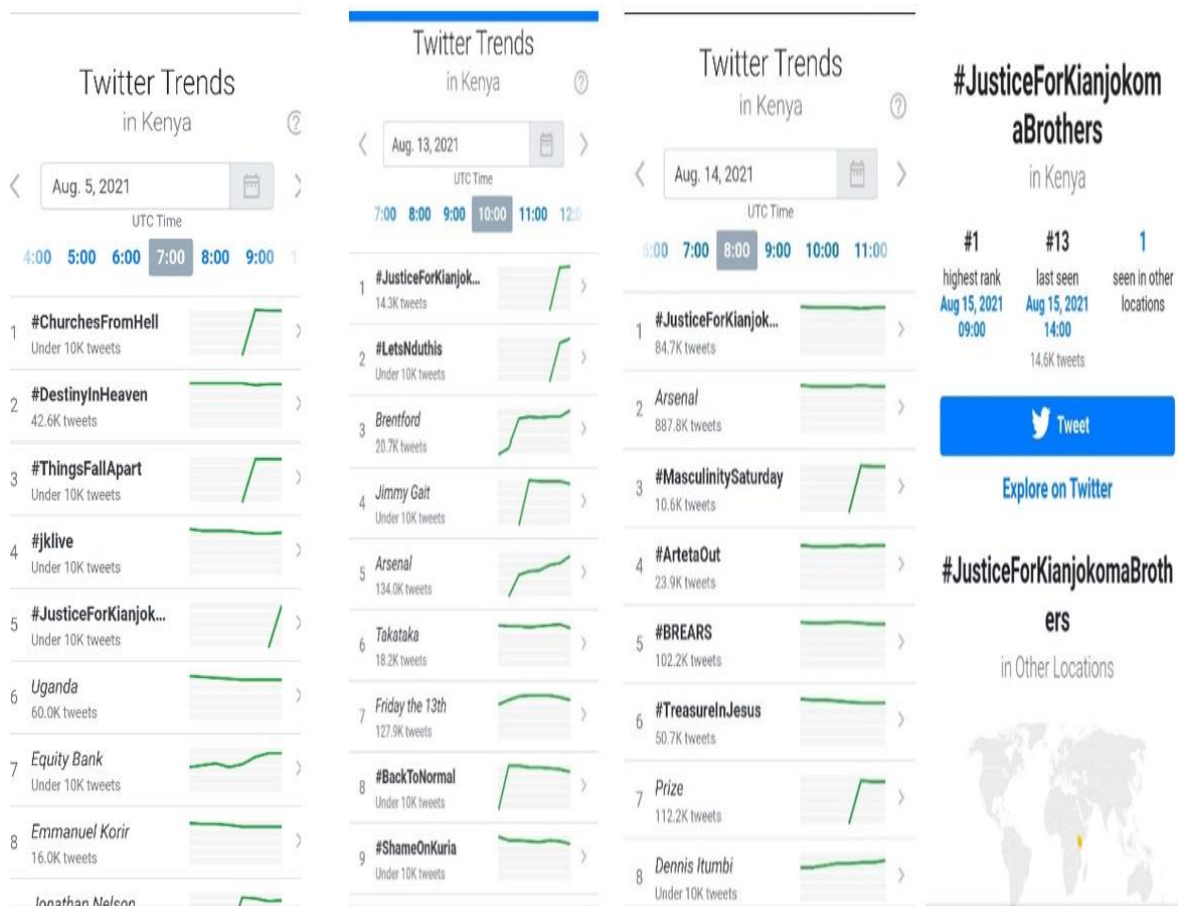
The entry point entailed active membership into the Twitter platform followed by continuous monitoring and observation of the activities on the platform. This helped in understanding how the platform works in terms of the communication dynamics and semiotic production in line with what Androutsopoulos points out as the main concern for systematic observation in the digital environment. The researcher undertook online ethnography on Twitter during the year 2021, monitoring the unfolding online activities in relation to offline events, while taking note of events and topics that propelled engagements on the platform.

The first decision emanating from the observations was to focus on hashtag activism against police brutality. This was informed by the dynamics of communication noted on the platform, which indicated that social injustice cases attracted more online conversations using hashtags. This being the COVID-19 pandemic period, many of the injustices were centred around excessive use of force by the police, an observation substantiated by reports from human rights institutions and IPOA in Kenya. Subsequently, the researcher undertook the monitoring of Twitter trends to identify trending activism hashtags that generated the largest public discourse in Kenya that year. A Twitter trend is a topic or hashtag that gains a lot of attention in a certain area. According to Twitter Help Centre (Twitter Inc., 2021), Twitter uses an algorithm to determine the trends and is primarily based on the amount of new audience engaged in a conversation. Once a topic stops to gain new attention, Twitter no longer considers it a trend even though it might still have a significant audience. Since Twitter has a feature that helps trace trending topics in different countries and cities around the world, the popularity statistics generated were used to select trending hashtags.

To get these statistics, GetDayTrends, a site that uses Twitter's API interface to retrieve and process trends from Twitter, was used to identify the hashtag that trended the most in Kenya. The website allows users to keep up to date with current trends, review trend history, and browse long-term popular hashtags and topics from different countries and even major cities around the world on an hourly basis. Figure 3.1 shows sample results from the Twitter trends for four different days starting from 5th of August 2021 to 14th of August 2021.

Figure 3.1

Sample Days and Hours when Hashtag was Trending



Note. Adapted from *Kenya Twitter trends*, by GetDayTrends, n.d. (<https://getdaytrends.com/kenya>). Copyright status unknown.

From the Twitter trends statistics in figure 3.1, the hashtag started trending on 5th of August at 7a.m., when it appeared in the top five trends of the hour. It lost ground on 15th August at 2p.m., lastly trending at position 13. The hashtag #JusticeForKianjokomaBrothers trended the longest and posted the largest volume of tweets in Kenya in 2021.

Observational data and statistics from this website guided the choice of the case to be used through identification of a hashtag that attracted the largest volume of tweets. Sampling a hashtag with the most engagements was important in this study since it meant the hashtag had attracted many members of the KOT community, thus facilitating a case that is

representative of the online population. In addition, having a case that stemmed from an offline event helped improve the quality of the sample by providing narrower boundaries for sampling and having the case within a specific context. Since the case was hashtag based, the study used the main hashtag #JusticeForKianjokomaBrothers and another related one, #JusticeForEmmanuelandBenson, to harvest the tweets to populate the case.

3.5.2 Selection of Tweets

The second phase involved sampling the tweets to be analysed from the hashtag case identified. Since the data of interest in this study was data produced naturally by online actors for their own purposes and not experimentally elicited data, there was no control over the amount of data available. Statistics from GetDayTrends indicated that the hashtag #JusticeForKianjokomaBrothers had amassed over 100,000 tweets by the end of August 2021. This being a qualitative study, it was impossible to analyse such large amounts of data, hence the researcher had to purposively select a sample from the available data. Herring (2004), in her Computer Mediated Discourse Analysis (CMDA) framework, argues that the most effective data samples for CMDA research are either motivated samples or samples of convenience. She proposes four sampling techniques, namely thematic, temporal, phenomena, and individual, which can be employed to purposively select data. Accordingly, in this study, data were purposively sampled in line with Herring's proposals using a combination of these techniques.

Sampling by time meant collecting tweets from a specific timescale. Temporal sampling has the advantage of preserving the richest context and reconstructing a shared context for all the tweets. This technique was critical because context was of paramount importance in this study. The timescale chosen for this study was between 5th and 15th of August 2021, a period when the hashtag was actively trending. Trending hashtags typically remain prominent for a period before yielding to others. This specific period coincided with offline activities surrounding the deaths of the two brothers at the hands of police officers. Figure 3.1 shows that the hashtag started trending at 7a.m. on 5th of August 2021, after the physical protests in Embu town. The brothers were laid to rest on 13th of August 2021 an event that again propelled the hashtag to the top position for the second time. The hashtag finally dropped from the top ten trending topics in Kenya on 15th of August 2021 at 2p.m., lastly

trending at position 13. It is thus justified to conclude that this is the period that offered the richest online context in relation to the hashtag, hence the best period to sample the tweets.

The second technique used to sample the tweets was by phenomenon. Since the phenomenon under investigation in this study was multimodality, then it was crucial to capture tweets in a multimodal ensemble. On Twitter, users have an option to compose their tweets in text only formats or text and images format. The sampling had to ensure that only tweets that used both text and image were to be included in the sample set to enable an in-depth analysis of multimodality. Thematic sampling was the third technique. This involved sampling tweets that addressed or alluded to the topic propagated by the hashtag, that is, police brutality. The technique ensured consistency and maintained coherence of the theme in the data sampled.

The last technique was sampling by individuals. Only tweets from personal accounts of KOT users and not corporate accounts were to be included. This enabled focus on tweets produced by individuals and not organizations. The latter were considered non-representative of the ordinary KOT user since they most likely expressed what the institution or organization wanted to communicate. Another reason for their omission was that they were probably formulated under certain institutional guidelines which would then not be aligned to the aim of the study. However, it is important to note that this criterion did not apply to tweets from personal Twitter handles of media personalities and government officials, as these were considered personal and not representing the corporates. The combination of these four techniques ensured data sampled was rich in context, coherent in theme, could facilitate an in-depth analysis of the multimodality phenomena and was focused on a particular group of tweeters. Combining the strengths of the four techniques minimized the impact of their individual limitations when used alone.

3.6 Data Collection Procedures

Data collection procedures for this study followed a multi-phase process that included obtaining appropriate technical access, preparing the collection environment, deploying software tools, and ensuring data integrity throughout the collection period. The process was shaped by the specific requirements of conducting research on a social media platform governed by corporate policies, as well as the demands of managing digital data.

The process began after securing the necessary institutional and ethical approvals. These included an introductory letter from Laikipia University Graduate School, which was used to apply for a developer license from Twitter Corporation, a research clearance certificate from the Institutional Scientific and Ethics Review Committee (ISERC), and a research permit from the National Commission for Science, Technology and Innovation (NACOSTI). While these approvals do not constitute data collection steps per se, they were crucial in enabling lawful access to digital data and are detailed further in the ethical considerations section.

To access data from Twitter, the researcher applied for and was granted a Twitter Developer account with academic research access. This license provided access to Twitter and a unique API 2.0 bearer token, which served as a digital credential to authorize data collection. Twitter's API allows researchers to collect real-time and historical data under specific terms of use, particularly for public tweets. Access was granted for academic purposes only and required strict adherence to the platform's developer policies regarding data use, sharing, and storage.

The next procedure entailed installing the Mecodify software tool for data collection. Initially, the installation presented a technical challenge because the Mecodify docker version repo is incompatible with Windows operating systems, which the researcher's personal machine operated on. To address this, the researcher procured a subscription to Digital Ocean, a pre-configured cloud hosting service, to deploy a virtual private server. This cloud environment allowed for uninterrupted data harvesting, visualization, and export over the entire study period. The subscription was maintained for approximately one and a half years to support data collection, cleaning, analysis, and thesis development.

The data collection phase was guided by a structured data management plan developed in accordance with best practices for handling social media data and in alignment with Twitter's developer terms. The plan outlined protocols for collecting, processing, storing, preserving, and sharing data. Only public tweets were collected, and no private user information was accessed or stored. The plan also included provisions for data security, such as periodic rehydration and backups to prevent data loss.

3.7 Methods of Data Collection

In contrast to traditional media data collection, extracting data from digital platforms requires managing substantial volumes of archived data. This section addresses the data collection tools, the automated collection process, the manual filtering processes and the image extraction process.

3.7.1 Data Collection Tool

Data collection in digital platforms like Twitter require a tool that can automate the data collection process, save the retrieved data and offer mechanisms for visualization (Al-Saqaf, 2022). To harvest the tweets, this study used automated data collection tools; the Twitter Academic Research API, and a third-party open-source software tool, Mecodify. The Academic API is an official API that allows researchers to access tweets and other related data directly from Twitter's data base. This academic API provides access to historical tweets with enhanced metadata and higher rate limits than the standard API. These capabilities made it a suitable instrument to collect a comprehensive dataset that could support the type of data, and the depth of multimodal analysis required in the study.

Mecodify, the primary instrument in this study, is a feature-rich software created through the Media, Conflict and Democratization (MeCoDEM) project to enable researchers extract, codify and present raw data from Twitter with ease (Al-Saqaf, 2022). The choice of the tool was guided by its seamless integration with the Twitter Academic Research API and a user-friendly interface. The tool's compatibility with the API allowed the researcher to collect tweets efficiently while respecting Twitter's data access policies. The integration made the software stick exclusively to the Twitter API during the data extraction process, making the data collected reliable, legal and ethical. Additionally, the incorporation of the Twitter Academic Research API facilitated the collection of tweets older than seven days, commonly referred to as historical tweets. This was critical for this study because the tweets in the corpus were generated in August 2021, meaning they were older than seven days by the time of collection.

The user-friendly interface eliminated the need for extensive expertise in programming. Other available third-party tools require some basics in programming languages, hence presenting difficulties for researchers with no background in programming. This capability

enabled the researcher to use the tool with much ease and focus on refining the search parameters to ensure data relevance. Furthermore, the tool allowed for automatic extraction and processing of the tweets by running the collected tweet IDs through the Twitter API to fetch details of the tweet. Compared to manual methods, this automated approach enabled a quicker and more systematic process for collecting and managing data.

The software also facilitated query customization. This allowed for automated querying of tweets based on relevant predefined search parameters such as hashtags and specific date ranges. These parameters were critical for this study because the case was built around specific hashtags and tweets produced within a specific period. The tool further provided a set of useful filters that allowed for the collection and inspection of data by focusing on different segments of interest. Some of the filters related to the inclusion or exclusion of retweets, images, video, links among others in the specific tweets to be captured. This approach enabled the researcher to select a range of features, resulting in a corpus with elements relevant to the study. As this was a multimodal study, it was crucial to collect tweets with the granularity required to explore all modes of communication. Therefore, retrieving data that encompassed typographic texts, images, videos, and any associated links was critical.

Mecodify was also ideal for the study because it captured several variables as metadata. These included the tweet ID, tweeter's username, language, and geolocation. These metadata offered additional information that helped in the data sampling and coding processes. For instance, since the study aimed at collecting data from the KOT community, the metadata on username and location of the tweeter helped in identifying members of the targeted KOT community.

Finally, Mecodify as a tool worked within Twitter's policy of not allowing developers to redistribute tweets outside of the platform. The software did not store the complete tweets themselves, but rather their IDs and corresponding metadata. It only allowed for the exporting of the text part of the tweet and the corresponding metadata into a comma separated values (CSV) format for further annotation and analysis. The actual tweet was

obtained through rehydration, a process of clicking on the link to fetch the tweet from Twitter live site. The CSV file acted as a preliminary resource for the creating a codebook.

One major limitation of the tool is its inability to automatically capture the visual content of tweets. Instead, Mecodify records the uniform resource locators (URLs) of visuals, which are exported alongside other metadata, such as tweet text, into a CSV file. This makes it difficult to view the text and visuals side by side as they appear in the tweets, a critical requirement for multimodal analysis. To address this limitation, the researcher rehydrated the tweets and captured the text-visual combinations using screenshots, ensuring the data was captured in its intended multimodal presentation.

3.7.2 Automated Data Collection and Filtering

The automated phase began with the installation of the software then signing up for an account with Mecodify. After logging in, a case with the details as illustrated on Figure 3.2 was created.

Figure 3.2

Visualization of Case Details

[Download raw text file containing hashtags used in the below tweets](#)

Case id: **policebrutality2021**

Title: **Tweets on Kianjokoma brothers**

Search query: **#JusticeForKianjokomaBrothers #JusticeForEmmanuelAndBenson**

Period: from (2021-08-05 23:55:30) to (2021-08-15 23:55:30)

Details: **Two brothers from Embu, Kenya killed while in police custody.**

Show: Top images ([Shared](#) | [Retweeted](#)) - Top videos ([Shared](#) | [Retweeted](#)) - Top links ([Shared](#) | [Retweeted](#))

[Export all 2126](#)

Note. Visualization of case details as captured from the researcher's personal Mecodify account. Figure generated within the Mecodify software.

The process of creating the case started with filling in the relevant details as required by the software. In this study, the search query based on the hashtags #JusticeForKianjokomaBrothers and #JusticeForEmmanuelAndBenson was used to jumpstart the crawling process. The start period was set at 05/08/2021, the time when the online protests began and the end period on 15/08/2021 the day when the hashtags stopped trending. This phase of the process was automated, so after the case creation the data extraction process was activated, and the case populated. When the process was completed, a total of 7,796 tweets had been collected. Mecodify presented the tweets in a table paginated per 100 tweets. The data collected was now ready for further filtering.

The second filter related to the tweet content type, where the software was instructed to capture tweets that included an image (photos and GIFs), a video, and a link. This ensured that only multimodal tweets were included in the sample. The software also allowed for the exclusion of retweets, which were not relevant in this study. Using the case already created in the first step, the filters on tweet content type were applied, reducing the collected tweets to n=1547. The data, including all metadata for each harvested tweet, was then exported to a CSV file for further processing.

3.7.3 Manual Data Filtering Process

The next step involved the manual filtering of the 1547 tweets collected. Each tweet in the corpus was rehydrated to retrieve the full tweet from Twitter live site. Once a tweet was retrieved, it was manually checked to ensure it fitted into the prescribed sampling criteria. Several filters were simultaneously used in this process. The first filter, relating to thematic sampling, involved checking if the tweet's content was relevant to the selected hashtag's theme. The process involved reading through the tweet on a simple exclusion/inclusion basis. The contents were examined to ensure they clearly addressed or alluded to the topic of police brutality as propagated by the selected hashtags. This was necessary because of hashtag abuse, a common practice on Twitter where users join a conversational thread of a trending hashtag, yet their content does not address the hashtag's theme. All tweets that simply hijacked the hashtags were labelled irrelevant and excluded from the data. This was to ensure consistency and maintain theme coherence in the collected data.

The second filter was to ensure all tweets that might lead to popular content were omitted. The decision was informed by Bruns and Liang's (2012) argument that if retweets and duplicate tweets are not removed from a dataset, the study risks inclusion of excess popular content. To avoid this danger, all quotes, retweets and identical tweets were excluded from the dataset. A data deduplication test, that involved the identification and removal of all duplicate tweets from the dataset, was also done. Since the software did not have a filter to automatically omit duplicated tweets, it had to be done manually during the tweet rehydration process.

The third filter was based on the user type, which involved checking the type of account and the user. Users on Twitter interact via two main types of registered accounts: personal and corporate accounts. Tweets from corporate accounts were to be excluded from the data as explained in the data sampling section. Consequently, all tweets that originated from Twitter handles registered under media houses, human rights bodies and government institutions were marked irrelevant and omitted from the data. To identify the users, the geolocation and usernames of the tweeters were checked to confirm if they were members of the KOT community. A total of 28 tweets had been tweeted from locations outside of Kenya but on further assessment of the metadata on usernames and profile description,

there was a strong indication that the tweeters were Kenyans and so their tweets were included in the sample data to be analysed. This confirmed the assumption made earlier, that people who interacted using the hashtag were likely to be members of the KOT community, because the topic touched on police brutality in Kenya.

The manual processing of all the above-mentioned filters was done simultaneously. Once a tweet was rehydrated, it was checked for all the four aspects; relevance of topic, tweet type, account type and KOT membership on an inclusion/exclusion criterion as earlier explained. If it fitted into any of the exclusion criteria it was marked irrelevant and omitted from the dataset. During manual assessment, a few purely textual tweets (without images, links, or videos) were found and subsequently omitted. The resulting dataset was a total of 496 tweets. This data was rechecked manually to ensure only the data with relevant characteristics had been captured. Table 3.1 gives a summary of how the data collection and filtering process was done to arrive at the final sample of 496 tweets.

Table 3.1

Summary of Data Collection and Filtering Process

Techniques	Parameters / Filters applied	No of tweets
Automated Search query (theme and temporal)	All tweets with hashtags: #JusticeForKianjokomaBrothers and/or #JusticeForEmmanuelandBenson Posted from 5/08/2021 01:01:30 to 15/08/2021 23:59:30	7796
Tweet type (Automatically captured)	Not a retweet but with image, video or link	1547
User type (Manually excluded)	Tweets from corporate accounts	
Thematic (Manually excluded)	Off-topic tweets with Irrelevant content	1,051
Tweet type (Manually excluded)	Quotes, Duplicate tweets, No image or no text	
FINAL SAMPLE Must have:	Phenomenon: text and an image and/or a video and/or a link Period: 5/08/2021 01:01:30 to 15/08/2021 23:59:30 Content: relates to police brutality Hashtag: either #JusticeForKianjokomaBrothers and/or #JusticeForEmmanuelandBenson Source: Individual KOT members	496

3.7.4 Image Extraction Process

The next step in the manual data processing involved a second rehydration of the tweets for image extraction and resolving the hyperlinks (following server redirects). When exporting the data from Mecodify to the CSV file, only text-based elements such as the

body of the tweet and other metadata are captured and saved. The images were captured and saved under the media link in the form of URLs. As earlier explained, the images could only be accessed by typing or pasting the URL into a browser's address bar, to retrieve them. To avoid this long process, the researcher opted to collect the images in a different format. Consequently, during the tweet rehydration process all the images used in the tweets were downloaded to a new file and saved using the tweet's serial number for ease of identification and reference to the tweet that used the image(s). All the files with images were saved in one folder labelled 'Tweet images'.

In addition to downloading the images, screenshots of each tweet were taken to verify the accuracy of the data captured by the software. This step was necessary because, in some cases, certain elements such as emojis were missing from the automatically extracted content. Each screen shot was labelled using the tweet's serial number as indicated on the Mecodify table, then saved in one folder. These screenshots provided a record of the tweets in their multimodal form during the data analysis process. For tweets containing hyperlinks, the links were resolved, and both the source and content of the linked media were examined and documented.

Finally, the CVC text format files, the image folder and the screenshot folder were organized into one folder and saved on both the computer and a cloud-based storage to reduce the risk of data loss. Considering this was a multimodal study, it was necessary to collect the data in multiple formats to ensure that all the semiotic resources used in the data had been captured to facilitate the multimodal analysis. As Jewitt (2016, p. 27) states, multimodal data collection "has to be fine-grained and holistic enough to ensure that data on each of the relevant modes and semiotic resources in use are captured." Combining automatic data collection and manual filtering processes and storing the data in multiple formats ensured that holistic data samples with all the semiotic resources were available for analysis.

3.8 Methods of Data Analysis

Having outlined the research design, the sampling process, and the data collection methods, this section turns to the analytical approach employed in the study. Before data analysis

began, the data had to be cleaned and coded. This section gives a brief description of the data cleaning, coding and analysis processes.

3.8.1 Data Cleaning and Coding

The dataset underwent cleaning to retain only the relevant details. Since data retrieved through the Twitter Academic Research API contains extensive metadata, non-essential fields such as user profile, tweet counts, favourites, likes and replies were removed. The cleaned dataset was then exported to an excel codebook for further organization and coding. Initial columns included tweet serial number (as captured on Mecodify), date, tweet URL, username, user location, tweet text, hyperlinks (if any) and hashtags used. This format enabled ease of identification, reference and rehydration during the analytical stages.

The next phase involved coding, which served to organize and interpret the tweet content systematically. As Saldana (2021) notes, coding bridges data collection and deeper analysis, helping to condense data for categorization. Given that qualitative coding is inherently interpretive, two linguistics graduates were recruited as coders to ensure inter-coder agreement. Their disciplinary background was essential for identifying the latent features in the data, supported by Saldana's assertion that coders require strong vocabulary, creativity and critical thinking.

The first stage involved thematic coding to identify the overarching message of a tweet in its entirety. Each tweet was treated as a unit of analysis to preserve contextual meaning (O'Conner & Joffe, 2020). However, given that tweets sometimes carried multiple or even contradictory messages, the protocol allowed for assigning multiple codes to a single tweet. Considering the nuanced nature of protest discourse, open coding was adopted to allow data-driven categories to emerge organically. The coders first double coded a small subset of 50 tweets (approximately 10 percent of the total data) to help refine the protocol and ensure consistency. Upon reviewing, comparing and discussing the provisional codes, a set of 32 codes was agreed upon. The final coding was guided by team consensus and dialogical intersubjectivity, rather than quantitative intercoder metrics, in line with Saldana (2021) recommendations. A new column on codes was created in the codebook and each tweet tagged with the appropriate codes

These codes were then categorized thematically into broad categories of message type through an iterative process of code categorization, which allowed grouping of similar communicative intentions. A total of seven categories for message types were created from the codes (see appendix A for the description). They included call to action (CTA), expressing solidarity, information sharing, expressing emotions, critiquing the authorities, social commentary, condolences and memorialization messages. Each tweet was then tagged onto the categories, making the data more organized as the tweets were now grouped into thematically based categories.

The next phase was coding the media forms using visual content analysis. An initial coding scheme was developed by adopting and revising image categories from earlier studies on Twitter images (Allen et al., 2021; Marchal et al., 2021; Okoth, 2020; Thelwall et al., 2016; Yoon & Chung, 2016). The categorization was based on the notion of image formats which describe the media type based on their constitutive properties to identify the general characteristics of the images. Adjustments were made iteratively through discussions between the coders and the researcher. For images that could not be immediately placed, a Google reverse image search was conducted to locate the sources. The final image categories included: photographs, edited photographs, screen captures, illustrations, text images, drawings, memes and digital posters (see Appendix B).

The last stage of coding involved coding the videos using content analysis. An initial coding scheme was developed from Thorson et al. (2013) and van Zoonen et al. (2010). The coders independently viewed each video, classifying them into the initial categories while taking note of those that did not fit into any of the existing categories. Through iterative refinement, a final classification system was agreed upon. The final video coding scheme had five categories of video content namely, events, artistic expressions, memorial or tribute, personal stories and testimonials and meme videos (see appendix C) The categories were largely different from those of previous studies because this study's emphasis was more on the content rather than mere classification.

At the end of the coding and categorization process the codebook was populated with all the relevant information which included the serial number of the tweet, date, the tweet text, location, the hashtags used, the message category of the tweet and the specific category of

the media form(s) used. This structured dataset formed the basis for the subsequent analytical stages.

3.8.2 Analytical Procedures

Having completed the processes of cleaning and coding, the next step involved interpreting the data through systematic analytical procedures tailored to both the textual and visual elements of the tweets. Due to the multimodal nature of the dataset and to fully address the research questions, the study employed a multilayered approach using content analysis, MCDA and multimodal video analysis as its analytical methods.

Content analysis, an observable and objective method, allowed for the quantification and systematic description of both verbal and visual content (Bell, 2010; Schreier, 2012). This method was selected for its ability to categorize, describe, and interpret patterns in a structured and replicable manner. In parallel, the MCDA toolkit offered a lens for the detailed examination of linguistic and visual features, supporting the uncovering of meaning potentials embedded within the protest discourse. However, since MCDA alone does not adequately interpret dynamic visuals such as videos, the analysis incorporated Wang's (2021) procedures for multimodal video analysis to address this gap.

To address the first research question regarding the meaning potentials of textual resources in anti-police brutality hashtag activism tweets in Kenya, a detailed description, explanation, interpretation, and critique of the resources was conducted. The study made use of a combination of automated annotation tools and manual inspection to describe and interpret the textual resources. The first step in description of the features involved doing a character count for each of the tweets. Twitter character counter (<https://charactercounter.com/twitter>), a free online tool used to measure the length of a tweet, was used to count the characters. Each tweet was copied exactly as it appeared on Twitter live site then pasted onto the tool to display the number of characters used in that tweet. The character count for each tweet was recorded and later summed up to calculate the average tweet length for the entire dataset.

The second step was to describe the linguistic resources, a step that made use of text analysis and natural language processing (NLP) techniques. The text was tokenized using

parts-of-speech (POS) analysis. The English Twitter POS tagger model (Derczynski et al., 2013), an extension of Stanford POS tagger was used to assign parts of speech to each word in the text as a foundation for further analysis. The software was appropriate for POS tagging since it contains trained tagger models that read into English tweets using the Penn Treebank tag set (see appendix D for description of tags). The data was first pre-processed by translating all non-English words into English. The last step was to describe the technologically facilitated features in the text part of the tweet. Resources such as mentions, hashtags, URLs and emojis which are part of the options offered by the platform, were described in terms of simple frequency counts to account for their occurrence and distribution in the entire corpus.

The analysis stage moved beyond the descriptive mapping of the textual resources used in the tweets to consider the meaning created by the resources. At this point the study adopted analytical procedures common to multimodal studies which involved viewing the data repeatedly to observe any peculiarities (Jewitt, 2016; Ledin & Machin, 2018b; Machin & Mayr, 2012, 2023). The meanings in the tweet texts were then interpreted and critiqued based on the relevant tools from the MCDA toolkit. An analysis on the lexical level for explicit structures and the implicit meanings was done. The lexical analysis was supported by results from the POS tagging, key word in context (KWIC) and word listings analysis. AntConc (Antony, 2023), a corpus analysis software was used to generate the word listings, collocations, word clusters and the KWIC analysis. The meaning potentials of the interactive resources and emojis as used in the context was also analysed.

To respond to the second research question on the meaning potentials communicated by the visual resources in anti-police brutality hashtag activism tweets in Kenya, a critical interpretation of the resources used in the media part of the tweet was done. The resources were first categorized and described, followed by a critical interpretation of the meanings they evoked. The images and videos were organized based on the formats identified during the coding process. A simple frequency count of each of the visual resources as used in the entire dataset was done to account for their distribution. The analysis involved visual content analysis, iconographic analysis and context sensitive interpretation of the images to extract the meaning created. Visual content analysis involved the identification and

description of visual elements (Kress & van Leeuwen, 2021; Ledin & Machin, 2018a). Building on this, iconographic analysis focussed on interpreting the genres of the images within the wider historical image context, traditions and aesthetic backgrounds. The meanings of salient visual elements were interpreted within their artistic and cultural contexts. Finally, these interpretations were situated within the broader context of police brutality and the specific tweets in which the visuals appeared.

To analyse the video resources, which are dynamic and incorporate different semiotic resources, the study adapted and modified mode categorizations proposed by Han and Zappavigna (2023) and Wang (2021) to develop a mode dictionary for coding. These scholars emphasize that video analysis should begin with identifying the perceivable semiotic elements within the video. This requires breaking the video into analysable units. Accordingly, the study applied the first two steps from Wang's (2021) framework for multimodal video analysis: sampling and transcribing. Sampling involved segmenting the video into frames based on either time or thematic content, with frames referring to the most salient elements of the video

The videos created from live events, music or screen recordings were broken down into frames at intervals of 5 seconds while those created through remixing of images, were organized into frames based on the images (thematically). The second step of transcribing involved taking note of all the different modes and semiotic resources used in the videos based on the frames and capturing them in a sequential order to create what Wang refers to as a 'storyboard'. Finally, a critical interpretation of the evoked meanings was given.

Regarding the third research question on the kinds of relations that exist between the textual and visuals resources in the tweets, an analytical approach that incorporated both the grammatical based and discourse level approaches was adopted. The study modified and applied text-image status and logico-semantic relations derived from Martinec and Salway's (2005) generalized model of Image-text relations. The model was expanded to incorporate discourse-based approaches (Liu & O'Halloran, 2009). The text-image relationships were analysed based on the findings from research questions one and two on meanings realized by the textual and visual resources. A five-category classification of the logico-semantic relations was established. The analysis established the connections across

the texts and visuals that interplay in the tweets to bring out the meaning that stemmed out of the multimodal ensemble.

3.9 Ethical Considerations

In this study, Twitter served as a site of research thereby giving rise to ethical issues that confront internet researchers. Conducting research in online environments introduces unique challenges that require careful navigation of legal, practical and moral responsibilities.

Before commencing data collection, all necessary approvals were obtained. Research clearance was secured from ISERC and NACOTSI in Kenya. Additionally, the researcher obtained a Twitter Developer account license for academic research, which permitted lawful access to data in accordance with Twitter's API policies. This compliance was necessary since Twitter functions both as a social platform and a corporate entity that governs user interactions through legally binding terms of service and developer agreements (Twitter Inc., 2022b). All data collection and handling adhered strictly to Twitter's legal and technical stipulations.

In relation to ethical considerations specific to Internet research, guidance was drawn from frameworks established by the Association of Internet Researchers (AoIR) and Menlo Report (Kenneally & Dittrich, 2012). These frameworks stress the importance of addressing issues related to public versus private domains, informed consent, anonymity and potential for harm.

On the issue of distinguishing between private and public domains, this study considered Twitter a public platform. By agreeing to Twitter's Terms of Service, users consent to have their public tweets accessible globally, if their account settings are set to public visibility (Twitter Inc., 2022a). Public tweets are thus considered part of a public domain, which can be searched and viewed by anyone, consequently only publicly available tweets were collected. The use of hashtags, which are designed to increase visibility, further reinforced the classification of these tweets as public content intended for wide dissemination.

Informed consent in social media research presents challenges due to the involvement of multiple stakeholders who include platform administrators, content creators, mentioned

subjects, and content consumers. This complexity renders traditional models of informed consent impractical (Ahmed et al., 2018). In response, this study adopted a contextual approach, as recommended by the AoIR, in which consent requirements are evaluated based on the specific circumstances of the research (Franzke et al., 2020). Given that all sampled tweets included hashtags and were public, and in line with Townsend and Wallace's (2017) argument that hashtagged tweets do not require informed consent due to their visibility-seeking nature, consent was deemed unnecessary.

For individuals mentioned within the tweets, obtaining direct consent was typically unfeasible. To obtain a balanced ethical position, pragmatic arguments were adopted based on the context of the study. One of the guiding principles by AoIR is for researchers to create a balance regarding the rights of the subjects with the social benefits of the research and the researcher's rights to conduct research (Markham & Buchanan, 2012). In line with this principle, the researcher tried to balance the rights of subjects with the broader social benefits of research, carefully considering the impact of sensitive content. Any potentially distressing content, such as traumatic images, were not explicitly included in the thesis. Instead, descriptive summaries were provided to capture essential content and context without risking re-traumatization or sensationalism.

On the issue of anonymity, although usernames and other identifiers were omitted, the study acknowledges the limitations of full anonymization on social media due to the possibility of reverse searching of content online. To mitigate this, aggregate trends were reported instead of direct quotations, especially when dealing with sensitive data. This strategy aligns with best practices for protecting privacy in digital research.

The case study design adopted in this research facilitated a focus on patterns and themes rather than individual users, thereby supporting ethical reporting. By prioritizing broader discursive trends, the study avoided disproportionately highlighting any single user or subject. All sources were properly cited to uphold scholarly integrity. These measures ensured that the study struck a careful balance between methodological rigour and respect for the rights of individuals whose public data were analysed.

3.10 Summary of the Chapter

This chapter has comprehensively detailed the research design, sampling procedures, data collection method, data analysis, and the ethical considerations for this study. The rationale for the choice of the case study approach used in this study was given and the sampling procedures used to ensure a manageable and representative data size described. The data collection method for the study was outlined while justifying the choice of the data collection tool. A discussion on content analysis, MCDA and multimodal video analysis as methods of data analysis was presented to shed light on the analytical tools and techniques employed to help respond to the study's research questions. Ethical considerations made in the study were discussed, highlighting the ethical guidelines adhered to. The chapter sets the stage for the subsequent chapters on data presentation, analysis and discussion of findings.

CHAPTER FOUR

DESCRIPTION, USAGE PATTERNS AND MEANING POTENTIALS OF TEXTUAL RESOURCES

4.1 Introduction

This chapter addresses the first objective of the study: to analyse the semiotic resources used in the textual part of the tweets. The focus is on describing the resources, examining their usage patterns in the corpus, and analysing the meaning potentials they carry. The resources are categorized into tweet length, orthographic, lexical, interactive and emoji resources. The chapter begins by presenting a summary of the textual features found in the current corpus followed by a discussion of the tweet length. Thereafter, the orthographic resources which include punctuation, capitalization, spacing and spelling and their meaning potentials are discussed. This is followed by a discussion of the lexical resources, focusing on the choice of words to provide insights into the meanings conveyed. The interactive resources such as hashtags, mentions and hyperlinks are also discussed. Lastly, the chapter addresses the use of emojis in the tweets. The chapter aims to provide a descriptive mapping of the resources while uncovering the range of possible meanings and potential interpretations they can evoke in relation to the communicative purpose of the tweets. All resources were analysed for meaning-making potentials based on the immediate communicative goals of the KOT and the broader social-political context.

4.2 Summary of Textual Resources

The text part of the tweet incorporates design, technical and linguistic resources. The semiotic resources identified in the text part of the tweet are categorized into tweet length, orthographic, lexical, interactive and emojis resources. Table 4.1 provides a summary of the resources identified in the corpus.

Table 4.1

Summary of the Textual Resources in #JusticeForKianjokomaBrothers Dataset

Category	Specific Resource Description
Design Features	• Tweet length
Typographic /Orthographic Resources	• Unconventional Punctuation • Unconventional Capitalization • Unconventional Spacing • Spelling Variations
Lexical Resources	• Nouns • Verbs • Adjectives • Pronouns
Interactive/ Networked Resources	• Hashtags (#) • Mentions (@) • Hyperlinks (URLs)
Emojis	• Emoji Faces • Emoji Hearts • Emoji Gestures • Emoji Objects

4.3 Tweet Length

A key defining feature of the Twitter platform is its character limit on tweets. According to the Twitter affordances, each tweet from users with free accounts is limited to 280 characters. The character count on Twitter includes the typographic text, emojis (counted as two characters for each), URLs (counted as 23 characters), @mentions that are non-replies, hashtags and spaces. Describing how this feature appears in the corpus is crucial, as it affects the semiotic resources used in the tweet text.

To analyse character usage in the corpus, the mean tweet length was calculated. The number of characters, sentences, and words per sentence in each tweet were measured using the Twitter character counter online tool. The dataset showed an average of two sentences per tweet, with a mean of 5.6 words per sentence. The average tweet length was 153.4 characters, with the shortest tweet using nine characters and ten tweets reaching the full 280-character limit. This indicates that users do not always utilize the maximum character space, a finding consistent with Crystal (2011), who reported an average tweet length of 100.9 characters during the 140-character limit period.

There was an almost equal distribution of tweets above and below 140 characters with 49.8 percent tweets over 140 characters and 50.2 percent below 140 characters. The finding contradicts Rosen (2017) who indicated that only five percent of tweets exceeded 140 characters in a study conducted during the test release at the start of the expanded 280-character limit. Additionally, Rosen's study indicated that only one percent of the tweets reached the 280 characters while the current study shows that two percent of the tweets reached the limit. The difference can be accounted for by the period when the data for the two studies was collected. Rosen's study collected data at a time when the CLL had just been expanded while this study collected data generated in 2021, close to four years after Twitter implemented the character change. Consequently, the current findings could be an indicator that users have adjusted and settled into the 280-character limit. The mean length of the tweets symbolizes the prioritizing of key points probably demonstrating that users understand the dynamics of the platform. Overall, the findings show that length restriction on Twitter is not a hinderance in expressing content as very few users struggled to fit into the CLL.

As much as character limit is a system design feature on Twitter, it can also be considered linguistically relevant since it impacts on the kind of orthography used in the tweets and by extension the choice of semiotic resources within the text. Though it does not directly encode meaning, it is a crucial factor in influencing how linguistic features are deployed in meaning creation on the platform. It can thus be conceptualized both as a technical constraint and as part of the broader semiotic landscape. The subsequent sections present findings on other semiotic resources identified in the text part of the tweet.

4.4 Orthographic Resources

This category encompassed conventions used to structure and organize the tweet text. The analysis in this section focused on the deviation from the conventional writing norms and how such deviations affect the tone and interpretation of the tweet. The study narrowed down to the use of punctuation, capitalization, spacing and spellings. The analysis centred on the description of the frequencies, patterns of nonconventional usage and the meaning potentials of the features. Only orthographic deviations considered intentional were identified, leaving out typos and other random factors as suggested by Crystal (2011).

4.4.1 Unconventional Punctuations

In this section, the focus was on punctuation marks that seemed to have been manifested differently or acquired new features from the already established punctuation system. To give an overall picture of non-conventional use of punctuations and their meanings in the corpus, the analysis focused on responding to three questions: (a) Which punctuation marks have been used in a nonstandard way? (b) What are the patterns of their usage? and (c) What meanings do the deviations convey? The question mark, omission mark (ellipsis), and exclamation mark were identified as punctuations that deviated from the norm.

a) Question Mark

The question mark had two main unconventional patterns; multiple use of the mark in a single instance and use of too many question marks in one tweet. Examples 1 and 2 illustrate the two unconventional patterns of question mark use in the corpus.

Example 1: *Why are you people quiet when we need you the most. How do you feel when looking at this mama crying for her departed sons??? We want answers. We want actions. R.I.P BROTHERS 🥹🥹🥹🥹 #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson @RabbitTheKing @JulianiKenya*

Example 2: *3 people shot, one life lost today in #Embu #kianjokoma After the death of the two brothers under police custody. Till when will the police stop this extrajudicial killings? Till when? Till when? #Embu #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBens*

In example 1, the three question marks used produce an effect of a heightened questioning intensity. The interpretation is based on the notion that repetition of any unit has an intensifying and emphatic effect (Jackson, 2016). The main concept being communicated is indicated by the initial occurrence of the question mark, while the additional repetitions create a threshold for the pragmatic meaning. The initial question mark indicates a simple inquiry, but each additional mark builds upon the preceding one to create a crescendo of inquiries that culminate in an emotionally charged rhetorical question. The marks highlight the tweeter's heightened sense of frustration at those who are quiet, emphasizing the gravity of the case. The multiple question marks also amplify the emotional impact of the question to the reader, by pricking their conscious, hence pulling them into the protests.

The use of too many questions in a single tweet as in example 2 can imply the many doubts in the tweeter's mind. The questions are also used to highlight the important ideas by framing them as thought-provoking ideas. Since the questions are addressed to the readers, they help establish a virtual dialogue between the author and the readers through prompting the readers to reflect on the issues being raised. This aligns with Tarasova's (2016) findings that multiple question marks encourage active reader engagement. The repetition of the phrase '*Till when*' in example 2 reinforces the significance of that issue. These questions can evoke emotional responses from the readers by making them reflect on cases of extrajudicial killings they may have heard about. This kind of engagement is important in interactive digital platforms like Twitter and more so in protest discourses where immediate feedback in the form of support for the CTA is critical.

The repetition further intensifies the emotional effect making the message more impactful. In addition, the many questions may implicitly challenge the assumptions that have so far been made concerning the case by encouraging the readers to critically reflect. The communicative functions of excessive question marks identified are consistent with Crystal (2015) and Tarasova (2016) findings that the mark is used for heightened emotional intensity and reader engagement. However, unlike what Crystal (2015) claims, the multiple punctuation marks did not introduce any ambiguity in the tweet texts.

b) Ellipsis

Another punctuation mark used unconventionally in the corpus is the ellipsis (...). The unconventionality lies in the number of dots used. While the standard ellipsis consists of three dots, the dataset contains instances of two, four, or five dots, what Crystal (2015) refers to as extended ellipsis. Additionally, some tweets used more than one set of ellipses. Examples 3 and 4 illustrate these two patterns: multiple sets of ellipses and extended ellipsis.

Example 3: *Another day and a Family in Embu are mourning the death of their 2 sons who were arrested and found Dead...they deserve justice.....Pray for them and their families...* ❤️❤️❤️❤️

Example 4: *The killer curfew 🚔.....fare-thee-well the Kianjokoma Brothers. You'll forever remain in our hearts and minds. #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson #PoliceBrutality*

Example 3 contains three sets of ellipses: while the first and third follow the conventional three-dot format, the middle set has five dots, making it a nonstandard use. The sets of ellipsis have the potential to convey several meanings in the context of the police brutality case under study. The first ellipsis which comes after giving part of the information ‘*the death of their 2 sons who were arrested and found Dead...*’ can convey the uncertainty and incompleteness of the details available to the tweeter and by extension the public about the death of the two brothers. The second set of dots may imply a speechless outrage that represents a sense of helplessness. When the tweeter says ‘*they deserve justice.....*’ the ellipsis shows the writer is too choked with emotions to continue writing. It expresses the depth of the feelings which in turn convey how grave the incident is. In addition, the use of five sets of dots instead of the conventional three may demonstrate the intensity of the feelings.

Crystal (2015) argues that extended ellipsis may be a playful feature, reflect personal style or have a semantic purpose. In this case, the extended ellipsis is treated as carrying meaning because in two instances the author uses the conventional three dots suggesting the increase in dots in the middle set was intentional. The last ellipsis ‘*Pray for them and their families...*’ may imply a call to the audience to trail off and reflect on the magnitude of the

loss to the family. The ellipsis gives the reader space to pause and contemplate thus inviting empathy for the family and a reflection on the whole issue of police brutality.

The omission marks in example 4 potentially conveys four different layers of meanings. Firstly, it creates a pause that invites the reader to reflect on the emotional weight of the statement. The extended ellipsis intensifies the pause suggesting a longer period of reflection, further amplifying the gravity of the situation. Secondly, the marks may also suggest that there are details about the ‘killer curfew’ that have not been verbalized. The details could be related to the brothers or other deaths brought about by the curfew. The additional dots add emphasis to the incompleteness suggesting the story has more layers than what has been said. Thirdly, the extended ellipsis combined with the loudly crying emoji brings out the heightened emotional weight brought about by the deaths. The marks indicate a struggle to fully articulate the pain and outrage thus showing that the tweeter’s emotions cannot be fully captured using words. Finally, the dots may serve to link the ideas in the tweet. They connect the killer curfew to the farewell message implying the curfew is implicated in the death of the brothers. Consequently, the use of ellipses in the tweets communicated different aspects of the tweets’ meanings. This aligns with findings on the role of ellipsis in digital contexts (Albritton, 2015) and non-digital texts (Meibauer, 2020). This indicates that the ellipsis serves as a versatile punctuation tool in both traditional and modern communication contexts to convey a subtle tone and meaning without making explicit statements. The flexibility of the omission dots in digital discourses makes it a dynamic element of punctuation that also enhances the expressive capacity of the tweet text.

c) Exclamation Mark

The exclamation mark was also used in ways that deviated from the norm. Any use of more than one exclamation mark was considered excessive. The two patterns identified in the corpus were the use of excessive marks (two (!!), three (!!!), four (!!!!) or five (!!!!!)) exclamation marks as illustrated in examples 5 and 6 and the use of several marks in different positions in the tweet as illustrated in example 7.

Example 5: *So Sad If Covid doesn't kill us the police will Kill Us ❤️ C's Fred
Matiangi,Ps Karanja Kibicho and Ig of Police Should RESIGN!!!!
#JusticeforEmmanuelandBenson #JusticeForKianjokomaBrothers*

Example 6: *We shall not forget!!! #JusticeForKianjokomaBrothers*

Example 7: *I see her pain! Words fail me ! May the killers never know peace!
#JusticeForKianjokomaBrothers*

Multiple use of exclamation marks is considered one of the defining features of internet orthography (Crystal, 2015; Tarasova, 2016), hence not a surprise feature in the corpus. Based on the assertion that exclamation marks in digital discourses are emotive tools which give the text a distinct intonation, aiding in expression of emotions beyond what is in the words (Crystal, 2015; Jonsson, 2020), the analysis revealed a range of emotional reactions. These reactions were produced by multiple exclamation marks. In example 5, the multiple marks help to emphasize the emotional intensity of anger in the message. Coming after the word 'resign', the marks accentuate the tweeter's anger culminating in an aggressive call to action. Each exclamation mark conveys a sense of urgency and aggressiveness to the resignation call on persons perceived to be culpable for the police brutality. Combined, they create a higher sense of anger emphasizing the urgency of the message.

Besides the use of exclamation marks, the anger is made more explicit through the capitalization (RESIGN!!!!!!) which implies shouting in digital communication. The combination of the two resources helps evoke a strong emphasis on the demand for the mentioned government officials to resign. In example 6, the exclamation marks create an emphasis on the tweeter's determination and passion to the unwavering resolve to remember. Each mark serves to emphasize the passion and commitment of the collective entity 'we', signalling a strong determination for justice.

The exclamation marks in example 7 serve to structurally amplify the different emotions in each of the three parts of the tweet. In the first part, the exclamation mark conveys the tweeter's empathy through emphasizing and acknowledging the mother's pain. The second mark expresses the frustrations of the author due to the overwhelming situation, while the third reinforces the fervent wish for justice through condemning the killers. The emotions

of empathy, frustration and determination are all expressed in the same tweet though separated into different sections using the exclamation mark. This pattern partially resembles a punctuation technique Tarasova (2016) refers to as parcelling. Tarasova describes it as the use of punctuation marks to single out a particular point in the statement, to add expressiveness and emphasis.

The multiple exclamation marks in the dataset are used to mark an increased intensity of negative emotions and single out different parts of the message. This finding aligns with other scholars (Crystal, 2011; Tarasova, 2016), who also concluded that the more the number of exclamation marks, the stronger the emotions expressed in the text. However, the use of the mark in the current study contradicts its traditional meaning of excitement in supportive communication (Albritton, 2015; Crystal, 2015) because it is mainly used for aggressive communication. This demonstrates the versatility of the mark in digital discourses. The analysis further demonstrates that the repetition of question marks and exclamation marks influenced the pragmatic meaning conveyed. These findings validate Jackson (2016) argument that different levels of meanings are triggered by different levels of incremental repetition.

d) Combination of Different Punctuation Marks

Another unconventional use of punctuation marks identified in the data was the combination of two different punctuation marks in one position. This is comparable to Tarasova's (2016) technique of synergy of punctuation marks. In the corpus, there were combinations of a question mark and exclamation mark as illustrated in example 8 and that of the omission marks and exclamation marks as illustrated in example 9.

Example 8: *@PoliceKE do you know what a demented sick fuck you have to be to kill kids?! No, like seriously! Are your officers given psych evaluations to join the forces? #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson*

Example 9: *If you posted when George Floyd was killed by a Cop in USA bt when 2 Kenyans are killed by our Cops you are silent... wewe ni mtu (you are a person)....!!!! #JusticeforEmmanuelandBenson #JusticeForKianjokomaBrothers #justiceformuturaandnjiru #JusticeForNdwigas #just*

In terms of meaning potentials, the analysis looked at the synergetic effect created through the combination of the punctuation marks. The combination of the question and exclamation mark in example 8 conveys extreme negative emotions of shock, disbelief and anger, helping to underscore the dubious behaviour of the police. The question *'do you know what a demented sick fuck you have to be to kill kids?'*, directed to the police, suggests the tweeter's shock and disbelief that such actions could happen, and the addition of an exclamation mark intensifies the emotions of anger and disgust. The emotions are further compounded by the exclamation mark in the statement that follows (...*No, like seriously!...*), which conveys a sense of incredulity and the last question that raises concerns about the mental health condition of the police officers. The synergy is aimed at highlighting the dubious nature of the police. The combination of a question mark and exclamation mark seems to help in expressing extreme negative emotions that neither of the marks would obtain when used in isolation.

In example 9, the omission dots mark a short pause and incompleteness of a sentence before the expression of emotions using the exclamation marks. The ellipsis implies the author is struggling to find an appropriate word to describe the person being addressed while the multiple exclamation marks convey the tweeter's strong feelings of disapproval or condemnation towards that person. The combination of ellipses and exclamation marks strongly imply that the behaviour of such people is despicable to the extent that the author could not find a word to describe them. The synergy of the marks further conveys the author's sense of frustration and disappointment with members of the KOT community who are indifferent to injustices perpetrated by the Kenyan police. The combination is used to express a mix of emotions with an aim to intensify the negative emotions. This aligns with Tarasova (2016) conclusion that the combination of punctuation marks adds another layer of meaning to the text, allowing the author to subtly express complex emotions and attitudes.

The unconventional use of punctuation marks on Twitter has expanded punctuations into flexible pragmatic markers that enhance the expressiveness of the text. The synergy of the marks expresses the emotional state of the author, the evaluative attitude towards the expressed thought, and implicit meanings. The unconventional punctuations make a

significant difference in the expressiveness of the tweet's message. These findings corroborate conclusions that unconventional punctuation marks in digital discourses is a stylistic choice that contributes to the emotional, intonational, attitudinal and semantic content of the tweets (Albritton, 2015; Tarasova, 2016; Wikström, 2017), hence enhancing communication richness. Additionally, the findings indicate that context is important in defining and constraining the pragmatic function of the non-conventional use of punctuation marks.

4.4.2 Unconventional Capitalization

For this aspect of orthography, the nonstandard variations of capitalization and their frequencies were analysed. The study adopted and modified Heath's (2018) patterns of capitalization to create four categories: all caps, single word capitalization, word initial capitalization and multiple words capitalization. In total there were 44 tweets (8.9 percent) with non-conventional capitalization with over half of them using the multiple word capitalization pattern.

a) All Caps

All caps' texts are those tweets where the entire tweet text (excluding the digital resources) is capitalized as illustrated by example 10. The data has six tweets with this pattern.

Example 10: *I SAY NO TO POLICE BRUTALITY @PoliceKE
@StateHouseKenya #JusticeForKianjokomaBrothers
#JusticeforEmmanuelandBenson*

b) Single Word Capitalization

Single word capitalization is where only one word in the entire tweet is capitalized as illustrated by the bolded word in example 11. The data has nine tweets using this pattern.

Example 11: *Benson Njiru Ndwiga (19 yrs) his brother Emmanuel Marura Ndwiga (21 yrs) were killed by Kenya police in Kianjokoma, Embu after being arrested going home past curfew hours. #JusticeForKianjokomaBrothers **RETWEET** for their Justice*

c) Word Initial Capitalization

The word initial capitalization category has the first letter in different words (not in the sentence initial position or proper nouns) capitalized. The bolded letters in example 12 illustrate this pattern. There are four tweets with such a pattern.

Example 12: *Enough is **Enough**. Let's **Stand** for **What's Right**, Let's stand for **Humanity** **We** **Demand** #JusticeForKianjokomaBrothers
#JusticeforEmmanuelandBenson @DCI_Kenya@IG_NPS @FredMatiangi
@NYC_YouthVoice @PoliceKE @StateHouseKenya*

d) Multiple Capitalization

The multiple words capitalization pattern entails the capitalization of several words or phrases in the tweet. The capitalized words are either scattered in the tweet as illustrated in example 13 or in a sequence as in example 14. The corpus has 26 tweets with this pattern.

Example 13: *Extra Judicial Killings is becoming the norm in this country. This cannot **CONTINUE**. 🙄 Justice **DELAYED** is Justice **DENIED**. 🙄
#JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson
#JusticeForNdwigas*

Example 14: *Their names were **BEN & EMMANUEL... REMEMBER THEIR NAMES BEN & EMMANUEL** #JusticeForKianjokomaBrothers
#JusticeforEmmanuelandBenson #JusticeForNdwigas
#JusticeForMuturaAndNjiru Taken from us too soon but we will not rest until Justice is served.*

In relation to the meaning potentials, capitalization is used to visually emphasize specific words and phrases, hence drawing the readers' attention to them. It highlights the importance of the concepts within the entire discourse. A closer examination of the capitalized words in the entire corpus revealed the kind of concepts tweeters emphasized. Emotional reactions are emphasized through the capitalization of words such as '*SHOCK*', '*PAIN*' and '*LAMENTATION*' which all pointed towards negative emotions. Emphasis is also placed on expected actions through capitalizing the words '*RESIGN*' and '*RETWEET*'. Disliked actions expressed in the words '*DELAYED*', '*DENIED*' and '*TRANSFER*' are also emphasized. The word '*JUSTICE*', which is the main theme of the discourse, is also

capitalized for emphasis. Words such as *'EXTRAJUDICIAL'* and *'INCOMPETENCE'* are capitalized to emphasize the injustice in the killings and describe the police as lacking in skills respectively.

The capitalized phrases highlight some of the main themes in the discourse. The themes include, the demand for justice and accountability expressed using phrases such as *'JUSTICE FOR EMMANUEL AND BENSON'*, *'DEMANDING TRUTH AND JUSTICE'*, *'BUT WE ARE DEMANDING'*, *'JUSTICE DELAYED IS JUSTICE DENIED'* and *'THOSE MURDERS MUST BE BROUGHT TO BOOK'*. The theme of remembering and honouring the victims is expressed through the phrases *'WE WILL NOT FORGET'*, *'REMEMBER THEIR NAMES BEN AND EMMANUEL'*, *'RIP TO FELLOW COMRADES BENSON AND EMMANUEL'* and *'REST IN POWER'*. The capitalization of *'WE WON'T BE QUIET'*, *'I RISE UP'*, *'SPEAK UP'*, *'WE WON'T TIRE OR FORGET'* and *'MAYOUTHS HATUNYAMAZI'* (youths we will not be quiet) emphasizes the theme of resistance. Finally, a critique of those in authority for their failures is expressed through the phrases *'OUR MOTHERS DON'T DESERVE THIS, PEOPLE WHO ARE SUPPOSED TO PROTECT US'* and *'IG MUST GO'*. The capitalized phrases emphasize themes that resonate with discourses addressing social injustices and demands for change, serving to highlight the urgency and importance of the messages conveyed.

Capitalization is also used to indicate the tone of the message. Specifically, capitalizing the tweeter's demands carries a tone of authority and assertiveness. For instance, the capitalization of the phrase *'THOSE MURDERERS MUST BE BROUGHT TO BOOK'* makes the demand appear resolute and non-negotiable. In this case, the capitalization carries a prosodic emphasis (Heath, 2017). Beyond tone, capitalization also amplifies the emotional intensity of a message. For example, capitalization of the phrase *'OUR MOTHERS DON'T DESERVE THIS'* aids in conveying strong emotions of anger and frustration at what the mothers were subjected to due to police actions. This corresponds to the emotive upscaling function of capitalization identified by Zappavigna (2012).

Overall, tweeters employed capitalization to visually emphasize the importance and urgency of the message, to mark its tone, and to strengthen its emotional impact. In this

way, nonstandard capitalization functions as an ostensive stimulus, cueing the reader to recognize the capitalized words or phrases and interpret them in a more meaningful way.

4.4.3 Lack of Spacing

Another aspect of orthography identified in the data is lack of spacing after punctuation marks such as commas and full stops, as illustrated in example 15.

Example 15: *What a painful **sight.I** am lost for **words.I** can't just imagine what the family is going **through.The** policemen/women involved should by now have been **arrested.The** IG MUST take **responsibility.We** demand **#JusticeForKianjokomaBrothers.May** God in his special way comfort Ndwiga's family*

In example 15, the tweeter omits spacing after sentence-final periods, as shown in the bolded sections of the tweet. A close inspection suggests this may have been done to save on character count. The tweet contains 279 characters, and including the missing spaces would have added six more, exceeding Twitter's length limit. Consequently, the lack of spacing appears to be a deliberate character-saving strategy used to convey more information within the platform's constraints.

4.4.4 Spelling Variations

The use of unconventional spellings is also noted in the data. These include variations such as the use of letter homophones, number homophones, word shortenings and logograms. Example 16 illustrates different spelling variations.

Example 16: *Curfew was meant 2slow covid19,it has turned 2be hours of death to youths. Our brothers r gone gone and gone 4ever.The killer police got transferred to other post2kill more people. Why should a mother go through this? #JusticeforEmmanuelandBenson #JusticeForKianjokomaBrothers*

The tweet in example 16 uses the number '2' in place of the word 'to' in three instances, number '4' replaces 'for' in the word 'forever' and 'r' used in place of 'are'. In this tweet, spelling variations function as character-saving strategies. There is also omission of spacing after the comma and period. Together, these techniques save nine characters,

resulting in a tweet with 276 characters, just within the character limit. This reflects features identified by Crystal (2011) as part of Twitter orthography. Such features are not new, having appeared in earlier forms of CMC like text messaging (Crystal, 2008; Ling, 2005; Ling & Baron, 2007; Thurlow & Brown, 2003). However, they are not widespread in this Twitter corpus and are mostly limited to longer tweets likely to exceed the character limit. This suggests that spelling is largely conventional, with tweeters only resorting to nonstandard forms as a space-saving technique, making Twitter spelling largely formal.

Overall, the data displays a wide variation of orthographic deviations in terms of punctuation and capitalization, in line with other findings on Twitter orthography. The data analysis reveals that the manipulation of orthography is a deliberate action on the part of the tweeter to achieve a communicative function. The unconventional orthography in the tweets is used to highlight important concepts, intensify the effect of the message, amplify the emotions expressed and as a character saving strategy.

4.5 Lexical Features

These refer to the lexical items that make up the typographic text of the tweet. The analysis of words involves word tokenization and key word analysis of predominant lexical items that convey meaning in the corpus.

4.5.1 Word Tokenization

The first step in describing the words in the corpus was to tokenize them using a part-of-speech (POS) tagger. This is a process of assigning syntactic class markers or parts of speech to each word in the dataset. The English Twitter POS tagger model (Derczynski et al., 2013), was used to assign the parts of speech to each word as explained in the methodology chapter. The tagger model uses the Penn Treebank tag set which has a total of 36 tags. Table 4.2 illustrates the frequency of the tags as identified by the tagger.

Table 4.2*Frequency Distribution of Parts of Speech in the #JusticeForKianjokomaBrothers**Dataset*

Part of speech	Tag	Description with examples	Frequency
Nouns	NN	Noun, singular or mass (brother, police, justice)	1024
	NNS	Noun, plural (brothers, officers, protestors)	439
	NNP	Proper noun singular (Emmanuel, Benson)	720
	NNPS	Proper noun, plural (Africans)	5
Verbs	VB	Verb, base form (remember, kill, forget)	399
	VBD	Verb, past tense (were, arrested, died)	161
	VBG	Verb, gerund or present participle (demanding, killing, following)	163
	VBN	Verb, past participle (seen, forgotten, lost)	189
	VBP	Verb, non-3 rd person singular present	304
	VBZ	Verb, 3 rd person singular present	207
	MD	Modal verbs (will, can, should)	163
Pronouns	PRP	Personal pronouns (I, we, you)	467
	PRP	Possessive pronoun (her, our, your)	171
	WP	Wh- pronoun (who, what, whose)	56
Prepositions	IN	Preposition (for, in, after)	709
Adverbs	RB	Adverb (allegedly, brutally, sadly)	326
	RBR	Adverb, comparative (more)	4
	RBS	Adverb, superlative (most)	2
Adjectives	JJ	Adjective (rogue, young, innocent)	411
	JJR	Adjective comparative (longer, stronger, better)	10
	JJS	Adjective superlative (hottest, saddest, least)	7
Conjunctions	CC	Coordination conjunctions (but, and)	213

Note. Since the focus of the study was on the lexical and grammatical categories some tags such as determiner, predeterminers, particles, ‘to’ and numbers have been excluded from the table.

The POS analysis of tweets in Table 4.2 shows that in the lexical category, nouns are the most used followed by verbs, adjectives and adverbs in that order. Since nouns are used to identify and categorize, their prevalence suggests that the tweets are more focused on naming and identifying people, places, objects or abstract concepts. In relation to the counts in the occurrence of nouns, the singular nouns dominate the list followed by proper noun singular. The predominance of singular nouns could suggest a focus on specific entities or generalized concepts. The substantial number of proper nouns in the corpus, suggests a discourse that is highly contextualized and personalized. The focus on people (especially the victims) and places can make the call to action more relatable.

The greatest number of occurrences of verbs are in their base form while the most prominent usage of adverbs and adjectives is in their unmarked forms. The use of verbs in their base forms might imply a focus on timeless actions. These forms indicate that the tweets are expressed as imperative statements, suggestions or statements of facts that are not time bound. The use of simple non-inflected (unmarked) adjectives and adverbs suggests lack of comparatives or superlative emphasis. This is an indicator that the tweets in the corpus aim to communicate basic qualities and straightforward messages without elaborating on degree or intensity. The prevalence of singular nouns, base form verbs and unmarked adjectives and adverbs and a near absence of inflectional markers suggests preference for simplified syntax in the tweets. This directness and simplicity tie in well with Twitter’s brevity.

These findings align with Jalbuena’s (2012) observations on the prevalence of singular nouns, base verb forms, unmarked adjectives, and unmarked adverbs, but differ in the dominant part of speech. While Jalbuena’s dataset shows verbs as the most frequent, followed by nouns, adjectives, and adverbs, this study identifies a different ordering. This discrepancy likely stems from the differing focus of the two studies. Jalbuena’s dataset spans various domains, including education, entertainment, personal topics, politics, and social issues, whereas this study focuses exclusively on police brutality, a socio-political

issue. This suggests that the communicative purpose of a tweet influences lexical choices, reinforcing the importance of analysing Twitter discourse based on thematic categories rather than treating it as a homogeneous genre.

While lexical categories reveal the content-bearing elements of the tweets, it is equally important to examine the role of functional categories in shaping the grammatical structure of the discourse. Functional words contribute to grammatical cohesion by linking text elements. The dataset's low frequency of functional words, as shown in Table 4.2, corresponds to the brevity of sentences. With an average sentence length of 5.6 words and two sentences per tweet, conciseness and directness appear to shape the discourse, resulting in shorter sentences.

Table 4.2 further reveals that prepositions were the most common grammatical words (709 occurrences), followed closely by pronouns (694), while conjunctions ranked lowest (213). The high use of prepositions indicates a focus on contextualizing information, while pronouns suggest a personalized and relational discourse. The low frequency of conjunctions reflects an avoidance of complex sentence structures, supporting the earlier observation of simplified syntax. This aligns with Twitter's fast-paced nature and character limits, reinforcing that tweets typically contain short, stand-alone statements without intricate relationships.

A comparison of lexical and grammatical categories shows a higher occurrence of content words. The LD, measuring the proportion of lexical items to total words, stands at 57 percent. A high LD is associated with information-rich text (Halliday & Matthiessen, 2004; Johansson, 2008). The corpus's LD suggests that despite Twitter's character constraints, these tweets balance brevity with information density, an observation consistent with Hu et al.'s (2013) dataset. Thus, in terms of information packaging, the tweets remain concise yet informationally dense.

4.5.2 Key Words Analysis

Keywords central to the tweets were extracted using the AntConc (Antony, 2023) software. Afterwards, functional words, usernames and hashtagged words were manually removed to ensure only content words were on the list. However, pronouns, which are typically

function words, were retained because of their potential to convey meaning beyond their pronominal reference in protest discourses (Aboh, 2024; Bhatia & Ross, 2022; Hanafy, 2021; Walker & Kaye, 2022). Finally, a word list with the top 50 words was created, as shown in Table 4.3.

Table 4.3

Top 50 Key Content Words Listings in the #JusticeForKianjokoma Dataset

No	Word	POS	No	Word	POS	No	Word	POS
1	We	PRN	18	Embu	N	35	Killing	V
2	Justice	N	19	Demand	V	36	Sons	N
3	Police	N	20	Them	PRN	37	Stop	V
4	You	PRN	21	Young	ADJ	38	My	PRN
5	Our	PRN	22	Ndwiga	N	39	Need	V
6	Not	ADV	23	People	N	40	Now	ADV
7	Brothers	N	24	Killed	V	41	Officers	N
8	Emmanuel	N	25	Curfew	N	42	Country	N
9	Kenya	N	26	Just	ADV	43	Death	N
10	They	PRN	27	Brutality	N	44	Kenyans	N
11	Benson	N	28	Lives	N	45	Know	V
12	Their	PRN	29	Rest	V	46	Painful	ADJ
13	Your	PRN	30	Day	N	47	Peace	N
14	Us	PRN	31	Mother	N	48	Won (V)	V
15	Family	N	32	Her	PRN	49	Let (V)	V
16	Pain	N	33	Want	V	50	Lost (V)	V
17	Forget	V	34	Arrested	V			

Note. N- noun, V-verb, PRN-pronoun, ADJ- adjective and ADV- adverb

Table 4.3 lists the most dominant words in the corpus in order of their frequency. Each of the words in the list was tagged with the appropriate part of speech based on the results

from the POS tagging. The word frequency list gives a general idea of the lexical items in the corpus and the main topics addressed in the tweets.

The analysis examined the tweeters' lexical choices and how these choices contribute to the meanings communicated in the tweets. It focused on the predominant lexical items in the corpus, as proposed by Machin and Mayr (2023). Table 4.3 presents the top 50 most frequent words, whose usage was explored through a KWIC analysis to reveal how the words functioned in their immediate textual environments, with attention to usage variations and implicit meanings. In selected cases, a collocation analysis was conducted to identify co-occurrence patterns and semantic associations. This lexical analysis aims to uncover the connotations, underlying assumptions, attitudes, values, and representations embedded in the tweets. The discussion is organized according to the parts of speech tagged in the table.

a) Nouns

Nouns function as indicators of the central themes, participants, and locations represented in a discourse. One of the most frequent nouns in the dataset, *justice*, used 92 times, captures the core subject of the discourse. This prominence is expected, as justice is the main rallying call of the hashtags. This finding aligns with Nartey's (2021) observation that nouns in protest discourse often serve functions of identification and categorization. Table 4.3 also includes words such as *action*, *answers*, and *accountability*, which are semantically linked to the pursuit of justice. In this hashtag activism discourse, these terms belong to the same semantic field, reflecting the goals articulated by Kenyans on Twitter (KOT). The term *justice* itself is multifaceted and carries various connotations within protest contexts, as illustrated in examples 17–21.

Example 17: *EXTRA JUDICIAL killings is becoming rampant in this country. It is time for JUSTICE! 🙏 #JusticeForComradeEmmanuelAndBen #JusticeForKianjokomaBrothers*

Example 18: *The dead cannot cry out for Justice. It's the duty of those living to do so for them. @NPSOfficial_KE @IG_NPS Embu #JusticeforEmmanuelandBenson #JusticeForKianjokomaBrothers*

Example 19: *Mama Benson and Emmanuel lost two children in a day, brutally murdered. The image of a mother down on the floor wailing from the agony of losing her sons, is one that cannot be ignored. Today we demand **justice** and ask who murdered the two boys? Have they been arrested?*
#JusticeforEmmanuelandBenson

Example 20: *We must ensure that **justice** is served @IPOA_KE.*
#JusticeForKianjokomaBrothers #igmustgo #JusticeforEmmanuelandBenson
#RestInPeace

Example 21: *We demand **Justice** for Kianjokoma brothers Emmanuel and Benson. Transfer of notorious cops is not justice. I remember George Frroyd killer was jailed for 25Years. @Karanjakibicho @FredMatiangi we want action*
#JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson

In example 17, the term ‘justice’ connotes systemic changes in the police service that can prevent extrajudicial killings in future. It calls for accountability and legal action for those responsible. Justice in example 18 implies it is the moral duty of the living to seek redress and accountability for the deceased who cannot do it. The mention of the police suggests a demand for investigations. ‘Justice’, as used in example 19, is tied to empathy and the human cost of the killings. It could imply efforts to address the harm and emotional trauma caused to the surviving family members by arresting the perpetrators.

In example 20, the tagging of IPOA adds another layer of meaning to the term and can only be understood by a reader who has knowledge about the mandate of the institution in Kenya. IPOA is a civilian oversight on police work and one of its key functions is to investigate deaths caused by police actions. If the body finds the police culpable, they recommend prosecution or disciplinary action. Their work is aimed at enhancing accountability and preventing impunity within the national police service, in the interest of the public. Hence, justice here implies the commencement of formal procedural investigations and mechanisms of accountability by IPOA.

Example 21 connotes what justice is by stating what justice is not. The tweeter states that disciplinary actions such as transfers do not reflect justice and implies that justice is jailing

the killers. This is done through intertextual reference to the viral case of George Floyd. The reader can understand this if they have background knowledge about the Floyd case and draw on the similarities between the two cases. The reference to a viral case of police brutality that happened in America and using the outcome as a yardstick to what justice entails carries an underlying meaning. It underscores the expectation for severe and appropriate punishment reflecting a desire for a universal standard for justice that involves accountability and deterrence.

In this police brutality discourse, justice connotes accountability, procedural investigations, legal redress, social change and systemic change. The repeated emphasis on formal legal action and systemic reforms highlights the KOT's demand for both immediate and long-term aspects of justice to address the injustices of police brutality. Consequently, the word 'justice' as used in the hashtag activism discourse lacks specificity as it does not denote one thing. When used in calls to action, such words help mobilize broader participation in hashtag activism by accommodating diverse perspectives.

Another key noun in the dataset is 'police'. Given the focus on activism against police brutality, examining the meaning potentials the term evokes is essential. As central social actors in the discourse, how the police are represented by KOT reveals implicit meanings. A KWIC analysis in information-sharing tweets highlights the types of information conveyed through the noun, as shown in the partial results in Figure 4.1

Figure 4.1

Selected KWIC Analysis of the Word 'Police'

for two brothers who died in the hands of kenya	police	after being arrested for flouting curfew rules. 📷 by Robert
	Police	brutalizing residents and killing 4 of them within a span
	Police	in Embu arrested two young brothers after curfew hours
Postmortem results show that	police	are lying on the death of, Benson Njiru and
One shot dead as	police	disperse angry residents in Kianjokoma Town Embu Viewer
	Police	have shot another youth in Kianjokoma for holding a
Kenya	police	kill more people than gangsters every year.

The KWIC analysis shows that the noun ‘*police*’ is used to name actors responsible for actions such as arresting, brutalizing, killing, dispersing, and lying. These usages suggest a shift from the institution’s official role as public protectors to one associated with perpetrating injustices. The discourse constructs the police as aggressors rather than enforcers of the law, echoing findings from the #EndSARS protest discourse in Nigeria (Aboh, 2024), where police actions were similarly portrayed as incompatible with their expected role. Furthermore, the use of the group noun ‘*police*’ indicates that tweeters refer to the institution collectively, attributing the negative actions to the system. As Machin and Mayr (2023) note, referential choices carry meaning potentials; in this case, collectivization frames the negative attributes as institutional rather than individual.

A collocation analysis of ‘*police*’ as used in the dataset shows the phrase *police brutality* has a higher frequency than *police officers*. Officer is a neutral term that gives the job description while brutality is an emotionally laden term that suggests outrage towards police. The preference by KOT to juxtapose police and brutality connotes the negative perception and outrage they have towards the law enforcers. It also gives an indication that the discourse in the tweets is centred on accountability and systemic issues within the police institution. The repeated association can impact on the Twittersphere’s perception of police, hence legitimizing the protests which may eventually lead to more tweeters joining in. The way the noun police is used helps in framing the narrative around police brutality from the protestors’ perspective. This aligns with D’Ambrosio’s (2019) findings on the use of lexical choices to inscribe negative judgement about the police.

The prevalent use of the proper nouns ‘*Emmanuel*’ and ‘*Benson*’ in the tweets identifies another category of social actors in the discourse: the victims. Proper nouns and other noun modifiers can have implicit meanings, as illustrated by example 22.

Example 22: *Benson Njiru Ndwiga (19 yrs) his brother Emmanuel Marura Ndwiga (21 yrs) were killed by Kenya police in Kianjokoma, Embu after being arrested going home past curfew hours. #JusticeForKianjokomaBrothers RETWEET for their Justice*

This tweet was among the earliest following the news of the brothers' deaths. Denotatively, the names, ages, and relationship status describe and identify the victims. Connotatively, naming individualizes and humanizes them (Machin & Mayr, 2023), countering the dehumanizing effect of anonymity often linked to oppression (Nartey, 2022). This personalization draws readers emotionally closer, enhancing the persuasive power of the CTA. By portraying the victims as real people rather than abstract statistics, the tweet evokes sympathy and outrage, making the desired outcome of the CTA more compelling.

In addition, the tweet includes proper nouns such as '*Embu*' and '*Kianjokoma*' to identify the location of the incident, further individualizing the victims by anchoring them in a specific place. The use of the noun modifier '*his brother*' not only clarifies the familial relationship between Emmanuel and Benson but also deepens the sense of injustice by showing that the loss affected a single family. This relational detail intensifies the emotional impact, emphasizing that the victims were not only individuals but closely connected by blood, thus amplifying the gravity of the tragedy.

The noun '*curfew*' introduces a new layer of meaning to the tweet. During the COVID-19 period, curfews were government-imposed containment measures aimed at saving lives. Ironically, in this context, the curfew became the very reason the brothers lost their lives. By highlighting this contradiction, the tweet implies that violating curfew rules does not justify such a fatal outcome. The lexical choices in the tweet evoke both sympathy and outrage, key drivers of activism. Moreover, the tweet features a high concentration of noun types and modifiers, enabling the integration of detailed and impactful information.

Table 4.3 also has the use of nouns such as *family*, *sons*, *mother*, *parent*, *children* and *boys*. All these nouns can be categorized under the lexical field of 'family' since they are used to indicate familial relationships within the broader domain of family and kinship. The use of such words in examples 23-25 can carry several layers of meanings.

Example 23: *Mama Benson and Emmanuel lost two **children** in a day, brutally murdered. The image of a **mother** down on the floor wailing from the agony of losing her **sons**, is one that cannot be ignored. Today we demand justice and ask*

*who murdered the two **boys**? Have they been arrested?*

#JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson

Example 24: *Sending peace, healing and blessings to the **family** of twin **brothers***

Benson Njiru and Emmanuel Mutura. We shall keep standing with you until

justice is served. #JusticeForKianjokomaBrothers

#JusticeforEmmanuelandBenson

Example 25: *The pain of a **mother** receiving the caskets of her two **sons**. No*

***parent** or **sibling** deserves such pain. #JusticeForKianjokomaBrothers*

Firstly, the words are used to humanize and give identity to the victims. The tweeters in examples 23-25 acknowledge that the victims are real persons who were sons and children with a mother, siblings and a family that is deeply affected by their death. Secondly, the use of nouns such as *sons*, *boys* and *children* to refer to the victims conveys their vulnerability, particularly because the words carry the connotation of being young and innocent. This can evoke sympathy and compassion emphasizing the society's responsibility to protect their vulnerable members from such injustices. Thirdly, the word 'family' in example 24 shows that the victims belonged to a larger unit in society, which was hard hit by their death. Lastly, words denoting familial relationships are used to underscore the pain and injustice that the deaths inflicted on the broader community. Police brutality does not just lead to the loss of the victim's life, but it also leaves another part of the society in pain.

The way the nouns are used communicates distinct meaning potentials in this protest discourse. The individualization of the victims using their names, place and relations, encourages the audience to view them as individuals with personal histories and relationships. These choices foreground the humanity of the victims, making the issue of police brutality more relatable to the audience. In contrast, the use of nouns like 'police' collectivises the entity obscuring individual accountability and presenting them as a faceless entity. This perpetuates the narrative that frames the police as a monolithic entity (Bosch & Mutsvairo, 2017), potentially reinforcing police brutality as a systemic issue. These lexical choices have ideological implications as they reinforce power dynamics where the state institutions (police) are seen as impersonal and authoritative while

individuals are humanized and individualized in their victimhood. This can influence audience perception helping to mobilize support for social justice movements (Bosch & Mutsvairo, 2017; Nartey, 2021), making it a good strategy for digital protests. Thus, the use of nouns for identity construction, critiquing the broader system and mobilization serve not only as linguistic resources but also as ideological tools that help shape the audience's understanding of police brutality.

b) Verbs

Another category of lexical items examined for their meaning potentials in the data is verbs. The meaning of the verbs is analysed in relation to the co-text and the theme of the tweet. Some of the frequent verbs in Table 4.3 include: *forget*, *demand*, *killed*, *rest*, *arrested*, *want*, *stop*, *need*, *know*, *won*, *let*, *murdered*, *continue*, *imagine*, *said*, *take*, *burying*, *feel*, *remain*, *stand* and *ensure*. The verb '*forget*' is the most prevalent, occurring mostly in tweets that are used to express solidarity. A KWIC analysis of the verb shows the different ways the verb is used as presented in Figure 4.2

Figure 4.2

Selected KWIC Analysis of the Verb 'Forget'

1	to solve this loss with a TRANSFER. WE WILL NOT	FORGET...
2	silent. Accountability in this country is a hoax! Do not	forget.
3	Good morning... We will let's not	forget,
4	We won't sleep in peace, we won't	forget
5	We ain't forgetting Lest we	forget. #
6	We will never	forget.
7	We cannot	forget
8	Do not ever	forget.
9	Just in case they think we'll	forget
10	today in Kenga. R.I.P comrade. We shall never	forget. #
11	timeline, we continue to demand for Justice!!! We shall not	forget. #
12	police officers to kill us. WE WON'T TIRE OR	FORGET #
13	Burying them won't make us	forget

In most of the tweets where the verb '*forget*' is used, it is negated using the adverb *not*. The KOT express a future commitment to 'not forget' using the modal verbs will and shall,

as illustrated in line one and eleven respectively. The protesters also warn against complacency by making the act of forgetting something undesirable using the word ‘lest’ as illustrated in line five. Furthermore, the use of ‘do not ever’ and ‘never’ bring a sense of insistence hence emphasizing the need for sustained activism. Additionally, the use of the phrase ‘*let us*’ invites collective action from the KOT community. The use of negation to form phrases such as ‘*we will not forget*’, ‘*we shall never forget*’, ‘*do not ever forget*’ and other similar variations serve as a rallying cry for solidarity and a call to justice through sustained activism. The ‘*not forget*’ in this discourse does not only mean keeping it in their memory but also implies a sustained digital activism, that is, constantly tweeting using the hashtag until the goal is achieved. The frequent use of the particle ‘not’ in the corpus concurs with Hanafy’s (2021) finding that ‘not’ is the most frequent tool of negation in hashtag activism.

The phrase ‘*not forget*’ can also communicate another layer of meaning in activism discourse. When protesters choose to use ‘we will not forget’ instead of ‘we will remember’ which carries the same intention, it communicates an implicit meaning. While the latter simply states an intention to remember, the former emphasizes a sense of active resistance against forgetting. ‘We will not forget’ has a connotation of defiance against forces that might seek to suppress the memories hence implying a pro-active stance by the protesters to uphold the memory despite any potential challenges. This makes the phrase more appealing and effective in hashtag activism, especially against police brutality, where the forces challenging such protests are more powerful than the protesters. Therefore, the tools of negation in hashtag activism are used to emphasize resistance against certain ideas or actions. This supports Nartey (2021) assertion that language that communicates resistance is crucial for empowering marginalized communities and asserting their rights.

Another prevalent verb in the dataset is ‘*demand*’ which, along with ‘*want*’, ‘*need*’ and ‘*ensure*’ belong to a semantic group expressing desire or necessity. These verbs articulate the tweeters’ calls for specific actions. A KWIC analysis reveals ‘*we*’ as the predominant subject and ‘*justice*’ as the most frequent object, highlighting the verbs’ role in expressing agency and collective action. This underscores how verbs function as key tools for conveying resistance and the pursuit of change (Nartey, 2021). Other objects paired with

these verbs (*answers, protection, knowledge, accountability and action*) also fall within the semantic field of justice.

The verb ‘*demand*’ is also used to express other implicit meanings beyond demanding for justice as illustrated in examples 26-28.

Example 26: *We Demand #JusticeforEmmanuelandBenson #JusticeForKianjokomaBrothers*

Example 27: *On Sunday, brothers Benson & Emmanuel Ndwiga were killed while in police custody. An autopsy report has revealed the two died from injuries due to a blunt object. Police continue to kill too many innocent Kenyans without accountability. We demand #JusticeForKianjokomaBrothers*

Example 28: *Mama Benson and Emmanuel lost two children in a day, brutally murdered. The image of a mother down on the floor wailing from the agony of losing her sons, is one that cannot be ignored. Today we demand justice and ask who murdered the two boys? Have they been arrested?*

Besides the explicit demand for justice, examples 27 and 28 carry implicit meaning potentials because of the additional information in the tweet. In example 27, the demand conveys a sense of assertiveness from the tweeter. The tweet gives background information with facts about what happened. It further states what is continuously happening before making the demand. The information justifies the demand, evoking the interpretation that the author’s demand is non-negotiable and should be met without question. In example 28, the tweeter presents a scenario that evokes emotions of outrage and anger before making the demand. The demand suggests the matter is critical and requires immediate attention. Additionally, the use of the word *today* helps give the verb a sense of urgency.

Verbs in this protest discourse are used as tools for expressing actions and agency of individuals, articulating resistance and constructing the narrative. They convey a sense of urgency which helps mobilize supporters and draw attention to the important issues. This encourages collective action, an important ingredient for sustaining the momentum of any movement and achieving its goals (Nartey, 2021). The verbs also emphasize actions that foster solidarity within the social movement. Verbs not only inspire action but also foster

a sense of community and shared purpose among the activists, reinforcing the idea that collective efforts in protests can lead to meaningful change.

c) Adjectives

Adjectives are an important lexical category for evaluation, as they describe the qualities of entities or individuals, thereby enabling expression and facilitating appraisal (Machin & Mayr, 2023). In looking at the adjectives in the dataset, the analysis centred on the qualities attributed to the different social actors and entities in the activism discourse. Some of the adjectives listed in table 4.3 include: *young*, *painful*, *heartbreaking*, *first*, *many*, *bad*, *quiet* and *rogue*. Since adjectives provide additional information about the attributes of nouns, it was necessary to identify the nouns they modify to uncover the intended meanings. Another aspect that informed the analysis was the quality expressed by the adjective. Considering adjectives derive their meaning from the context in which they appear, a KWIC analysis of the adjectives was done to help uncover the meanings. Table 4.4 provides a categorization of the adjectives.

Table 4.4

Categorization of Adjectives

Quality	Examples of Adjectives	Individual/Entity
Age	Young,	Victims
Emotion	Painful, heartbreaking	Death of victims
Judgement	Bad, rogue, notorious	Police
Perceptual	Quiet	KOT
Time	First, many	Case

Table 4.4 shows that adjectives with a negative valence (*painful*, *heartbreaking*, *bad*, *rogue*, *notorious*) are used to modify the police and the events caused by police brutality. On the other hand, the victims are described using adjectives that convey favourable attributes. Such adjectives can shape audience perception of the evaluated entity (Nartey, 2021). In this case, they evoke sympathy for the victims and outrage towards the police,

sentiments that support activism against police brutality. Consequently, adjectives in this discourse are used for framing both the oppressors and the victims in a way that aligns with the goals of the narrative.

The evaluation of the victims based on the quality of age using the adjective ‘*young*’ carries other connotations as demonstrated in examples 29-31.

Example 29: *This is not how young men are supposed to end up. Young men making an honest living are supposed to be upheld, respected not butchered and losing their lives in the hands of crooks in the name of police.* #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson

Example 30: *R. I. P Kianjokoma Brothers. It's painful witnessing burial of young guys who had a very bright future. Hope your killers will be brought to justice.* #JusticeforEmmanuelandBenson #JusticeForKianjokomaBrothers

Example 31: *Yesterday two young men were laid to rest, the future was promising to them their parents and the community, in this country when one is buried justice is buried too, will #KianjokomaBrothers family get justice?* #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson

‘*Young*’ as used in example 29 highlights the vulnerability and innocence of the victims. The word emphasizes their youthfulness implying they were unprepared for a violent world. The description ‘*young men*’ juxtaposed with ‘*crooks in the name of police*’ suggests the victims were no threat, implying that such young adults need protection from the harm caused by those in positions of authority.

In example 30, the use of ‘*young*’ implies the tragic loss of persons with so much unrealized potential, further heightening the injustice. It emphasizes the tragic loss brought about by the death of people who had a whole life ahead of them. In example 31, the word emphasizes the magnitude of the loss by implying the death of young persons has a huge impact on the community. The adjective ‘*young*’ in the tweets underscores the injustice committed by the act of police brutality, thus legitimizing the protests. The adjectives enhance the descriptive quality of the tweets by providing details and attributes to the nouns used.

d) Pronouns

Pronouns are important lexical items in this discourse. Table 4.3 shows that the most frequently used word in the corpus is the pronoun ‘we’. Eight out of the ten pronouns in the table are in the top 20 positions, emphasizing the prominence of pronouns in the corpus. This aligns with Hu et al.’s (2013) observation on the extensive use of pronouns on Twitter. The pronouns in the table include *we, you, our, they, their, your, us, them, her* and *my*. There seems to be a bias towards the use of first-person plural and third-person plural pronouns in the dataset. This aligns with earlier findings which indicate that Twitter, compared to other mediums, has an extensive use of first-person and third-person pronouns (Hanafy, 2021; Hu et al., 2013).

The pronouns in the discourse go beyond being referential and deictic expressions to bearing other meaning potentials. They are used for social categorization, identity construction, collectivism, solidarity and to emotionally engage the reader. An analysis of the pronoun ‘we’ indicates the tweeters used the pronoun to create a collective identity. The tweeters presented themselves as a collective category rather than an individual when making the demand for justice as illustrated in examples 32 and 33.

Example 32: *Dear DCI, **We** are waiting for your composition. **We** are waiting for your well composed composition telling us, that the people behind the murder of Benson and Emmanuel have been apprehended. #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson*

Example 33: *With every murder happening in Kenya, the murderers are getting closer to me, to you, to the one that I love, to the ones that you love. If **we** don't speak out against this, the murderers will get closer to all of us. #JusticeForKianjokomaBrothers*

The use of ‘we’ in example 32 gives an indication that the discourse is presented from a collective point of view. The pronoun is all-inclusive thus allows the tweeter to speak for the digitally protesting activists who affiliate with the hashtag. In example 33, the pronoun ‘we’ is also used to emphasize solidarity and the sense of collective identity among the protestors. The ‘we’ suggests that people must come together because they are all candidates of police brutality. If they have not already been impacted, then they might be

soon. It helps show that the struggle against police brutality is not limited to any group hence should be a shared concern. Consequently, the use of 'we' in police brutality protests helps to amplify the voices of groups that would ordinarily be considered less powerful.

When tweeters who affiliate with the hashtag make the demand for justice collectively using 'we' it helps create a sense of collective power and offers a platform for those who might otherwise remain unheard. These corroborate findings by Walker and Kaye (2022) who also concluded that plural pronouns in hashtag activism are a proxy of collectivism. Considering the sense of community (we-ness) and personal involvement created motivates participation in social media engagement (Machin & Mayr, 2023; Van Zomeren et al., 2012; Panjaitan & Janah, 2022), the pronoun plays a significant role in hashtag activism. The pronoun also reinforces group identity (Aboh, 2024; Hanafy, 2021) which in turn creates group cohesion.

The pronouns in the discourse are also used to enact social identity and social categorization, by creating polarity between the social actors. They lay out a sense of us and them, creating the ingroup and out group, delineating group boundaries. The police and government are presented as the outgroup, while the protestors who share in the hashtag represented by the pronouns 'us' and 'our' are presented as the ingroup as illustrated in examples 34 and 35.

Example 34: *So Sad If Covid doesn't kill **us** the police will Kill **Us** ❤️ C's Fred Matiangi,Ps Karanja Kibicho and Ig of Police Should RESIGN!!!! #JusticeforEmmanuelandBenson #*

Example 35: *How about for the whole of next week, when any government official or agency or politician posts a tweet, just 1000 of **us** reply with a photo these two brother and just the hashtag #JusticeForKianjokomaBrothers I will do that, feel free to join me*

In example 34, the 'us' implies a sense of social identity where the tweeter aligns with a broader community that is vulnerable to harm from both COVID-19 virus and police brutality. The use of the pronoun creates a sense of inclusivity, implicitly connoting the presence of an outgroup responsible for the perceived threat on 'us', that is, the police. The

inclusion of the names of the cabinet secretary (CS) and permanent secretary (PS), who represent the government, conveys the message that they are part of the outgroup. The vulnerable ordinary citizens are presented as part of the ingroup, while the police and government are the outgroup. Example 35 also divides the social actors into two; government officials, government agencies and politicians as part of the outgroup while the author and other Twitter users calling out for justice, collectively referred using the pronoun ‘us’, are part of the ingroup. This aligns with Aboh’s (2024) findings on the use of pronouns to create a dichotomy between the oppressors and the victims.

The frequent use of the pronoun ‘you’ in the dataset signals the nature of hashtag activism. Activism tweets are meant to reach a wide audience and mobilize more tweeters to join the hashtag campaigns. This can be achieved through making the readers supportive, sympathetic or provoked by the actions expressed in the tweets. In the corpus, the pronoun is used as an engagement strategy to manipulate the emotions of the reader as exemplified in examples 36-39.

Example 36: *As Desmond Tutu once said, “If **you** are neutral in situations of injustice, you have chosen the side of the oppressor.” We demand for Justice for this two beautiful souls. #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson*

Example 37: *If **you** posted when George Floyd was killed by a Cop in USA bt when 2 Kenyans are killed by our Cops **you** are silent... wewe ni mtu (you are a person)....!!!! #JusticeforEmmanuelandBenson #JusticeForKianjokomaBrothers #justiceformuturaandnjiru #JusticeForNdwigas #just*

Example 38: *Have **you** ever seen two hearses following each other leave alone heading to the same homestead? Enyewe (truly) the hardest thing about growing up is burying your mates. R9.I.P my people. #JusticeforEmmanuelandBenson #JusticeForKianjokomaBrothers*

Example 39: ***You** watch the burial and **you** realize how damn painful this is to the family yet the so called 'leaders' will be looking foward to get done with this for their usual PR stunts and continue politicking!!! #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson*

In example 36, 37, and 38, ‘you’ is used for emotional manipulation. In 36, the tweeter uses a quote from a well-known figure to lend authority and credibility to the message. The quote uses the phrase ‘...*you have chosen the side of the oppressor*’ to guilt-trip any reader who remains neutral. Example 37 also uses emotional manipulation through guilt-tripping those who tweeted during the American case but have not done so for the Kenyan case. The use of the phrase ‘our cops’ shows the tweet is directed to the KOT while the omission marks after the words ‘you are a person’ shows the author lacks words to describe that person. When the words are said in Kiswahili (as used in the original tweet) they carry a tone that connotes a negative description or an unthinkable trait of a person. The tweet communicates the idea that it is morally wrong for members of KOT to demand justice for other nationalities and fail to do so for their own countrymen.

Example 38 employs a different kind of emotional manipulation using a rhetorical question. The question is emotionally laden and highlights the uniqueness of this case of police brutality. The question further underscores the weight of the injustice which can evoke outrage from the reader. Ultimately, the tweet can appeal to the readers’ emotions, making them join in the protest movement. In example 39, the author uses the second person perspective to express their opinion and offer a critique as a way of engaging the reader. The ‘you’ encourages the reader to visualize themselves in the author’s position, hence fostering a sense of empathy. Using the pronoun, the author invites other users to relate and reflect on the events from their own perspectives. This creates a shared experience between the author and the reader which helps boost a sense of solidarity. The pronoun ‘you’ as used in the corpus, invites any reader to assume the responsibility of participating in the activism campaign, an aspect that, as Hanafy (2021) notes, aligns closely with nature of hashtag activism.

The choice of words in protest discourse on Twitter is crucial for achieving the communicative goal of the tweets. Considering tweets are user generated, words can carry different meaning potentials as demonstrated in the discussion. The length restriction on Twitter does not allow tweeters to provide elaborate explanations, requiring them to choose informationally dense lexical items. The nouns help in introducing the social actors and the main issues in the discourse while the verbs aid in highlighting the actions committed by

social actors giving an indication of the roles played by each social actor. The choice of adjectives indicates the kind of qualities the tweeters attribute to the social actors. The pronouns act as engagement markers, create a sense of community and delineate the different entities described in the discourse creating insiders and outsiders.

4.6 Interactive Resources

This category is made up of technical conventions and symbols unique to digital platforms used as both interactive and referential tools while contributing to meaning making. They include hashtags, mentions and hyperlinks.

4.6.1 Hashtags

Hashtags are a semiotic resource since they provide metadata and additional contextual information about the content posted. In describing the hashtags, the analysis is organized around three main questions: (a) Which are the main hashtags used in the tweets? (b) What patterns are used for the hashtag formation? and (c) What positions are the hashtags embedded in? The analysis of hashtags was also done at the lexicogrammar and discourse semantics levels to realize their linguistic functions in the data. The lexicogrammar level of analysis examined the meaning communicated by the descriptive annotation of the hashtag while the discourse semantics level involved analysis of the meanings enacted in the hashtags' context.

The first step was to extract all the hashtags used in the dataset. The Mecodify software aided in the extraction and provided a visualization of all the hashtags as shown in Figure 4.3.

Figure 4.3

Hashtag Cloud Visualization for the #JusticeForKianjokomaBrothers Dataset



Note. Visualization of the hashtags as generated within the Mecodify software using Twitter API data.

The visualization in Figure 4.3 illustrates the hashtags frequently used in the tweets in a larger font than the ones not commonly used. Since hashtags are produced by users, several different tags were generated in this social event as evident from the visualization. In terms of the number of words used to construct the hashtags, over 90 percent of the tags in the corpus are compounds of more than one word. These findings are different from Tsur and Rappoport (2012) corpora, which had over 55 percent of compounded hashtags. The difference can be accounted for by the fact that hashtags are produced by users as opposed to being assigned by the microblogging service. Some users might have an affinity for longer hashtags, as in the case of the KOT community who produced the current dataset while others might not. In line with what Cunha et al. (2011) note about hashtags, it is evident that the three hashtags #JusticeForKianjokomaBrothers, #JusticeForEmmanuelAndBenson and #JusticeForMuturaAndNjiru were the ones widely accepted by the KOT community making them thrive as they were used in more tweets. The rest were sparsely used in the tweets.

Next, the pattern used in the formation of the main hashtags was assessed. As can be observed from the visualization in Figure 4.3, the two main hashtags used for the campaign are #JusticeForKianjokomaBrothers and #JusticeforEmmanuelandBenson. The hashtags are concatenated phrases, combining four and five words respectively. The formation shows some pattern of regularity with how the KOT community form their hashtags as observed by Munuku et al. (2017). These hashtags illustrate the stand of the formulator using clear and concise wording. The tag has a noun expressing the key theme and explicitly names the victims making it a victim specific hashtag. By omitting a specific subject, the tag becomes a rallying call open to anyone who aligns with the sentiments expressed. This structure emphasizes collective action over individual identity, implying the need for societal involvement. The hashtags mention the brothers by their names 'Emmanuel and Benson' in one of them and by the name of their home village 'Kianjokoma' in the other. The tags are context bound since they address the happenings of the day. Additionally, they are idiosyncratic or expressive tags. These are hashtags used to emphasize a stance or express an evaluative sentiment; in this case the stance is 'justice'. This aligns with Page's (2012) findings that updates posted by ordinary account tweeters had a higher likelihood of making use of idiosyncratic or expressive types of hashtags.

The analysis of the meaning potential of the two main hashtags at the lexicogrammar level was done by examining the lexical items used in the formulation of the hashtags. The hashtags #JusticeForEmmanuelAndBenson and #JusticeForKianjokomaBrothers have the head noun 'Justice' which reflects the central theme of the tag. The word carries the notion of a legal or moral redress for the harm caused, making the phrase a demand for accountability. The demand for justice also presupposes an injustice was committed.

The names of the victims, 'Emmanuel and Benson,' whom justice is being sought for, are also used. This has the potential to personalize and humanize the hashtag. The names particularize the demand moving it from an abstract concept to specific individuals with an identity. Compared to using a hashtag like #EndPoliceBrutality which is very general and does not give any specifics, the #JusticeForEmmanuelAndBenson has a clearly spelled-out focus. This can put more pressure on the authorities to act on the specific incident. The hashtag also has an emotional impact as it enhances empathy and compassion from the

readers. Human beings are more likely to be moved by the plight of named individuals than unnamed ones. The use of names is also a way to honour the victims' memory and ensure their names are not forgotten. Considering the searchability affordance of the hashtags, the victims' names will always be kept alive on the internet.

In the second hashtag, #JusticeForKianjokomaBrothers, the victims' village of origin (Kianjokoma) and their relationship (brothers) helps to describe the persons justice is being sought for. This kind of description can carry different meaning potentials. Firstly, it creates a sense of community identification, showing the victims were part of a community. This is in line with the Kenyan socio-cultural practices, where people identify with their places of origin. Secondly, the tag can symbolize that loss of life not only affects individuals, but an entire community. Thirdly, the use of 'brothers' can have an emotional impact on the readers, evoking feelings of empathy towards the victims and their family and those of anger towards the perpetrators of the injustice. The KOT formulated the main hashtags using simple noun phrases that were concise and communicated the specific demand.

The hashtags used in the tweets were extracted from the corpus and categorized as per their position in the tweets, that is, beginning (prefix), middle (infix) or end (suffix) (Tsur & Rappoport, 2012; Wang et al., 2012). For tweets where the hashtag(s) appeared in more than one position, a count was done for each position. For instance, example 40 has hashtags in both the medial and end positions.

Example 40: *3 people shot, one life lost today in #Embu #kianjokoma After the death of the two brothers under police custody. Till when will the police stop this extrajudicial killings? Till when? Till when? #Embu #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBens*

Additionally, sequences of hashtags were treated as occupying a single location (Tsur & Rappoport, 2012). Hence the first two hashtags in example 40 were both considered to be in the mid position while all the last three hashtags were allocated the end position. In the corpus, there were tweets composed of hashtags only. Such were not classified since the hashtags were not accompanied by any text. The frequency was arrived at by counting how

many tweets had hashtag(s) in a particular position irrespective of the number of hashtags used as shown in Table 4.5.

Table 4.5

Hashtag Positions in the #JusticeForKianjokomaBrothers Dataset

Position	Tweet example	Frequency
Beginning	#JusticeForKianjokomaBrothers#JusticeforEmmanueland Benson <i>Two young souls taken out of this world</i>	26
Middle	<i>More Kenyans and leaders will closely follow and tweet #JusticeForGeorgeFloyd and not care to agitate for #JusticeForKianjokomaBrothers. Let's get answers otherwise this becomes just another statistic.</i>	48
End	<i>It is only news until it is your brother. Justice for these two brothers. #JusticeForKianjokomaBrothers</i>	401

The analysis indicated that 80.8 percent of the tweets have hashtags at the end, 9.6 percent embedded in the text and 5.2 percent at the beginning. This finding closely aligns with Wang et al. (2012) and Mahfouz (2020), who reported that end-position hashtags overwhelmingly dominated. However, it slightly contrasts with Tsur and Rappoport (2012), who found both the beginning and end positions to be most common. These differing results highlight the syntactic flexibility of hashtags, suggesting that their position is shaped by the hashtag's type, formation pattern, and the communicative context. The occurrence of most of the hashtags at the end position in the current corpus can be attributed to the context and type of discourse. Protest messages usually make a key demand, in this case, it was a demand for justice for the victims. Considering the argument that hashtags in the end position serve as thematic markers (Tsur & Rappoport, 2012), the end position was the most ideal for the hashtags in this protest discourse.

The analysis of meaning potential of the hashtags at the end position indicates that they are most used to sum up the stance of the tweeters hence acting as summary tags or thematic markers as illustrated in examples 41 to 45.

Example 41: *Breaking News, Kianjokoma Embu we want Justice. Police brutalizing residents and killing 4 of them within a span of 1week. It's inhuman,*
#JusticeforEmmanuelandBenson #JusticeForKianjokomaBrothers
#BREAKING_NEWS #NTVTheICCTruth.

Example 42: *Transferring INCOMPETENCE from one region to another* 😞😞😞😞😞!! *It's frustrating being a patriot in Kenya* 😞😞!!
#JusticeforEmmanuelandBenson #JusticeForKianjokomaBrothers

Example 43: *@PoliceKE do you know what a demented sick fuck you have to be to kill kids?! No, like seriously! Are your officers given psych evaluations to join the forces?* *#JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson*

Example 44: *Let's stand for our own like we stood for George Floyd.*
#JusticeForKianjokomaBrothers

Example 45: *REST IN POWER!!* 🙏🕯️ *#JusticeForKianjokomaBrothers*
#JusticeforEmmanuelandBenson

The tweet in example 41 provides information about what happened in Embu, along with the author's evaluation. Example 42 expresses frustration over the transfer of incompetent officers. Example 43 condemns the authorities for the actions of the police. Example 44 expresses solidarity with the victims, while example 45 conveys a condolence message. The stance of the tweeters in all these tweets is summed up using the two main hashtags, #JusticeforEmmanuelandBenson and #JusticeForKianjokomaBrothers. The hashtags serve as a concluding remark for the reader after encountering the full context of the tweet narrative. In all the examples, the tweeters build up a narrative before reminding the reader about the bigger demand thus enhancing motivation to support the cause.

In general tweets, hashtags placed at the end often express attitudes, opinions, moods, and emotions (Laucuka, 2018; Zappavigna, 2015), or provide additional information (Wang et al., 2012). In contrast, in activism tweets, end hashtags function to express the collective stance of online protestors. Placing them at the end enhances the tweet's impact by creating

a narrative flow that culminates in the CTA, making it the final thematic takeaway for the reader.

There were other hashtags used alongside the two main hashtags in the end position. These hashtags carried a different meaning from the stance marking. For instance, *#BREAKING_NEWS* in example 41 serves as a metacommentary marker. The tag describes the type of news communicated in the text and provides a cue that guides the reader in interpreting the tweet. The phrase ‘breaking news’ connotes that what is reported in the tweet is urgent, important and immediate. This is consistent with Wikström (2017) and Zappavigna (2018) findings on the metacommentary function of hashtags.

Other tags used in the end positions included viral tags such as *#BlackLivesMatter* and *#StopPoliceBrutality* as illustrated in example 46.

Example 46: *Once you decide to be a police officer. You surrender your interest and concrete on protecting others. If you can't do that just resign and venture in other field. #BlackLivesMatter #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson #StopPoliceBrutality*

The *#BlackLivesMatter* in example 46 is a viral hashtag, often associated with a racial perspective. The use of the tag in a case that has no racial dimension seems misplaced. However, the tweeter leverages on the viral status of the hashtag to recontextualize the killing of the two brothers to make it part of a global affair. The hashtag serves to place the police brutality in Kenya into a broader global context hence lending legitimacy to the protest and expanding the reach of the tweet to a wider audience. This finding supports Laucuka's (2018) conclusion that hashtags offer another layer of meaning to the tweet's content, hence serving a metalinguistic function.

Hashtags appearing at the medial positions are seamlessly integrated into the text. They form a natural part of the tweet's clausal structure, functioning as part of its syntactic and semantic content. Additionally, they communicate other meanings depending on the semantic content of the hashtag. When the main hashtags are used in the mid position, they introduce an additional layer of meaning, which evokes a sense of the CTA being integral to the tweet message rather than an add-on as illustrated in example 47.

Example 47: *We'll continue tweeting, **#JusticeForKianjokomaBrothers** **#JusticeforEmmanuelandBenson** . Burying them won't make us forget they were killed by our own police. **#EndPoliceBrutalityKenya***

Example 47 reinforces the hashtag by embedding it within the body of the tweet, making the call for justice an integral and natural part of the discourse. It further binds the CTA directly to the ongoing action of 'tweeting' and 'not forgetting' described in the tweet. Additionally, the placement creates a balance between the attention given to the tweet content and the CTA in the hashtag. When a reader encounters part of the message, then the call and finally the rest of the message, it reinforces the CTA within the context of the narrative. The mid position highlights the CTA as central to the discussion thus creating a sense of ongoing relevance and importance.

Hashtags different from the main hashtags were also integrated in the medial position. In such instances, apart from being part of the syntactic and semantic content, the hashtags also serve to emphasize and highlight information the author considered important as illustrated in examples 48 and 49.

Example 48: *3 people shot, one life lost today in **#Embu** **#kianjokoma** After the death of the two brothers under police custody. Till when will the police stop this extrajudicial killings? Till when? Till when? **#Embu**
#JusticeForKianjokomaBrothers **#JusticeforEmmanuelandBens***

Example 49: *I RISE UP against **#ExtraJudicialKilling** because I am a **#Mother**, a **#daughter**, a **#sister**, and If I don't SPEAK UP, my son, brother, nephew, cousins maybe NEXT. **#StopPoliceBrutality** . OUR MOTHERS DON'T DESERVE THIS!
#JusticeForKianjokomaBrothers **#JusticeforEmmanuelandBenson***

The hashtags **#Embu**, **#kianjokoma**, **#ExtraJudicialKilling**, **#Mother**, **#daughter**, **#sister** and **#StopPoliceBrutality** in examples 48 and 49 act as a form of meta discourse, highlighting the special status of the hashtagged words (Zappavigna, 2018). Tweeters used it to highlight what they considered important aspects of the tweets. Since hashtags visually stand out, they can be more impactful than plain text as they reinforce the importance of the hashtagged words.

In other tweets the integrated hashtags signalled intertextuality through referencing other online trends as illustrated in example 50.

Example 50: (1144) *Why can't we Kenyans more out the #GeorgeFloyd way and move to the streets in #PeacefulDemonstrations #StopPoliceBrutality #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson #PoliceBrutality*

The #GeorgeFloyd in example 50 references a case of police brutality that happened in America. For users who are familiar with the reference, it adds another layer of meaning to the tweet by fostering a sense of shared understanding. Through referencing a viral case, the hashtag has been used to draw parallels to other social movements as a basis to critique the KOT's way of handling the Kianjokoma brothers' case. The use of the tag also acts as an exophoric marker by referencing information outside the text. Since a hashtag is clickable, it supports what Zappavigna (2016) refers to as ambient intertextuality, where the use of a hashtag presupposes the existence of other texts containing the same tag. Therefore, any reader who would want information related to the George Floyd case can click on the tag and tweets related to the case will come up.

The tweeters leverage on the socio technical functions of hashtags to connect with a wider audience and to a past event, hence creating a network of related content and potential audience engagement that can amplify the messages. In protest discourse, connecting to a past event helps reinforce the present narrative by situating it within a broader historical framework (Bhatia & Ross, 2022). This in turn lends legitimacy to the discourse through continuity and context. Integrating hashtags into the syntax of the tweets is a creative way of expanding the functions of hashtags in digital discourses. As Mahfouz (2020) notes, it deviates from the metadata's traditional role of separating meta-information from the primary content, to acquire new semantic functions. This illustrates the dynamic nature of hashtags as semiotic resources.

Hashtags located at the initial position of the tweet are used to catch the attention of the reader and provide an immediate context for the tweet as illustrated in example 51.

Example 51: #JusticeforEmmanuelandBenson

#JusticeForKianjokomaBrothers *'Every time I think of those two brothers and what they must have gone through before meeting their death, I just want to shed tears. How helpless they must have been, and probably in so much tears and so much pain. This hurts *

The hashtags in example 51 signal that the tweet content is part of a larger conversation about justice for the two brothers. Placing the hashtags at the initial position makes it the focal point of the tweet, ensuring immediate association with the CTA. This aligns with Zappavigna's (2018) functions of hashtags placed at the beginning. However, this position potentially interferes with the narrative flow, a fact that probably explains why there were fewer tweets with hashtags at the initial positions in this corpus, compared to the mid and end positions.

The corpus also has hashtag only tweets. These are hashtags that appear without any accompanying text. Such hashtags imply that the tweeters' main intention is to make the topic trend as opposed to providing content. Leveraging on the technical affordance of the hashtag, such tweets increase the visibility of the tag, a function that is crucial in hashtag activism. Twitter's algorithm on trending topics relies on the increased use of a hashtag over time (De Cock & Pizarro Pedraza, 2018), hence the use of hashtag-only tweets helps push the tag to the top position. Visibility is key in digital activism as it keeps the topic trending longer, helping to create more awareness which may eventually yield the desired action. Consequently, when tweeters use hashtag-only tweets it demonstrates that their desire for visibility is much more than providing content. This can equal to the physical presence of more protestors during a physical demonstration. In terms of the communicative function, the tweeters use hashtag only tweets to aptly highlight and communicate the message expressed in the hashtag. In other words, the users are saying they have nothing more to add, apart from demanding justice for the victims. This is a pointer to the importance of hashtag formulation in digital activism. A tag formulated to communicate the message concisely can still raise awareness about the demand, even when used without any accompanying text message.

The analysis demonstrates that hashtags used in the corpus went beyond the technical affordance (topic-marking and aggregation functions) to serve as meaning-making resources. As semiotic resources, the main hashtags, which served as a clear demand for justice, are used to mobilize collective action, identify the issue, increase visibility and create a sense of community around the cause. Other tags in the corpus function as metadiscourse markers that highlight important concepts, index intertextuality and provide metacommentary.

Tweeters leverage on the technical affordances of hashtags to perform social, pragmatic, linguistic and metalinguistic functions. These results align with previous studies on the communicative functions of hashtags (Giaxoglou, 2018; Konnelly, 2015; Laucuka, 2018; Mahfouz, 2020; Wikström, 2014; Zappavigna, 2018). However, the current findings extend this body of work by demonstrating that a single hashtag can take on new functionalities depending on its placement within the tweet.

The main hashtags in the corpus, #JusticeforEmmanuelandBenson and #JusticeForKianjokomaBrothers, acquire their communicative functions depending on their positioning in the tweets. When placed at the end position, the hashtags serve as stance markers or summary tags, in the mid position the hashtag's message became an integral part of the tweet and at the beginning they provide context for the tweet. While previous studies used different hashtags to demonstrate how the placement influences the function (Mahfouz, 2020; Tsur & Rappoport, 2012), the current study uses the same hashtag to bring out the change in function. This strengthens the role of hashtag placement as an important aspect of their functionality, particularly in hashtag activism.

4.6.2 Mention Feature (@Username)

Another key digital resource identified in the data is the mention convention also referred to as @username or @reply (when the tweet is a reply) on Twitter. The feature places the @ symbol before a user's handle indicating the users mentioned in the tweets. To fully account for the use of this feature in the dataset the analysis sought to respond to three questions: (a) What is the frequency of the feature in the corpus? (b) Which positions does

the feature occupy in the tweets? and (c) Which users are mentioned the most in the corpus? In addition, meanings communicated by mentioning the users in the tweets are examined.

To begin with, a simple count of the tweets that used the feature was done. Only 127 out of the 496 tweets made use of the feature, translating to a 26 percent occurrence frequency. The frequency count helps show how the feature is spread or distributed across the corpus. Despite the low number of tweets that incorporated the feature, the number of total mentions is relatively high, standing at 1,917 mentions in the corpus. This implies that the mentions are concentrated in a small number of tweets, possibly used in certain contexts or by specific users. Further assessment of tweets with mentions revealed that most included multiple mentions, with some containing up to 13, as illustrated in Example 52.

Example 52: @bonifacemwangi @IG_NPS @FredMatiangi @IPOA_KE @DCI_Kenya @thekhrc @NPSOfficial_KE @Kenyajudiciary @ODPP_KE @gathara @WMutunga @johnallannamu @wmnjoya Justice must be served to this family. This is painful. #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson

This finding contradicts Wang et al. (2013) recommendation of five mentions as the upper limit in a single tweet for the tag to be effective. The frequent use of multiple mentions in a single tweet can be attributed to the increased character limit on Twitter, which reduces concerns about exceeding the limit. Additionally, the goal of hashtag activism, that is, to reach a wider audience is likely to motivate users to include more mentions to enhance information diffusion.

As earlier observed, most of the tweets (74 percent) did not use the mention feature. This contradicts Page (2012) findings which show that ordinary account users made use of both broadcast style updates and conversationally addressed messages at almost similar proportions of 48 percent and 42 percent respectively. The higher use of broadcast style updates (tweets without mentions) in the present corpus may be attributed to the themes in the tweets. Majority of the message type categories identified in the data involve self-expressive acts which may not require the mentioning of other users. These are information engagement, solidarity, expressing emotions, condolences and memorialization categories.

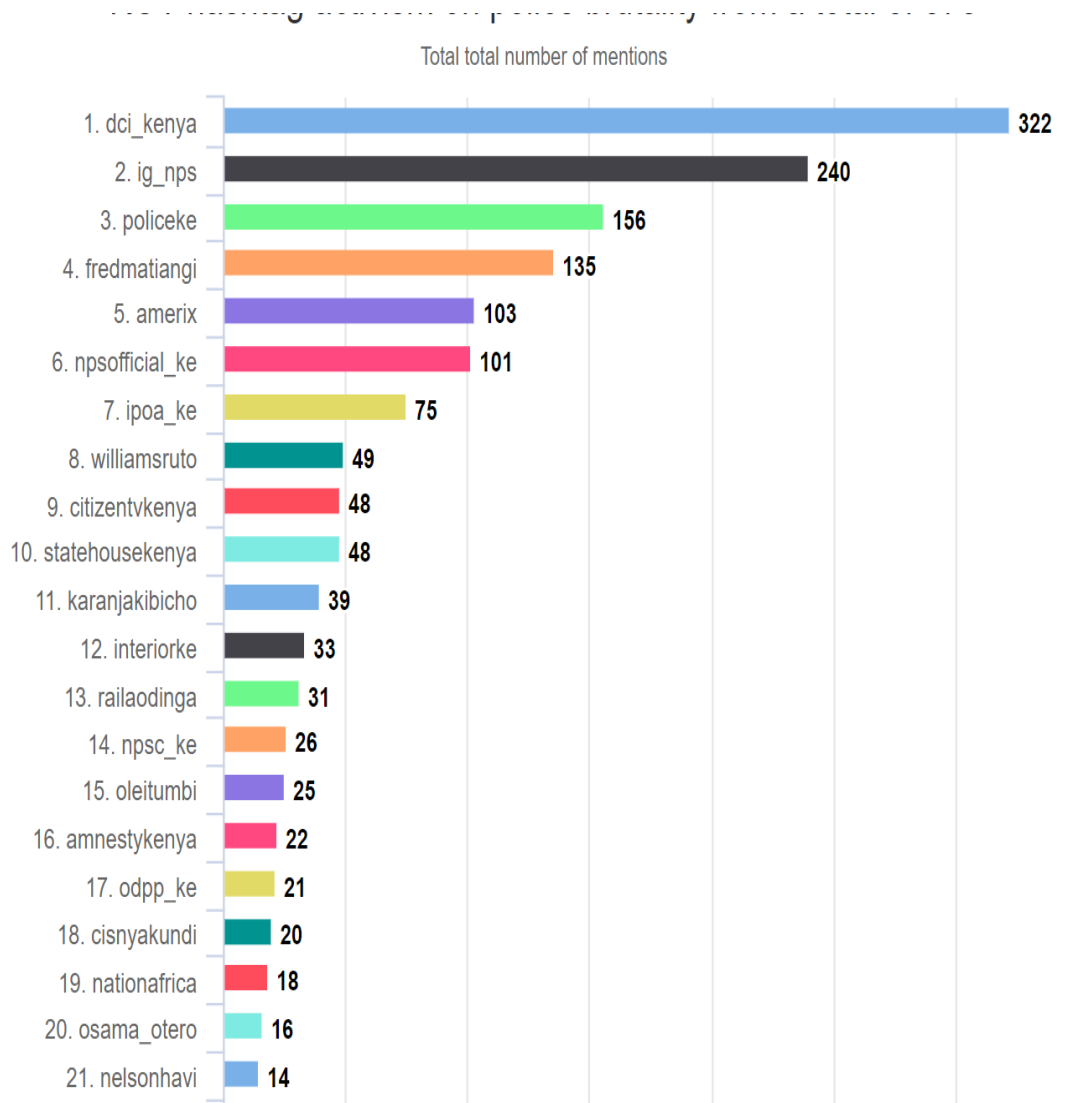
Only the call to action and critique of authorities' categories would largely involve acts of mentioning other users, a factor that could have contributed to the low number of tweets with mentions.

The analysis of the feature's position in the tweets was done based on Clarke (2022) initial and non-initial mentioning categories. When the feature is placed at the beginning of the tweet (initial mentioning) it serves as an addressitivity marker. This directs the tweet at the mentioned individual while limiting its visibility to those who follow the mentioned users and the author. When used as non-initial mentioning, the feature appears at either the mid or end positions, making the tweet available in the timelines of all followers. There were 57 tweets with the initial mentioning while 70 tweets had the non-initial mentioning. This means most tweeters prefer to reference other users in third person rather than interacting directly with them. Such referencing helps increase visibility for the tweet, enhancing its reach (Clarke, 2022).

In analysing the users mentioned, the accounts of tweeters who were mentioned the most (but not necessarily tweeted anything about this case) in the tweets were extracted. Figure 4.4 illustrates a record of the top 21 mentions in the tweets as captured by Mecodify influence chart.

Figure 4.4

Top 21 Accounts with Highest Mentions in the #JusticeForKianjokomaBrothers Dataset



Note. Figure generated within the Mecodify software using Twitter API data

Figure 4.4 shows that the official Twitter handle for the Directorate of Criminal Investigations (dci_kenya) in Kenya received the highest number of mentions. The second highest mentions are for the IG (ig_nps) of the national police service followed by the Kenya police (policeKe), a body charged with law enforcement. The mentions were further grouped into a seven-class schema to illustrate the categories the accounts fell under as shown in Table 4.6.

Table 4.6*Categories of @Mentions in the #JusticeForKianjokomaBrothers Dataset*

Category	Examples of Accounts	Total mentions
Government institutions	dci_kenya, ig_nps, policeke, statehousekenya, interiorke, odpp_ke, kenyajudiciary and npsc_ke	1035
Government officials	Fredmatiangi (CS Ministry of Interior), karanjakibicho (PS Ministry of Interior)	174
Politicians	williamsruto, railaodinga, kipmurkomen, robertalai, cecilymbarire, senmutula, honkangati	125
Media	citizentvkenya, nationafrica, standardkenya, thestarkkenya, ktnnewske, k24tv, nationbreaking	108
Non-governmental organizations	amnestykenya, thekhrc, imlu_org	36
Media personalities	hassanmugambi, fchurii, johnallannamu, larrymadowo, oburrow	33
Others	Ordinary Twitter users including social media activists, popular bloggers and celebrities	406

Table 4.6 shows that government institutions received the highest mentions, taking up 57 percent of the total mentions. Twitter users categorized under ‘others’, mainly include tweeters with many followers (as noted from their accounts metadata), some of whom were renowned social media activists, celebrities and bloggers, made up about 21 percent of the mentions. Two top government officials in the Ministry of Interior and National Administration, a ministry where the national police service (NPS) of Kenya is housed contributed to nine percent of the total mentions. The media and media personalities received only seven percent of the mentions while politicians got 6.5 percent of the mentions.

In the politician's category, the accounts of two leading political contenders in Kenya's 2022 presidential elections, the then Deputy President @williamsruto and the opposition leader @railaondinga, got the highest number of mentions. In contrast, human rights organizations accounted for only two percent of mentions. These patterns reflect which users the KOT community considered worthy of mention. The frequent mentions of government institutions suggest a belief in their central role in delivering justice and accountability, aligning with Wang et al.'s (2013) view that influence and relevance drive mention choices. The notable mentions of celebrities and popular bloggers further point to an effort to escalate the hashtag and expand its reach, consistent with Munuku et al.'s (2017) finding that tweets mentioning influential users tend to amplify conversations.

A surprise finding was the low mentions of the mainstream media and media personalities. Considering the media's main function is to pass information, one would have expected them to receive more mentions to help escalate the demand. The low number of mentions could be an indicator that the KOT community had no faith in the mainstream media on issues related to police brutality. It was probably felt that the mainstream media ignored or presented a distorted coverage of the issue as evidenced in sentiments expressed in some of the tweets as illustrated by example 53.

Example 53: *Our media kept us alive and excited at the story of Caroline Kagongo. Every step, Every day on tv and print, until she was found dead,she was a front page story. Lakini, Justice For the Kianjokoma Brothers is where they draw the line 🤔🤔🤔🤔 #JusticeForKianjokomaBrothers*

In example 53, the tweeter insinuates that media is normally more interested in other stories but in relation to this story on the killing of the Kianjokoma brothers, they have shown less enthusiasm. Such sentiments could be what contributed to the low mentions of the mainstream media organizations.

The mention as a digital resource also has an affordance for social tagging. Once a user is mentioned, they receive a notification alert, and the tweet appears on their timeline and on that of their followers. The government institutions accounts tagged most in the tweets include the @DCI_Kenya, @IG_NPS, @PoliceKE, @NPSOfficial_KE and @IPOA_KE.

Apart from being a direct address or engagement with the intended recipients, the social tagging also communicated other layers of meaning.

The mention of @DCI_Kenya serves as a demand for action from the institution. To provide context, the DCI is a semi-autonomous directorate under the NPS, tasked with investigating serious crimes. By tagging @DCI_Kenya, the KOT exerted public pressure on the directorate to launch investigations into the killings of the two brothers. Similarly, the @IG_NPS, the official Twitter handle for the IG of the NPS in Kenya, is tagged to emphasize public demands for action, accountability, and personal responsibility. Given that the IG exercises command over the NPS, the tagging highlights his direct authority over the officers involved.

Moreover, the NPS Kenya, an umbrella body for law enforcement units which include the Kenya Police, Administrative Police, DCI, and Internal Affairs Unit, is tagged via @NPSOfficial_KE. This serves to hold the organization accountable for misconduct by any of its units. Additionally, @PoliceKE, the handle for the Kenya Police, the primary national body in charge of security and law enforcement, is tagged specifically because the accused officers were from this unit. In this case, tagging the service functions as both a critique of their actions and a call for accountability. It also aims to raise awareness among police officers about public sentiments and to demand reforms within the service.

Lastly, @IPOA_KE is tagged to appeal for procedural investigations to commence. IPOA, an independent oversight body, is mandated to investigate deaths caused by police actions and recommend prosecution or disciplinary measures when necessary. Tagging this handle conveys the public's trust and confidence in its impartiality and oversight role. These meaning potentials are exemplified in examples 54–60.

Example 54: *@DCI_Kenya we need a thread about these brothers. We need to know what exactly happened on that day. We need to know who gave Kenya Police the authority to kill innocent, unarmed youth. We need answers.*
#JusticeForKianjokomaBrothers #LightsOutKE

Example 55: *Very unfortunate and uncouth for few rogue police officers to shutter the dreams of these 2 young brothers. The @IG_NPS @NPSOfficial_KE must bring to book the culprits who are in uniform.*

#JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson

Example 56: *We must all demand for Justice. To the @IG_NPS these young guys deserved a future , the parents were raising kings but your policeman 🤔🤔🤔*

#JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson

Example 57: *Kenya would've been a better country without @NPSOfficial_KE*

Example 58: *@PoliceKE do you know what a demented sick fuck you have to be to kill kids?! No, like seriously! Are your officers given psych evaluations to join the forces? #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson*

Example 59: *We must ensure that justice is served @IPOA_KE*

Example 60: *Which student wants to read about their classmate & his brother dying like this? 💔💔💔🤔 #JusticeForKianjokomaBrothers*

#JusticeforEmmanuelandBenson @IPOA_KE @DCI_Kenya justice must not just be done,it must also be seen to be done J.U.S.T.I.C.E 🗣️🗣️ @CisNyakundi @PresidentKulsa

Tagging of the DCI in example 54 is a direct demand for the directorate to commence investigations and publicly report the findings of what transpired on that fateful night. In example 55, the tagging is an accountability call to the IG and NPS to exercise their mandate and arrest the law breakers referred to as ‘culprits in uniform’. The use of @IG_NPS in example 56 personalised the call for accountability implying that the highest-ranking police officer must take ultimate responsibility for the actions of his officers. The mention in example 57 tags the NPS for informational purposes, without making them the primary focus. They are informed about the distrust and dissatisfaction the tweeter has for them.

Example 58 is a direct address to critique and condemn police actions. The mention of the police serves as a form of symbolic protest, demonstrating citizen empowerment. When individuals challenge institutions like police, it signals their refusal to be silenced and their right to demand for justice. Tagging IPOA in example 59 acts as an appeal for intervention

from the oversight body. It can imply that the KOT do not trust the police to investigate their own (DCI is part of the NPS) and they would rather the civilian oversight body does it. The tagging of the two bodies in example 60 could imply the tweeter's desire for the case to be treated as a serious crime as well as a case of extrajudicial killing. The tweeter potentially implies that having the two bodies work on the case would help reinforce public trust in handling of the issue. The choice of which government institution to tag in the tweets demonstrates that KOT are aware of the mandate of each of the authorities.

The positioning of the mention features also communicates their role in the tweet. At the initial position the feature serves as a direct address to express criticism or make a demand as seen in examples 54 and 58. The mid position is a way of integrating the mentioned user into the conversation and seeking for their intervention as seen in examples 55, 56, and 60 while the end position tags them for informational purposes as in example 57 and 59. This demonstrates the role the position of the feature plays in activism tweets.

Another group that attracted the second highest number of mentions included celebrities, bloggers, and social media activists. These individuals were often tagged at the end of tweets to increase visibility and amplify the hashtag. With their large following, tagging them made the tweets accessible to wider audiences, contributing to the hashtags' trending. This practice plays a vital role in online activism by building solidarity and uniting a coalition of voices that ultimately strengthens the protests.

The mentioning of two government officials, the then CS and PS in the Ministry of Interior, more using their personal Twitter handles than the official @InteriorKE handle, carries connotations. Firstly, it emphasizes the personal responsibility of the CS and PS in addressing the issue as illustrated in example 61.

Example 61: *We demand Justice for Kianjokoma brothers Emmanuel and Benson. Transfer of notorious cops is not justice. I remember George Frroyd killer was jailed for 25Years. @Karanjakibicho @FredMatiangi we want action #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson*

The tagging of the two in example 61 using their personal handles places the spotlight on their personal actions and decisions rather than those of the broader institution. Integrating

the mentions into the tweet is a way of acknowledging their influence and seeking for their help.

Secondly, the tagging carries the potential of exerting more pressure on the CS and PS to act, since the KOT are holding them accountable in their personal capacity. The frequent mentions may make them encounter what Wang et al. (2013) refer to as severe mention overload problems. These numerous mention notifications can interrupt their use of Twitter compelling them to act on the issue. The mentions can also subject the officials to public scrutiny, abuse and potential reputation damage if they don't respond appropriately.

Thirdly, the mention connotes an emotional appeal as illustrated in example 62.

Example 62: *@FredMatiangi Dr. Fred Matiangi. NO. NO PARENTS, NO HUMAN BEING SHOULD BE SUBJECTED TO THE KID OF PAIN YOU HAVE CAUSED FOLLOWING THE MURDERS OF EMMANUEL AND BENSON. JUSTICE FIRST. #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson #KianjokomaBrothers*

The mention of the then CS using both his name and personal handle in example 70 appeals to his sense of humanity, duty and moral responsibility as an individual. Such appeals potentially increase the impact of the message in the hashtag.

Lastly, the use of personal handles connotes long-term accountability as the individuals are held accountable beyond their terms in office as illustrated in example 63.

Example 63: *@Karanjakibicho enjoy the privilege as it lasts! The thunder of JUSTICE is loading... it will strike at the most appropriate time! @InteriorKE @IPOA_KE @NPSOfficial_KE #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson*

The tagging in example 63 is a way of reminding the then PS of his role and responsibility beyond his official capacity. The official handle for the ministry does not attach responsibility to any individual because the occupants of the office can change but the personal handles remain with the individual even after their term ends.

The mention primarily signals the institutions and individuals KOT hold accountable, those deemed most influential in responding to the hashtags' demands, and those KOT wished to collaborate with for visibility. The resource provides the tweeters with a direct channel to address relevant authorities within the activism discourse. By enabling ordinary citizens to engage public figures and government institutions that are typically difficult to reach, the feature represents a transformative shift in power dynamics within digital protests. Its accessibility dismantles traditional communication barriers, creating a participatory space where grievances are publicly linked to authorities, making them harder to ignore. In this activism discourse, mentions are strategically used to engage, pressure, challenge, and hold government institutions, authority figures, and police accountable in the fight against police brutality.

4.6.3 Hyperlinks

Hyperlinks or links are clickable pieces of text that redirect the user to an external (outside the tweet) resource. The description of hyperlinks in the data involves a frequency count of the links and identification of the link source. A total of 12 links were identified, translating to only 3 percent of tweets with hyperlinks. The low use of hyperlinks in the dataset is in sync with Bruns et al. (2013) findings about the use of links in hashtags that are related to original commentary. Considering that hashtag activism involves self-expressive acts, most of the content can be termed as opinions and commentary thus the low use of hyperlinks.

In relation to the source of the hyperlinks, six linked to the Twitter status of Kenya's interior CS at that time, one to a blog post, one to a Facebook status update and four to news websites. The news websites included established media with both offline and online presence such as Nation Media Group and The Star Kenya and purely online sites such as Kahawa Tungu. Over half of the hyperlinks in the dataset linked to social media platforms like Twitter and Facebook, which contradicts Himelboim et al. (2013) findings that links to other social networking sites are rarely shared on Twitter. This discrepancy can be explained by the types of accounts where the data was collected and the specific purposes of the tweets. The current study collected tweets from individual accounts whose main aim

of tweeting was to demand for justice and accountability hence relying more on user generated content rather than content generated by media houses or any other such link.

The very low linking practice on this protest discourse could be an indicator that hashtag activism on police brutality by ordinary Twitter users is not about providing more information but about expressing their opinion and emotions, as they demand for justice.

4.7 Emojis

Emojis are visual symbols commonly used across social media platforms. Although visual in form, they are technically classified as text because they are embedded within written language. Notably, emojis are pre-configured by the Unicode Consortium, and users select them from a predefined repertoire. To effectively describe and analyse their meaning potentials in the corpus, the discussion is organized around four aspects: the distribution and positioning of emojis in tweets, the types of emojis used, their meaning potentials, and the sequential patterns in which they appear.

4.7.1 Distribution and Positioning of Emojis

To provide an overview of emoji distribution in the tweets, the number of tweets containing emojis was counted. Only 78 tweets included emojis, representing 15.7 percent. This reflects a relatively low frequency compared to the widespread use of emojis in digital communication (Alharbi & Mahzari, 2023; Kejriwal et al., 2021; Zhao et al., 2018). The limited use highlights the distinctive nature of protest discourse and suggests different communicative priorities in tweets addressing police brutality.

Firstly, the limited use of emojis may reflect restraint by tweeters who aim to convey a more formal and urgent tone that aligns with the gravity of the issue. Secondly, it may suggest that activism against police brutality prioritizes message clarity. Since emojis can introduce ambiguity or miscommunication (Annamalai & Salam, 2017; Jaeger & Ares, 2017; Miller et al., 2017), tweeters may intentionally avoid them to ensure their messages remain unambiguous.

Thirdly, the emoji usage pattern in these tweets suggests that their deployment is sensitive to the tone of the topic. Li and Yang's (2018) findings show a preference for positive emojis in creating a light or friendly online atmosphere. In contrast, the serious and emotionally

charged nature of police brutality likely discourages emoji use to maintain the solemnity of the message. Lastly, the pattern indicates that hashtag activism tweets are primarily task oriented. This aligns with Li and Yang's (2018) conclusion that emojis are used less frequently in task-focused communication and more in socio-emotional exchanges.

Despite the low number of tweets containing emojis, some users included multiple emojis in a single tweet, resulting in a total of 189 emojis in the dataset. For instance, the tweet in example 64 illustrates multiple use of emojis.

Example 64: (25) *only tears are flooding in my eyes. Rest in peace innocent comrade* 🥲🥲🥲🥲🥲🥲🥲🥲 *So sad #JusticeforEmmanuelandBenson #justiceformuturaandnjiiru #JusticeForKianjokomaBrothers*

The concentration of the emojis in a small number of tweets can be an indicator of a specific group of users who prefer the use of emojis as a style of communication. In addition, it might suggest the use of emoji is determined by the theme of the tweet, a proposition that would require further investigation by looking at the thematic categories where the emojis were prevalent.

The description also examined the positioning of emojis within the tweets. Three positions were identified: beginning, middle, and end of the tweet text. The findings indicate that 60.2 percent of the tweets place emojis at the end, 23 percent in the middle, and 1.3 percent at the beginning. Additionally, 9 percent include emojis in both the middle and end positions, while 6.4 percent are emoji-only tweets. These results show a clear preference for end placement. This trend aligns with previous studies reporting the end position as the most common for emoji use on Twitter (Danesi, 2017; Ge & Herring, 2018; Zhao et al., 2018).

4.7.2 Emoji Types

The dataset had 27 different types of emojis. To get their official names and descriptions, the emojis were copied and pasted onto Emojipedia, a reference website affiliated with the Unicode consortium which documents the name, definition and other technical information of emoji characters (see Appendix E for the formal descriptions of the emojis).

The emojis were categorized into four groups based on Jonsson (2020) classification for easier analysis: emoji faces, emoji hearts, emoji gestures, and emoji objects. Table 4.7 displays these categories along with their frequencies. The count also includes instances where the same type of emoji is used multiple times within a single tweet.

Table 4.7

Types of Emojis in the #JusticeForKianjokomaBrothers Dataset

Faces	F	Hearts	F	Gestures	F	Objects	F
 Loudly crying face	63	 Broken heart	33	 Raised fist	20	 Dove of peace	8
 Anxious face with sweat	9	 Red heart	2	 Flexed biceps	1	 Loudspeaker	6
 Crying face	9	 Green heart	1	 Man facepalming	1	 Candle	4
 Smirking face emoji	4			 Backhand index pointing down	1	 camera with flash	4
 Weary Face	4			 Folded hands	1	 Hundred points	3
 Enraged or pouting face	4			 Victory hand	1		
 Face with rolling eyes	3			 Man running (dark skin tone)	1		
 Pleading face	3						
 Unamused face	2						
 Frowning face	2						

Table 4.7 shows that emoji faces were the most common type of emoji in the dataset, with the loudly crying face () being the most frequently used. Notably, in the same year (2021), Emojipedia reported that this emoji had, for the first time in years, overtaken the face with tears of joy () to become the most popular emoji on Twitter (Broni, 2021). This suggests that the activism campaign may have contributed to this global trend. Three

emojis (loudly crying face, broken heart and raised fist) accounted for over 60 percent of the emoji usage in the corpus, while the remaining 24 emojis made up less than 40 percent. This concentration indicates that users regarded these three as most effective for expressing their emotions and messages. The presence of 27 distinct emojis across only 78 tweets also reflects a diversity of emotional expression and possibly individualized communication styles. This implies that the choice of emojis is influenced more by personal preference and intended meaning than by the platform's technical affordances.

4.7.3 Emojis as Meaning-making Resources

To fully understand how emojis operate as semiotic resources, the analysis explored the range of interpretations and symbolic possibilities they bring into the tweet while exploring how they are strategically used within the discourse. The discussion is organized around the emoji categories namely emoji faces, emoji hearts, emoji gestures and emoji objects.

(a) Emoji Faces

These are facial expressions that convey different emotions and reactions. Any pictograph resembling a mimicked face was categorized as an emoji face. All emoji faces listed in Table 4.7 share one characteristic: they represent negative emotions such as sadness, exhaustion, frustration, annoyance, aggression, and anger. Their prevalence suggests that the discourse or actions within it triggered negative emotional responses from tweeters. Notably, no emoji in this category expresses a positive emotion. The meanings of these emojis are shaped both by their resemblance to real facial expressions (Sergeant, 2019) and by the context in which they appear (Dainas & Herring, 2021; Gibson et al., 2018; Zappavigna & Logi, 2024).

In the dataset, emoji faces are used to express a range of emotional reactions from the tweeters as illustrated in examples 65 and 66.

Example 65: Rest easy rothers 🥲🥲 #JusticeForKianjokomaBrothers
#JusticeforEmmanuelandBenson

Example 66: *how evil are this police 😞no we won't forget*
#JusticeforEmmanuelandBenson #JusticeForKianjokomaBrothers

The loudly crying face emoji (😭) in example 65 is used to express the emotions of sadness and grief as the tweeter sends a message of condolences. In example 66, the frowning face emoji (😞) is used to express the tweeter's disappointment and dismay at the actions of the police actions hence aligning with the critical tone of the message.

Emojis are also used to enhance the intensity of the emotions expressed in the text as illustrated in example 67.

Example 67: *Postmortem results of the two Ndwiga brothers is out. The died from being clobbered by blunt objects that is commensurate from torture. R.I.P comrades. This is painful 😭 #JusticeforEmmanuelandBenson #JusticeForNdwigas*

The textual message in example 67 expresses the emotion of pain brought about by the tragic death of the two brothers using the phrase 'this is painful'. The use of the crying face emoji enhances the intensity of the emotion by indicating the act of crying which is because of the pain. This makes it clear the tweeter is deeply affected by what the victims went through.

Emoji faces are also used to substitute words, visually illustrating the feelings of the tweeter rather than using words to describe them as illustrated by example 68.

Example 68: (924) *I just feel 😞and emphathise for this woman. #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson #KianjokomaBrothers*

The emoji (😞) in example 68 is not only used to substitute the word 'sad' but also adds other nuances. Using the anxious face emoji connotes more than sadness as it expresses sadness coupled with anxiety and nervousness, showing the tweeter may be overwhelmed by the situation.

Besides conveying emotional reactions, emoji faces in the dataset also reflect the tweeter's attitude toward the message, adding depth and nuance to the textual content, as seen in example 69 and 70.

Example 69: (12) *EXTRA JUDICIAL killings is becoming rampant in this country. It is time for JUSTICE!* 😏 #JusticeForComradeEmmanuelAndBen #JusticeForKianjokomaBrothers

Example 70: (1155) @Karanjakibicho *Empowerment can not be realized through tyranny, intimidation, police brutality and extrajudicial killings of Kenyans* 😏😏!! #JusticeforEmmanuelandBenson

The smirking face emoji (😏), characterized by a sideways glance and half-smile, typically conveys smugness, amusement, or scepticism, making it an informal and somewhat playful expression. Its use in tweets addressing serious issues such as police brutality and extrajudicial killings introduces an unexpected twist, allowing for layered interpretation.

In example 69, the emoji may express the author's self-confidence and resolve in the pursuit of justice despite rampant killings. In example 70, it conveys mockery or sarcasm directed at a government official's (PS @Karanjakibicho) empowerment claims. Here, the emoji undermines the credibility of such pronouncements amidst ongoing brutality. The repetition of the emoji further emphasizes the tweeter's strong disapproval. In both instances, the emoji shifts how the tweet is perceived and interpreted, underscoring its evaluative and rhetorical function).

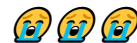
Emoji faces are also used to visually illustrate the action the emoji stands for. In this case, they act as a direct representation of the action visually represented as illustrated in example 71.

Example 71: 😭😭 #JusticeForKianjokomaBrothers #KianjokomaBrothers #JusticeforEmmanuelandBenson

The emoji in example 71 may indicate that the tweeter is literally crying while composing the tweet or, figuratively, crying out for justice for the victims. This visual expression of a cry for justice highlights the tweeter's emotional attachment to the cause.

In some tweets, emoji faces function as punctuation, indicate actions, or modify tone, as illustrated in example 72.

Example 72: (90) *We must all demand for Justice. To the @IG_NPS these young guys deserved a future , the parents were raising kings but your policeman*

 #JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson

In this tweet, the loudly crying face emoji replaces ellipsis dots to indicate an incomplete thought. Instead of explicitly stating what the policeman did, the tweeter uses emojis to convey that the act was too painful to verbalize. The repetition of the emoji suggests emotional overwhelm, implying that the tweeter is breaking down while composing the tweet. This visual cue highlights the severity of the act, especially when contrasted with the phrase ‘*were raising kings*’ which elevates the victims and frames the unnamed action as particularly heinous. The emoji also modifies the tone, intensifying the emotional weight of the message. These findings reinforce previous studies that identify emoji faces as primarily emotive markers (Jonsson, 2020; Li & Yang, 2018; Siever, 2020).

(b) Emoji Hearts

Three types of hearts appeared in the dataset, the broken heart emoji () , green heart () and red heart () . Based on the frequency count on table 4.7, the broken heart emoji is the most common in the corpus. The emoji is used as a metaphorical representation, directly illustrating the abstract concept of a heartbreak as illustrated in examples 73 and 74.

Example 73: (273) *Another day and a Family in Embu are mourning the death of their 2 sons who were arrested and found Dead...they deserve justice.....Pray for them and their families...* .

Example 74: (331) *Kabarak Students give a finall bow to the fallen Soldiers , Emmanuel and Benson. RIP brothers*    
#JusticeforEmmanuelandBenson #JusticeForKianjokomaBrothers 

In example 73 and 74, the broken heart emoji serves a dual function of expressing a reaction and for tone modification. In example 73, the emojis express the emotional pain that comes with a heart-breaking experience. They convey the tweeter’s emotional response towards the grieving family. They also modify the tone by strengthening the emotional weight of

the message. By adding multiple broken hearts, the tweeter conveys profound sorrow and grief creating a sombre tone in the tweet.

In example 74, the broken heart emojis show the tweeter's reaction about the deaths. Combined with the crying face emoji, the sequence collectively conveys a sense of mourning and loss. The emojis also modify the tone of the tweet by adding to the gravity and solemnity of the message, hence emphasizing on the sorrow expressed in the phrase 'RIP brothers.' The use of a visual representation carries a higher emotional intensity of sadness and emotional pain than the use of words, more so, because the visuals can be repeated to increase the intensity.

The red heart (❤️) and green heart (💚) are the only two emojis in the dataset that express positive emotions. They appear only thrice out of the 189 emoji instances, highlighting their rarity in a discourse dominated by grief, anger, and protest. Examples 75 and 76 show tweets that use the emojis.

Example 75: *Kwani how evil are this police 😞no we won't forget
#JusticeforEmmanuelandBenson #JusticeForKianjokomaBrothers ❤️.*

Example 76: *It's the motherly love expressed through pain. Through the emotions
I feel how deep its cutting 😞💔so sad.Pole sana wishing you healing and
strength in this hard time 💚No woman deserves this!! 🙏
#JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson*

The red heart (❤️), a widely recognized symbol of love and emotional intensity, is used in example 75 at the end of a tweet condemning police brutality. Its placement signals emotional solidarity with the victims, framing the protest as deeply personal and rooted in compassion. In this context, the heart becomes a tool of emotional resistance, humanizing the victims and reinforcing the protest's affective tone.

Similarly, the green heart (💚), though less common in emotional expression, carries meaning in protest discourse, as seen in example 76. Appearing alongside messages of

condolence and healing, specifically in the phrase “*wishing you healing and strength in this hard time* 🍀”, the green heart symbolizes empathy, renewal, and strength. Its association with growth and its alignment with the phrase ‘*motherly love expressed through pain*’ reinforces its nurturing connotations. Used in a tweet addressing gendered suffering (‘*No woman deserves this!!*’), it also serves as a subtle symbol of protest and resilience. Together, these two emojis function as emotive markers and rhetorical devices that project care and communal support, offering a softer but powerful layer to the protest discourse.

(c) Emoji Gestures

As shown in Table 4.7, the raised fist emoji (✊) is the most frequently used gesture in the dataset. A historic symbol of resistance against oppression, it signifies physical action and solidarity. In the corpus, it appears mostly at the end of tweets, either before or after hashtags, or in emoji-only tweets, as seen in examples 77 and 78.

Example 77: @DCI_Kenya #JusticeforEmmanuelandBenson

#JusticeForKianjokomaBrothers this is what we want to hear 🍀✊

Example 78: 🍀✊✊✊ #JusticeforEmmanuelandBenson

#JusticeForKianjokomaBrothers

In examples 77 and 78 the emoji is used to symbolize collective unity and defiance. Example 77 is a reply to the DCI and the author is dictating what the tweeters want to hear from the investigative body. The tweet ends with the raised fist as a sign of defiance. The emoji only tweet in example 78 implies the tweeter stands in solidarity with the victims of police brutality and those fighting for justice. The emoji appears more in the solidarity expressing category. The use of three raised fist emojis in assorted colour tones is a sign of diversity and inclusivity, communicating that people of all backgrounds can join the protest. The raised fist emoji creates identity for the discourse, placing the current hashtag activism against police brutality within the global justice movements around the world.

d) Emoji Objects

This category has emojis that represent concepts and objects they visually illustrate. Table 4.7 shows the corpus had objects such as 🕊 Dove of peace, 🔊 Loudspeaker, 🕯 Candle,

 camera and  Hundred points. The Objects emojis are a mix of both pictograms and ideograms. They communicate meaning through directly representing the concept or through cultural and symbolic associations as illustrated in examples 79, 80 and 81.

Example 79: #JusticeForKianjokomaBrothers  
#justiceforemmanuelandbenson  

Example 80: *We cannot forget you*   #JusticeForKianjokomaBrothers
#JusticeforEmmanuelandBenson

Example 81: *My heart breaks*     *No one...NO ONE. Deserves such pain*
May God be your pillar, fortress and peace.   *Rest easy Kianjokoma brothers.*
#JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson#Peace

The loudspeaker emoji in example 79 signifies announcing or broadcasting, suggesting the call for justice is a public message needing amplification. In the context of hashtag activism, it emphasizes the urgency of the issue and the need for immediate attention and action. The candle and dove emojis used in examples 80 and 81 have both a cultural and symbolic meaning. The dove is used as a symbol of peace while the candle is used to symbolize mourning, light and hope. During the mourning period, lit candles symbolize remembrance and foster an emotional connection with the deceased. In example 80, the candles symbolize remembrance reinforcing the message communicated in words. The dove emojis used in example 81 communicates a wish for peace to the deceased.

In this protest discourse, emojis primarily serve semantic and pragmatic functions. Semantically, they convey literal, metaphoric, symbolic, and cultural meanings shaped by the accompanying text, aligning with Na'aman et al. (2017) findings on emoji use in digital contexts. Pragmatically, the emojis reflected Herring and Dainas's (2017) taxonomy, performing functions such as expressing reactions, modifying tone, and indicating virtual actions. Notably, unlike Dainas and Herring's (2021) findings, the softening function was absent, suggesting a communication style that is assertive and unmoderated. This reflects the protest discourse's aim to deliver direct messages that highlight the gravity of the cause.

Grammatically, though minimal, emojis are used to substitute for words and punctuation. This corroborates findings by Dürscheid and Siever (2017) and Arafah and Hasyim (2019)

on the structural linguistic roles emojis fulfil. The findings further demonstrate that emojis provide paralinguistic cues that enrich the text through conveying attitude, expressing emotions and providing contextual clarity. This supports Tantawi and Rosson's (2019) conclusion that emojis serve a super paralinguistic role on Twitter, enhancing the expressiveness and clarity of the messages hence making the interactions more nuanced and effective.

4.7.4 Emoji Sequencing Patterns

In assessing the emoji sequencing in the tweets, instances where more than one emoji is used in a sequence were identified. The sequencing was then classified into two different sequential patterns, the repeated or reduplicated sequence and the mixed emoji sequence. The emojis were further classified using the emoji n-gram approach (McCulloch & Gawne, 2018). N-gram is a sequence of consecutive characters (lexical, numbers or symbols) in a text. The classification had bigram for two, trigram for three, quadrigram for four, pentagram for five and octagram for eight emojis. Table 4.8 gives a summary of the emoji sequencing patterns and the frequency of each.

Table 4.8

Emoji Sequential Patterns in the #JusticeForKianjokomaBrothers Dataset

Reduplicated Emoji Sequence			Mixed Emoji Sequence		
N-gram	Example	F	N-gram	Example	F
Bigrams (2)	 	24	Bigram (2)	 	5
Trigram (3)	  	5	Trigram (3)	  	4
Quadrigram (4)	   	9	Quadrigram (4)	   	2
Pentagram (5)	    	1	Pentagram (5)	    	1
Octagram (8)	       	1			

a) Reduplication Pattern

As shown in Table 4.8, reduplication is the most common emoji sequence pattern, accounting for 77 percent of all occurrences in the dataset. This is significantly higher than the 53 percent reported by McCulloch and Gawne (2018) in their corpus. This disparity likely stems from the differing corpora: their study drew from a large, mixed dataset collected via a keyboard app over four months, while the current study analysed a smaller, context-specific set of tweets gathered over two weeks. Despite this, both studies identify repetition as the dominant emoji sequence. In this corpus, reduplication involved 12 emoji types, most commonly in bigrams. Except for the loudly crying face, broken heart, and raised fist, the remaining nine emojis appear primarily in bigram form.

The emoji repeated the most is the loudly crying face (😭), used in 17 tweets and in five recurring sequences (two, three, four, five and eight emojis). The sequences of five and eight emojis (pentagram and octagram) are rare, so most studies limit their analysis up to a range of three, that is, bigrams, trigrams and quadrigrams (Cohn et al., 2019; McCulloch & Gawne, 2018). The existence of these unique sequencing patterns in the current corpus can be attributed to the emotional tone of the discourse. The repetition of eight emojis in a sequence could be an indicator of the tweeter's strong emphasis on the emotions communicated. This aligns with the idea that repetition of emojis serves an emphasis function, resembling how beat gestures function in spoken discourse (McCulloch & Gawne, 2018). Such a sequence amplifies the intended emotional message making it more pronounced. The broken heart (💔) was the next most reduplicated emoji manifesting as a bigram, trigram and quadrigram. The prevalence of the repetition pattern in the current corpus is consistent with other datasets where reduplication was the most frequent pattern of emoji sequencing (Cohn et al., 2019; McCulloch & Gawne, 2018).

The repetition of emojis is used to suggest the intensity of the emotions expressed as illustrated in example 82.

Example 82: *tunawazika leo* (We are burying them today). *R.I.P* 😭😭😭

#JusticeForKianjokomaBrothers #JusticeforEmmanuelandBenson

#justiceformuturaandnjiru

The loudly crying face emoji (😭) in example 82 expresses the sadness and grief felt by the tweeter during the burial day. Its repetition intensifies the emotional expression, with each additional emoji amplifying the depth of grief conveyed.

b) Mixed Emoji sequence

In the mixed emojis pattern, there are six different combinations of emojis with sequences of two, three, four and five emojis. The broken heart and crying face (💔😭) sequence is the most common emoji n-gram while the rest of the combinations are used only once. There is little consistency in emoji order, for instance, some tweets placed the crying face before the broken heart, while others reversed the sequence. This aligns with Cohn's et al. (2019) corpus which also exhibited linear sequences without a structured order.

There is also internal repetition within mixed emoji sequences, for example, the repeated broken heart in 😭💔💔💔. This partially aligns with McCulloch and Gawne's (2018) findings, who observed partial repetition in over half of heterogeneous trigrams and quadrigrams. However, unlike their study, repetition in the current dataset appears only in quadrigrams and pentagrams, not in trigrams.

The analysis of meaning in mixed emoji sequences considered the four n-gram patterns outlined in Table 4.8. Examples 83–86 illustrate these mixed emoji n-gram patterns.

Example 83: *REST IN POWER!! 🙏🖤 #JusticeForKianjokomaBrothers
#JusticeforEmmanuelandBenson*

Example 84: *Stand for your fellow Kenyans 💪 😭💔 Thanks for all whom ain't
keeping quite and silence... Demand for #JusticeForKianjokomaBrothers
#JusticeforEmmanuelandBenson*

Example 85: *Justice for the two boys 😞😞🙏. #JusticeForKianjokomaBrothers
#JusticeforEmmanuelandBenson*

Example 86: *Transferring INCOMPETENCE from one region to
another 😞😞😞😡😡!! It's frustrating being a patriot in Kenya 😞😞!!
#JusticeforEmmanuelandBenson #JusticeForKianjokomaBrothers*

At first glance, the dove and raised fist emojis in example 83 may appear contradictory. However, within context, the dove symbolizes peace for the deceased, while the raised fist represents solidarity in the fight for justice. Together, they merge the themes of peace and activism in the hashtag discourse, suggesting that remembrance and resistance can coexist. The emoji bigram conveys that justice can be pursued peacefully while still confronting injustice.

In example 84, the trigram begins with the flexed biceps emoji to signal strength in unity, followed by the weary face to express emotional exhaustion, and ends with the broken heart to convey sadness over the events. Together, these emojis communicate determination amid adversity by affirming solidarity and acknowledging the emotional toll of the justice struggle. Example 85 combines the pensive face to suggest introspection and regret, the pleading face to express an emotional appeal for justice, and the dove to symbolize a longing for peaceful resolution. These sequences blend strength, sorrow, and hope, all directed toward the pursuit of justice.

The pentagram in example 86 features emojis with negative valence. The rolling eyes emoji (🙄) expresses frustration and disbelief, while the angry face (😡) conveys intense anger. Together, they communicate a strong emotional response to the situation. The repetition intensifies these emotions, with the three rolling eyes possibly indicating a greater degree of disbelief than anger. The sequence may also suggest the tweeter's sense of helplessness in response to the described event

In the mixed emoji sequences, the tweeters seem to consciously sequence the emojis to convey a message that reinforces and complements the one communicated in words. While each emoji carries an individual meaning, the combination strengthens the overall meaning. Contrary to Herring and Dainas' (2017) assertion that emoji sequences typically convey a sequence of events rather than a composite message, the current corpus exhibited both. Some sequences reflected a progression of emotions (example 86), while others created a unified composite meaning (example 84).

The mixed emoji patterns in this discourse can be described as semantic lists (Cohn et al., 2019), as most sequences consist of semantically related emojis. This supports earlier findings that non-repetitive emoji sequences often cluster within the same semantic field (McCulloch & Gawne, 2018). However, not all sequences in the current study exhibit intrinsic semantic relations, for instance, examples 83 and 84 include emojis that appear unrelated. Thus, emoji sequences in the corpus function as contextual lists, where meaning is shaped by usage rather than inherent relation, reinforcing Grosz et al.'s (2023) claim that emojis lack fixed correspondences with specific meanings.

In addition to their semantic composition, the structure of these mixed emoji sequences was notably simple, aligning with Cohn et al.'s (2019) category of linear grammars. The sequences either repeated the same emoji or listed related emojis without a structured syntactic order. This structural simplicity supports Dürscheid and Siever's (2017) view that while emoji sequences enhance meaning in text, they do not constitute a grammar-bound language.

The absence of emoji rebus or calques, widely reported in other datasets (Cohn et al., 2019; Danesi, 2017; Seargeant, 2019; Siever, 2020; Zappavigna & Logi, 2024), communicates about the nature of the protest discourse. As Machin and Mayr (2023) argue, the omission of a semiotic convention can itself be meaningful, reflecting characteristics of the discourse. In this case, the lack of rebus suggests that tweeters avoid playful emoji constructions in serious, emotionally charged contexts. Given the gravity of police brutality and the urgency of the call to action, such sequences may be deemed inappropriate. This implies that emoji rebus is more suited to light-hearted or humorous communication rather than discourses centred on human suffering and justice.

The analysis of emoji meaning potentials reveals that their interpretations are shaped by context, co-text, and the inherent semantic content of the emoji. While meanings are open-ended, they are bound by the situational and textual environment. In some cases, interpretation required an eclectic range of knowledge (socio-cultural, religious, or gestural), as noted by Seargeant (2019). Face, gesture, and object emojis often reflect a hybrid of iconic, indexical, or symbolic meanings influenced by their accompanying text.

Facial emojis function as paralanguage (Zappavigna & Logi, 2024), modifying tone, expressing emotion, or signalling virtual actions. Overall, emojis emerge as a distinct element of online language (Dainas & Herring, 2021), functioning as text-based visuals that convey complex pragmatic meaning.

4.8 Summary of the Chapter

This chapter has provided a detailed examination of semiotic resources within the textual part of the tweet. The classification of the resources ensured each aspect of the tweet's textual content was examined and created an inventory of all the semiotic repertoires used in the tweet text. By describing the usage patterns and analysing the meaning potentials of the orthographic, lexical, interactive and emoji resources, the chapter has demonstrated the diverse ways these resources contributed to the communicative goals of the KOT in the protest discourse. The findings underscore the collective role of the resources in shaping the interpretations of the tweet text. The analysis of each resource revealed the explicit and implicit meanings and potential impacts embedded in anti-police brutality protest discourse. Having examined the resources on the text part of the tweet, the next chapter examines the resources used in the media part of the tweet.

CHAPTER FIVE

DESCRIPTION, USAGE PATTERNS AND MEANING POTENTIALS OF VISUAL RESOURCES

5.1 Introduction

In the previous chapter, the semiotic resources used in textual component of the tweet were analysed. This chapter focuses on the second objective of the study that examines the meaning potentials communicated by the visual resources in the media part of the activism tweets. The chapter opens with a categorization of the resources and a summary on the general usage patterns of visuals in the corpus. The discussion then transitions to a description of the resources and their meaning potentials starting with the images which include photographs, edited photographs, screen captures, illustrations, drawings, memes, digital posters and text-based images. Thereafter the dynamic visuals which include videos and GIFs are discussed. The chapter aims to create a mapping of the visuals utilized in the dataset while uncovering the various meaning potentials they hold within the context of police brutality discourses on Twitter.

5.2 Usage Patterns of the Visuals

The media part of the tweet allows for the use of visual content that includes static images, videos and GIFs. Twitter permits a user to attach visual items in the form of up to four static images (any visual in an electronic image file format such as PNG or JPG), one video (not longer than 2 minutes and 20 seconds) or one GIF per tweet. Before analysing the visual formats identified, it is important to understand how the different forms were used across the corpus. Table 5.1 provides a summary of the visual resources found in the corpus and their frequencies.

Table 5.1

Summary of Visual Resources in the #JusticeForKianjokomaBrothers Dataset

Visual Type	Visual Format	No. of tweets	No. of Shares
Static Visuals	Images	459	511
	• Direct Photographs		
	• Edited Photographs		
	• Screen captures		
	• Illustrations		
	• Digital Posters		
	• Memes		
	• Drawings		
	• Text-based Images		
Dynamic Visuals	Videos	35	35
	• Event Videos		
	• Artistic Expression videos		
	• Memorial/Tribute videos		
	• Personal Testimonial videos		
	• Meme videos		
	GIFs	2	2
	• Reaction GIF		

Table 5.1 shows that in the corpus of 496 tweets, two tweets had GIFs, 35 had videos and 459 had images attached. This translates to the use of static images in 92.5 percent of the tweets, making them the most dominant type of visual in the corpus. The finding shows that KOT preferred the use of images compared to the use of videos and GIFs in this hashtag activism.

In the category of tweets that made use of images, there were a total of 511 image shares in the entire dataset. The corpus had 32 tweets with four images, 15 tweets with three

images, 26 tweets with two images while the remaining 386 tweets made use of only one image. This means that only 7 percent of the tweets made use of four images, the maximum afforded by the platform, while about 84 percent of the tweets were composed using only one media item. This demonstrates that KOT largely underutilized the affordance of attaching more images on the tweets. The findings could be an indicator that despite Twitter allowing the use of up to four images, most users preferred to keep their tweets concise by using only one image.

The visuals were broadly categorized into static and dynamic visuals based on their characteristics. The visual formats under static visuals include direct photographs, edited photographs, screenshots, illustrations, memes, digital posters, drawings and text-based images. Categories of videos include event videos, artistic expression videos, tribute videos, personal testimonial videos and meme videos. This classification allowed the study to systematically analyse how the different image types contribute to the protest messages. The subsequent sections focus on the description and analysis of meaning potentials of each specific visual format.

5.3 Direct Photographs

These are images presented exactly as they were captured by the camera to faithfully represent the subjects with no visible manipulations. In an era of digital photography, sometimes it is difficult to tell photographs that have undergone some form of digital editing. Consequently, the criteria of photographs that have a high degree of verisimilitude and the realism claimed by the photograph was used to assign them to this category. If there were any manipulations or enhancements, then they were very minimal hence no drastic alterations to the reality depicted by the picture. These photographs represented records of reality about people, places, objects, actions and events.

5.3.1 Direct Photograph Categorization

For ease of analysis, the photographs were categorized into photographs of people, photographs of objects and others. Table 5.2 gives a summary of the categories and their frequency in the dataset.

Table 5.2*Categories of Direct Photographs in the #JusticeForKianjokomaBrothers Dataset*

Categories	Specific representations	No. of shares
People	Victims' Photographs (VP) - Seven different photographs of the brothers together taken on different occasions.	123
	Mother's photographs (MP) - Four different photographs of the victims' mother taken on two different occasions.	83
	Other people such as demonstrators, police, past victims of extrajudicial killings, mourners, politicians, and the president.	43
	Total shares of photographs in the people's category	249
Objects	Candles, flowers, hearses, coffins, t-shirts, cartridges, buildings, memorial portrait, burning trye, police tape	91
Others	The grim reaper, the statue of emptiness and the police tape	3
Total occurrences of photographs shared in the data		343

As shown in Table 5.2, the corpus contained a total of 343 direct photograph shares, accounting for 67 percent of all image shares. This makes photographs the dominant image type in the dataset. This finding aligns with previous research on Twitter datasets (Marchal et al., 2021; Thelwall et al., 2016; Yoon & Chung, 2016), which also identify photographs as the most shared image format on the platform.

As the most shared image format on the platform, direct photographs dominate this dataset. Within this category, photographs of people appear nearly three times more than those of objects, a trend also observed by Thelwall et al. (2016), where over half of the photographs featured people. This suggests a general preference for human-centred imagery on Twitter. In the current study, it also reflects the human-focused theme of the corpus, with the images depicting the brothers, their mother, college mates, police, demonstrators, mourners, and other victims of extrajudicial killings.

The photographs of the victims are shared more than any other type of photograph. The high frequency of these photographs corroborates observations by Cupit et al. (2021) that SNSs offer an opportunity for visual manifestation of grief through the publication of the deceased photographs. There are seven different photographs of the brothers during their happy times. The photographs seem to have been selected based on a strong preference for those that are representative of the deceased personalities and make an important statement about the bond between them. Incorporating photographs taken at different times helped to represent different aspects of their lives. Among the victims' photographs, one specific photograph was shared 87 times contributing to about 71 percent of all the personal photographs of the brothers. The same photograph was widely used in mainstream media when reporting about the case. This suggests cross-media networking and convergence of offline and online media contexts.

Object photographs depict items associated with funerals and demonstrations, including coffins, hearses, flowers, memorial portraits, T-shirts, candles, burning tyres, and cartridges. Among these, images of the two coffins placed side by side are the most frequently shared, appearing 60 times, followed by photographs of the two hearses shared 16 times. The remaining objects appear only once or twice. This suggests that the coffins' photographs are the most symbolically significant objects in the discourse, explaining their prominence in the tweets.

The photographs depict various locations that represent key events in the protest discourse, including the police station, the family home (as both residence and burial site), the streets, and the university hall. The home appears most frequently, with all photographs of the victims and four out of five of the mother's taken there. The streets are shown during demonstrations and the funeral procession, while the university hall is featured during a candlelight vigil organized by students in honour of their late colleague. The events captured include the vigil, demonstrations, and burial ceremony. The prominence of the home in these images highlights its symbolic and emotional significance as the central setting.

The findings on the types of direct photographs used corroborates the results from Gibbs et al. (2015) who indicate that old photographs of the deceased and funeral images dominate the type of photographs associated with death shared on Instagram. The similarity can be attributed to the theme of death and funeral shared by both studies. This shows that despite differences in the purpose of communication, or the platform used (Gibbs et al. used Instagram), the same types of direct photographs are shared when it comes to the topic of death. These findings also point to the cross-platform relationship on social media platforms.

Photographs placed under the category of others are those that could not be traced to any actual person, event or place. The Google reverse image search traced their sources to different websites on the internet. This means they are pre-existing photographs that had been re-contextualized within the tweets. There are three of such photographs in the dataset: the grim reaper, the emptiness statue and the police tape.

5.3.2 Meaning Potentials of Direct Photographs

Based on the social semiotic perspective, photographs are semiotic texts consisting of multiple meaning-making resources (Boeriis, 2024). To analyse their meaning potentials, an iconographic analysis of the photographs was done based on the important visual cues that shape how images are interpreted. The MCDA toolkit complemented with Kress and van Leeuwen's (2008, 2021) visual grammar and Ledin and Machin's (2018) toolkit for visual analysis were used. The visual cues examined include gaze, pose, settings, participants, objects, colour and action processes represented in the images. The discussion is organized around the different categories of photographs described in Table 5.2.

a) Victims' Photographs

The descriptive mapping of photographs identifies seven different photographs of the brothers as illustrated in Figure 5.1.

Figure 5.1

Victims' Photographs



Photographs VP1-VP7 were captured at different times during the lives of the deceased. The analysis of the visual cues helps unravel the values and ideas that the photographs potentially communicate. The first important visual cue that potentially influences the kind of engagement the viewer has with the participants in a photograph is gaze. The type of gaze can help to implicitly evaluate the participants in the photograph (Kress & van

Leeuwen, 2021; Ledin & Machin, 2018a; Machin & Mayr, 2023). In six of the victims' photographs, the brothers are looking at the viewers directly. This type of gaze creates a demand image (Kress & van Leeuwen, 2021) which builds a symbolic visual contact between the participants in the photograph and the viewer (Peng, 2017). The demand gaze communicates a sense of the brothers 'demanding' for something from the viewers. In the context of them being victims of police brutality, this may be interpreted as a demand on the viewer to fight for their justice. In protests with a rallying call for justice, the use of photographs with a demand gaze from the victims can seek to connect the viewers with the participants. Even for viewers who did not personally know the victims, the gaze can create an imaginary visual contact that enhances an emotional-relational bond with the deceased. Such a representation of demand can potentially make the tweeters feel obliged to join in the fight for justice.

The way the participants are presented in the photographs conveys significant meaning. All seven photographs depict the brothers together, highlighting their close bond. This connection is further emphasized through homogenization in their dressing. In VP1, they are both dressed in long black hooded jackets and shoes of a similar colour and make. This shared appearance suggests not only their familial relationship but also a deep friendship. Their youthful physique and style of dressing reinforces their identity as young men, symbolizing innocence and vulnerability.

This depiction of their bond, juxtaposed with the tragedy of their simultaneous deaths due to police brutality, amplifies the emotional impact on viewers. It underscores the idea of an untimely death and a stolen future, evoking sympathy and fuelling public outrage. Such emotions can encourage more people to participate in the activism. Furthermore, portraying the brothers as innocent and defenceless highlights the disproportionate use of force by the police. This representation strengthens the legitimacy of the protests and reinforces the demand for justice.

Their poses and facial expressions also potentially communicate aspects of their identity. Machin and Mayr (2012, 2023) point out that poses can connote discourses that express ideas, identities and other broader values. In VP1-VP6, the brothers are standing side by side while in VP7 they are seated on the same couch, each with a dog. Their poses closely

mirror each other, further homogenizing them. In VP1, they are both pocketing, a pose which carries a sense of ease and casualness making them appear relaxed. The brothers also convey playfulness through poses such as a side glance in VP2 and sticking the tongue out with a smile in VP4. Their smiles in all the photographs communicate warmth, approachability and positivity towards life. The poses and facial expressions show the brothers as relaxed, approachable, energetic, fun-filled, playful and happy individuals. The victim's demeanour and the knowledge about their tragic death can intensify the reader's empathy, ultimately mobilizing support for the protests.

The setting, which indicates where the photographs were taken, can influence the interpretations drawn from that photograph. Settings connote ideas based on social norms and cultural constructions related to the spaces portrayed (Machin & Mayr, 2023). The objects seen in the photographs can give an indication of the setting. In four of the photographs, objects such as a clothesline, trees and bananas can be seen in the background. This points to a setting within their home compound while the remaining two photographs are inside the house. The home setting provides insights into their personality and lifestyle. It paints a picture of responsible young men who had strong family ties and prioritized spending time at home. Consequently, the setting visually reinforces the idea that the lives of these responsible young men, were unjustly cut short by police.

The visual cues in the photographs of the deceased connote values, aspects of identity and other broader ideas which are either implicitly or explicitly expressed in the tweet texts. The photographs visually reinforce the identity of young individuals who had a whole life ahead of them. These connotations, juxtaposed with their tragic deaths, reinforce their identity as victims of police brutality. Such visual representations can potentially trigger emotions of sympathy, empathy and anger from the tweeters. These emotions may lead to public outrage which can help boost tweet diffusion (Casas & Williams, 2019), helping in online mobilization hence enabling the hashtag to achieve its goal.

Considering these photographs were taken when the brothers were alive, they seem to have been chosen to propagate ideas and values that aligned with the hashtag. This is in line with Ledin and Machin (2018a) argument that photojournalism involves conscious choices to select one photograph over another. Online hashtag activism can be considered a form of

citizen journalism (Bosch & Mutsvairo, 2017), hence the use of photographs in such campaigns is part of photojournalism. The frequent sharing of the brothers' photographs can be interpreted as a public display of mourning, making the cry for justice a communal affair. It propagates a deep sense of the injustice committed by the police actions, justifying the call to action.

b) Mother's Photographs

The other person represented in the photographs is the victims' mother. From the descriptive mapping, the dataset has four different photographs of the mother (MP1-MP4) as illustrated in Figure 5.2.

Figure 5.2

Mother's Photographs



The photographs of the victims' mother depict the emotional aftermath of the police brutality incident, powerfully conveying the human cost of such violence. The choice to feature the mother, rather than the father or any other family members, is ideologically significant as it serves to heighten the emotional impact on the audience. This aligns with the observation that women, children, and the elderly tend to evoke greater sympathy in visual discourse (Ledin & Machin, 2018a; Machin & Mayr, 2023). A closer analysis of the visual cues reveals the layered meanings communicated through these images.

In terms of setting, three of the photographs (MP2-MP4) were captured during the burial day while MP1 was captured outside the police station on the day she received news about the death of her sons. In the photographs, there were groups of people around her, but the mother is individualized. "Individualization is realized...where one person is made salient in an image and other people being out of focus" (Ledin & Machin, 2018a, p. 70). This draws the viewer closer to the individualized person encouraging them to identify with her experiences. It also communicates the depth of the pain she is feeling, highlighting the fact that despite the presence of people around her, they could not ease her pain.

The type of setting on the mother's pictures is also impactful. The two occasions when the photographs were taken relate to a time of heightened emotional pain for people close to the victims. Consequently, photographs taken on such days capture the raw emotions that express the pain and hurt the mother is feeling. Such images have the potential to elicit empathy and anger, encouraging the viewers to actively support the call for justice.

The mother's photographs capture her in different poses that communicate the intensity of her pain. Based on Ledin and Machin's (2018a) assertion that emotional and mental processes are indexed by poses and facial expressions, the analysis examines the emotional and mental states communicated by the poses. In MP1, she is lying on the ground with her mouth open while in MP3 she is lying flat on the ground face down with outstretched hands. These postures evoke a sense of vulnerability, anguish and despair. The outstretched hands may symbolize submission, helplessness and surrender. The photographs portray someone who appears to be physically and emotionally defeated due to the profound sorrow and grief she is experiencing. The postures further convey a message of powerlessness in the face of her sons' deaths.

In MP2 and MP4, the mother is shown with her hands crossed over her chest as she tightly clutches her jacket, a posture that can signal a defensive attempt to protect herself from emotional or physical pain. Such a gesture reflects how people often cling to something when in distress, suggesting an instinctive act of shielding vulnerability. This posture may also indicate anxiety or insecurity, functioning as a form of self-soothing that provides a sense of security in emotionally challenging situations. Additionally, the crossed arms may reflect an effort to maintain composure or self-control amid overwhelming emotion. Collectively, these visual cues portray a mother overwhelmed by extreme pain, suffering, heartbreak, and devastation over the loss of her sons. They emphasize the deeply personal toll of police brutality. These interpretations are consistent with Ledin and Machin's (2018a) assertion that emotional processes are often indexed through body poses.

The type of gaze in the mother's photographs also communicates. In all the photographs she faces off frame with her eyes closed, which means no connection is created between her and the viewer. This makes such photographs offer images (Kress & van Leeuwen, 2021). The lack of a direct gaze "offers the represented participants to viewers as items of information, objects of contemplation, impersonally, as though they were specimens in a display case" (Kress & van Leeuwen, 2021, p. 118). With no direct gaze, the mother's photographs present her as an offer image and the viewers are invited to get information from the images. The information viewers can infer is that of a mourning mother in intense pain.

In offer images, interpretation is also made based on the direction the person is facing (Kress & van Leeuwen, 2021; Ledin & Machin, 2018a; Machin & Mayr, 2023). In MP2, the mother is facing sideways with her head lifted upwards. Looking off frame invites the viewer to imagine what the person is thinking about (Machin & Mayr, 2012, 2023). In this case, the mother could be thinking about the helpless situation she is in. Her upward look may be interpreted as seeking divine intervention during this distressing time. This is contrary to the suggestion that an upwards off frame look suggests positive thoughts (Ledin & Machin, 2018a; Machin & Mayr, 2012). This contradiction highlights the importance of context in the interpretation of visual cues such as gaze.

Closing of eyes further indexes emotional processes. In all her photographs, the mother is presented with closed eyes, which can be an indicator of the state of her emotions. In times of profound sadness, closing one's eyes can be a manifestation of feeling overwhelmed by the intensity of the emotions. It becomes a natural response to seek emotional relief by shutting out the external world. It can also index a subconscious coping mechanism to manage the flood of emotions. The closing of eyes allows the individual to have a moment of solace amidst the turmoil of emotions. This act reinforces expression of the overwhelming emotions she is experiencing.

All the visual cues in the mother's photographs portray a mourning woman who is emotionally and physically overwhelmed by the loss of her sons. These images reveal the real-life suffering endured by families affected by acts of police brutality. The absence of eye contact (offer image) prompts viewers to reflect on the emotional trauma and devastation brought about by such violence. In addition, the images convey an affective atmosphere that serves as a powerful visual reminder of the urgent need for redress and the pursuit of justice. Ultimately, they communicate the broader idea of the human cost of police brutality, encouraging tweeters to rally support for justice through the hashtag.

c) Events Photographs

Other photographs shared in the tweets represent the funeral, demonstrations and candle lighting events. The burial ceremony is the one captured the most underscoring its importance in this protest discourse. The photographs focus on the funeral rituals and funeral material elements such as coffins, hearses, memorial portrait, T-shirts with the deceased pictures, funeral programme and the grave as illustrated in Figure 5.3.

Figure 5.3

Funeral Photographs



The photographs in Figure 5.3 capture a range of materials and rituals that serve as symbolic representations of death while conveying a deep sense of mourning and solemnity. Elements such as the coffins (representing the physical vessels that held the bodies) and the hearse (symbolizing the final journey to the burial site) underscore the gravity of the situation. Particularly striking is the image of the two coffins placed side by side, which powerfully communicates the profound loss experienced by the bereaved family and the community at large. These images function as visual reminders of the brutality that led to the brothers' deaths and the depth of injustice suffered, evoking sadness, empathy, and collective anger towards the perpetrators. These emotions can in turn help to legitimize the protests.

In addition to mourning, the photographs also foreground public support and communal solidarity with the family. The presence of funeral processions, complete with convoys of vehicles and motorcycle riders, as well as mourners dressed in t-shirts bearing the brothers' images, illustrate the widespread outrage and emotional investment in the case. The visible crowds not only signify the magnitude of loss but also embody a collective call for justice. These images convey the affective intensity of the event and invite those who were not physically present to bear witness to the victims' final journey.

The re-sharing of funeral images on social media further extend the space of mourning into the digital realm, enabling a sense of remote presence for those affiliated with the hashtag movement. For members of the KOT community who were unable to attend the funeral, engaging with these images becomes a form of emotional and symbolic participation. Through this digital engagement, the funeral photographs become part of an ongoing online conversation serving as a means of reinforcing communal ties and sustaining protest momentum.

Taken together, these photographs do more than document grief; they contribute to a broader ideological framing of the deaths. Beyond their immediate emotional and symbolic functions, the funeral photographs construct a counter-narrative that frames the deceased as victims of structural violence and the state as a complicit or morally compromised actor. By centring visual symbols of mourning, such as coffins, hearses, and large crowds, the images offer a critique of state-sanctioned brutality and simultaneously legitimize public dissent. The visual documentation of solidarity, seen in coordinated mourning rituals and attire, promotes an ideology of collective identity and resistance in which the deaths of a few reflect broader systemic injustices. Furthermore, the online circulation of these images allows for emotional alignment across time and space, creating an inclusive and participatory protest community. Thus, the funeral images not only express loss and remembrance but also advance ideological stances around power, citizenship, and the right to justice within the discourse of digital protest.

d) Object Photographs

The most widely shared object photograph was that of lit candle(s). In images from the candlelight vigil, the candles served as the focal point, while other tweeters shared isolated photographs of lit candles. Figure 5.4 illustrates two of the photographs.

Figure 5.4

Object Photographs



Frame A of Figure 5.4 is an isolated candle image while frame B shows candles captured during the candle lighting vigil. In some cultures, lit candles are associated with remembrance and honouring the memory of the deceased. Use of lit candles is also a sacred ritual that is part of the Christian culture meant to pay tribute to the deceased and can be traced back to ancient pagan rites (Marsden-Ille, 2023). In the recent past, candle lighting vigils have been incorporated as part of the memorial activities for deceased persons in Kenya. Denotatively, light illuminates everything and dispels darkness hence the lit candles can symbolize a peaceful and calming atmosphere amidst grief.

In the context of the hashtag activism, the photographs of candles may serve as a symbolic representation of remembrance and paying tribute to the victims of police brutality. Candles can also serve as a symbol of light in the dark alley of the heartbreaking event. They may signify a glimmer of hope that justice will eventually be served. In this activism context, the use of candles combines the religious ritual of candle lighting with a form of protest to symbolize remembrance, hope and resilience.

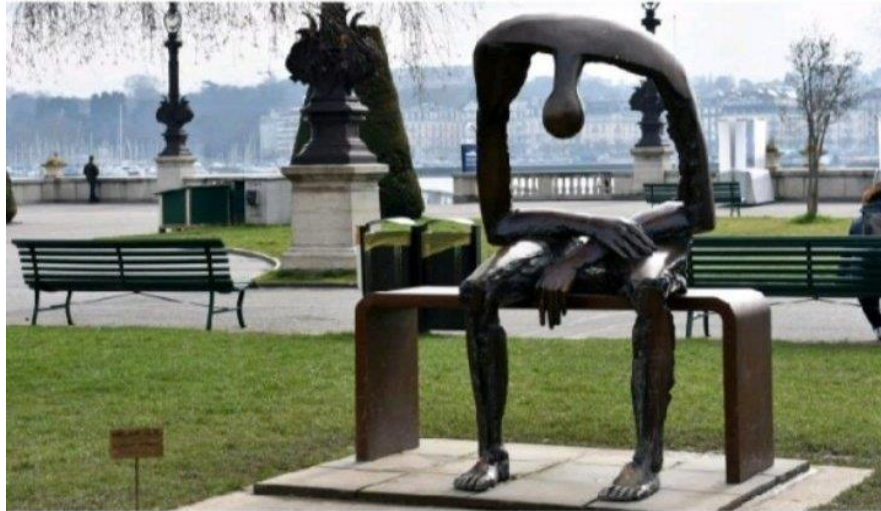
e) Internet Photographs

Tweeters used stock photographs from the internet to symbolically express their feelings and views about police brutality. The photograph of a statue commonly referred to as the

Melancholy of Departure or Sculpture of Emptiness by Albert Gyorgy illustrated in Figure 5.5 is used.

Figure 5.5

Melancholy of Departure Image



The *Melancholy of Departure sculpture* is a visual representation of complex emotional states. The curved artwork depicts a slumped figure sitting on a park bench with its arms crossed on the thighs, the head hanging low and a hollow cavity in the middle of the figure's torso. Created by Albert Gyorgy to express his grief following the death of his wife, the sculpture's visual elements convey a wide range of emotional expressions. The slumped posture and lowered head are commonly associated with despair, exhaustion, introspection, and profound grief.

In the context of police brutality, the sculpture may symbolize the sadness experienced by the family after the deaths of the two brothers. It can also reflect the mental exhaustion and deep contemplation that follow such tragedies. The hollow void in the figure's body can represent the emptiness and sense of loss felt by the victims loved ones. The park setting adds to the figure's sense of isolation and loneliness, further intensifying the emotional weight of the image. This visual evokes feelings of sadness, longing, and emptiness that align with the experience of grief. Interpreted through the lens of police brutality, the

sculpture captures the emotional burden carried by the victims' families and may evoke empathy and anger in the audience. These emotional responses can foster solidarity and help mobilize support for the pursuit of justice.

Another stock photograph is that of the grim reaper illustrated in Figure 5.6.

Figure 5.6

Grim Reaper Image



The grim reaper is an image of a skeletal figure standing in a dark setting with a hooded robe (face not visible) and both hands clutching a long-curved scythe. The tool symbolizes the harvesting of human souls (McKenna, 2016), making the image to be associated with death. Using the image in police brutality discourses suggests the tweeter perceives the existence of agents of death. This connotes that when police kill innocent citizens, they act as agents of death.

The grim reaper symbolizes authority and control over life and death. This connotes that the police create fear and apprehension in civilians. It can also metaphorically symbolize the power dynamics between police and civilians. Consequently, likening the police to a grim reaper emphasizes the disproportionate power the police wield, highlighting the potential for abuse. Equating police to a grim reaper serves to emphasize the act of police

brutality by implying they are perpetrators of death instead of protecting lives. The comparison brings out the perception civilians have towards the police.

The photographs shared on the tweets serve as representations of realities, helping to identify the victims and show the effects of the brutality act. They are carefully selected to represent realities that support the goal of the hashtag activism. The photographs demonstrate the power of visuals to enhance emotional and interactive aspects of activists' movements (Bosch & Mutsvairo, 2017).

5.4 Edited Photographs

This category represents direct photographs that have been edited or altered by use of software. The computer and smartphone technology has transformed the world of digital art and photography through the many softwares which can transmute photographs. The technologies have built-in image edits that can adjust the saturation, exposure and contrast of images, do cropping, change backgrounds, create collages, alter the colour tones, blur and other diverse forms of art filters.

5.4.1 Categories of Edits

In the data, there are photographs that have clearly undergone some editing or modification. The modified photographs were organized based on the kind of filter or edit applied. Table 5.3 gives a summary of the types of filters, a brief description on what the editing entails and the frequency of the photographs in the dataset

Table 5.3*Types of Edits used in the #JusticeForKianjokomaBrothers Dataset*

Type of Filter	Brief description	Frequency
Cloud filter	The background of the photograph is changed to replicate textures and shapes of clouds.	53
Artistic filters	A technique that transforms photos into various art styles to give it a drawn or painted appearance.	49
Text overlay	The adding of texts, captions and watermarks to images. Texts superimposed on edited photographs.	15
Cropping	Removal of unwanted parts of an image or changing its aspect ratio.	12
Colour tones	Converting the photographs into black and white and use of sepia effect.	5
Collage	Juxtaposing different photographs to showcase a distinct photographic composition.	5
Blurring	Selectively making some parts of an image less visible to control the focus of the viewer.	1

A total of 140 edited images were shared, accounting for 22.9 percent of all image shares. These images appeared multiple times across different tweets. Apart from blurring and collage creation, all other types of filters were exclusively applied to photographs of the victims. Among the edited images, those modified using cloud filters appeared most frequently, followed closely by those with artistic filters. Drawing from Wong's (2019) argument that image edits which transmute photographs function as semiotic resources, the frequent application of such filters to the victims' photographs suggests that these modifications convey an added layer of meaning.

5.4.2 Meaning Potentials of Edited Photographs

The meaning potential of visuals is influenced by the type of digital photographic manipulation or editing applied to an image (Boeriis, 2024). Each type of edit introduces

an additional layer of meaning that extends beyond the message conveyed by the original photograph. This section examines the meaning potentials instantiated through the specific edits applied, as well as the meanings connoted by the tweeters' use of such altered photographs. The iconographic analysis draws on the social representations associated with each type of edit and considers other visual cues present in the images.

a) Cloud Filters

One of the victims' photographs (VP1) was edited using the cloud filter as illustrated in Figure 5.7.

Figure 5.7

Cloud Filter



In Figure 5.7, the background of the photograph was changed to replicate textures and shapes of clouds. The participants in the picture are surrounded by dark stormy like clouds that create a dark moody tone and their legs hidden in the clouds. Clouds can symbolize contradictory representations. From the secular perspective, they serve as an image of destruction while in the religious perspective they represent the divine mystery and protection (Basker, 2006).

When a photograph with the cloud filter is used in memorialization messages, the clouds may symbolize several things from the divine perspective. Firstly, they symbolize being cut off from the world and transition to a higher realm. Secondly, the clouds connote the entrance of deceased persons into a divine space adding a sense of spirituality to the

memorialization process. Thirdly, they add a layer of ethereal beauty to the photograph. Lastly, the filter adds solemnity to the photograph, serving as a tribute to the lives lost. All these meanings aid in the memorialization process. Based on the secular perspective, stormy clouds can also symbolize lack of clarity about something (Basker, 2006). The sense of heaviness (rain about to fall) and darkness often associated with stormy clouds may symbolize destruction and emotional turmoil.

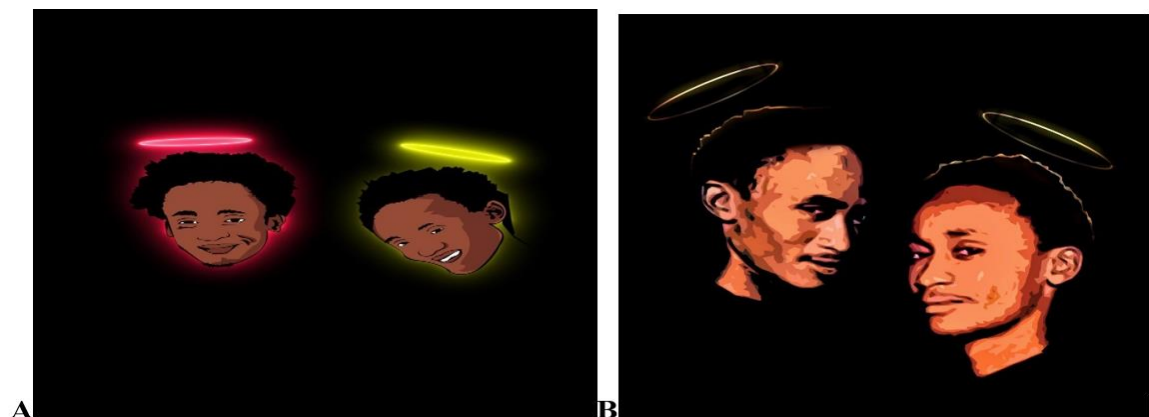
Editing the deceased photograph with a cloudy background may serve as a visual metaphor for the many unanswered questions surrounding the deaths. The modified photograph could imply the victims' demise is shrouded in uncertainties and the pursuit of justice faces challenges. The grey tones and swirling shapes of storm clouds can evoke feelings of grief and sadness in the viewers. These meaning potentials demonstrate that the cloud imagery in contemporary digital visuals can serve parallel symbolic functions depending on the sender's communication goal. In addition to Basker's (2006) religious and secular functions, the findings also illustrate the emotional arousing function of cloud symbolism.

a) Artistic Filters

This edit transformed the photographs using art style giving them a drawn or painted appearance. Two of the victim's photographs were transformed to look like drawings and a bright circular crown glow light placed around the heads of the subjects as shown in Figure 5.8.

Figure 5.8

Nimbus Artistic Filter



The crown radiating light used in the edited photographs in Figure 5.8 is referred to as the nimbus or halo in art. It is an ancient symbol of royalty used in Christian art (Cvetković, 2002) to figuratively represent kingship, power, divinity and sanctity of the figure (Redazione, 2019). When used in a sacred piece of art, it indicates the divine nature of the character depicted. In the activism context, photographs modified with the nimbus art may symbolize the innocence of the victims showing the spiritual protection and guidance they are receiving. Since the art is used to depict spiritual beings, applying the effect to the victims' photograph emphasizes the presence of a higher power conveying a message of hope and belief that justice will prevail.

The nimbus effect also serves to elevate the victims to a revered or saintlike status. According to Christian iconography (Redazione, 2019), the symbol represents sanctity. Consequently, visually presenting the victims with the symbol suggests a sense of honour and reverence on them after death. This encourages viewers to regard them as having been elevated to a righteous position, exonerating them from any wrongdoing. The connotation helps counter the police and government officials' narrative that presents them as wrong doers. This view amplifies a sense empathy and compassion for the victims which in turn helps to mobilize support for the hashtag.

The artistic filter also enhances the visual appeal of the photographs. The touch of artistic flair creates an aesthetically captivating visual representation. Such aesthetic enhancement defamiliarizes the photograph (Peng, 2017), making it appear like a new photograph to the viewers. This can help capture the attention of the viewers leading to more engagements with the message of justice and remembrance of the victims of police brutality.

The dark background in the photographs also carries a meaning potential. In iconography of death, a dark background can be an indicator of a stuck soul or a lower vibration soul. There are cultural beliefs that souls can get stuck when they have unfinished business on earth. For instance, in cases where someone's death is considered unnatural, that is, caused by another human being then the soul can get restless. Such souls are unable to move into the next part of their journey hence the low energy. The dark background potentially suggests that the brothers' souls are stuck because justice has not been served. Representing

the victims as stuck souls can help mobilize people to fight for their justice, for them to attain eternal peace.

b) Collage

The dataset has edits where different photographs are combined to form one composite image. The collage as a semiotic resource relies on an implicit comparison triggered by the visual arrangement (Wong, 2019). The collages are mainly created using burial photographs as illustrated in Figure 5.9.

Figure 5.9

Photographic Collages



The collage in frame A has a combination of three photographs and a caption. It combined a photograph of the two open hearses with the coffins visible and two of the mother's photographs (MP2 and MP3). The first photograph conveys the reality of the death of the two brothers while the two photographs of the grieving mother convey the overwhelming and unbearable depth of her grief. The text underscores the unjust nature of the deaths by emphasizing that no one deserves such pain. Based on the visual arrangement, the collage conveys the intense personal suffering of a mother caused by the deaths of her sons. It

creates an emotionally impactful image that can draw the viewer into the personal grief of the mother.

In frame B, the collage consists of two images. The top image shows coffins loaded in a hearse, symbolizing the deceased brothers, while the bottom image is a portrait of the brothers. The portrait humanizes the victims, reminding viewers that they were individuals with an identity. It highlights their youthful appearance, emphasizing the tragic loss of young lives. The hashtag #JusticeForEmbuBrothers serves as a call to action, encouraging viewers to support the fight for justice.

The juxtaposition of the coffins with the brothers' portrait contrasts life before and after their encounter with police, underscoring the devastating outcomes of such actions. This visual arrangement narrates the transition from life to death, illustrating the irreversible consequences of police brutality. The collage conveys the harsh reality of police brutality, evoking an emotional response in viewers that moves from empathy to anger. As Aiello (2012) asserts, placing two or more images side by side can generate new meanings or effects for the audience. In this case, the collages evoke emotions that not only emphasize the tragedy but also inspire viewers to join the demand for justice, further mobilizing support for the cause.

c) Cropping

This edit involved removing the lower part of the photograph to change the photograph from a long shot to a medium close shot. A medium close shot cuts the participants approximately at the waist level (Kress & van Leeuwen, 2021), making only the upper part of their bodies visible as illustrated in Figure 5.10.

Figure 5.10

Cropped Photograph



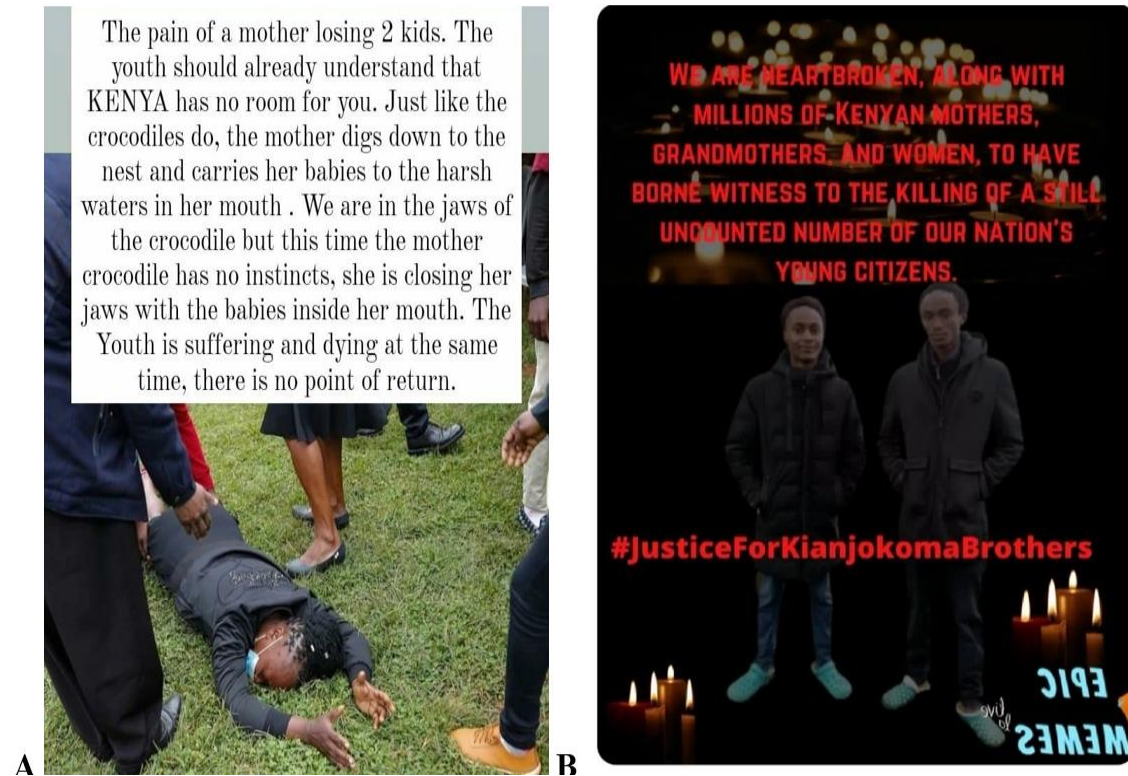
Kress and van Leeuwen (2021) identify social distance as one of the aspects of visual grammar that conveys meaning. In photographs, social distance is determined by how the image producer positions the subject, either as close (through a close-up shot) or distant (through a long shot). Applying the cropping edit to the victims' photograph can be interpreted as a deliberate attempt to present the subjects more personally, thereby altering the relationship between the viewer and the image (Boeriis, 2024). This edit reduces the perceived social distance, bringing the participants closer to the viewer. Figuratively, this closeness creates an imaginary connection, encouraging viewers to perceive the participants as friends. Such a portrayal can evoke empathy and strengthen the emotional bond, compelling the audience to engage with the demand for justice.

d) Text Overlays

This edit involves superimposing an image with a piece of text or caption to create a text overlay image. In several protest visuals within the dataset, text overlays appear as deliberate linguistic insertions on photographs, serving to frame, reinforce, or recontextualize the image's communicative intent. Figure 5.11 illustrates two of the text overlays.

Figure 5.11

Text Overlay Images



The image in frame A of Figure 5.11 combines a powerful photograph of a grieving mother with a metaphor-laden text overlay to evoke both emotional and ideological responses. The image captures the bereaved mother on the ground, conveying raw anguish and despair. Superimposed over the image is a block of reflective text that metaphorically compares Kenya to a mother crocodile that has lost her instinct and devours her own children. This metaphor serves as a damning critique of the Kenyan state, portraying it as complicit in the deaths of its youth. The use of capitalization for the word ‘KENYA’ accentuates national culpability, and the repeated reference to the suffering of the youth transforms a personal tragedy into a broader commentary on state abandonment and structural violence. The overlay and image work intermodally to reinforce a discourse of mourning, betrayal, and irreversible loss, drawing viewers into a deeper emotional and political engagement with the protest cause.

Frame B features a solemn visual of the Kianjokoma brothers flanked by candlelight against a dark background, accompanied by a text overlay that articulates collective grief. The visual elements which include, lit candles, dark tones, and frontal positioning of the brothers, function as symbols of memorialization and spiritual vigil. The red and white text expresses heartbreak not just from individual mourners but from a collective body of Kenyan women, mothers, and grandmothers, positioning the killings as a national crisis that violates familial and societal values. The inclusion of the hashtag #JusticeForKianjokomaBrothers transforms the image into a digital site of resistance, embedding the personal within the political. Through this combination, the image evokes empathy while simultaneously framing the deaths as part of a systemic pattern of youth victimization. The interplay of visual solemnity and textual mourning produces a discourse of solidarity and collective demand for justice, aligning affective expression with ideological resistance.

These composite images exemplify how multimodal protest discourse utilizes text overlays as framing devices that anchor interpretations, activate ideological critique, and mobilize affect. The integration of mournful visuals, maternal metaphors, and nationalistic appeals constructs a politicized mourning discourse, positioning victims not merely as individuals but as symbolic casualties of state violence and systemic failure. The images become digital protest artefacts (memorials, accusations, and calls to action), woven into the broader resistance narrative of the hashtag movement.

The edited photographs examined in this section reveal how users strategically compose visuals to frame the victims as innocent, spiritualized figures while foregrounding state culpability. Through symbolic filters, compositional choices, and affect-laden overlays, these digital artefacts construct a discourse of mourning, resistance, and collective memory. From the MCDA perspective, such multimodal texts reveal how affective, aesthetic, and ideological meanings are co-constructed through the different types of edits. In this way, the images function as discursive acts of resistance that challenge dominant state narratives and sustain the momentum of hashtag activism. This corroborates Wong (2019) assertion that edits transform photographs from passive representations to active constructions, that shape ideological expressions.

5.5 Illustrations

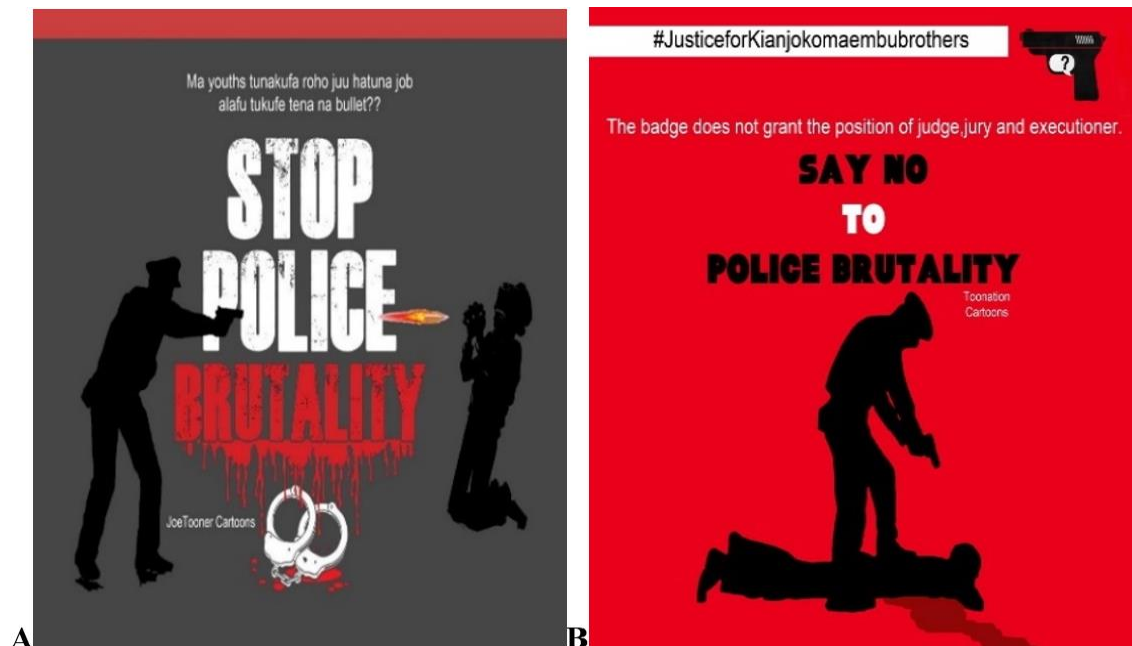
Illustrations refer to visuals created and shared by social media users to convey specific messages within a given context. This category corresponds to the Allen et al. (2021) category of illustrations with texts. In this study, illustrations accounted for 7.5 percent of the images. These included four graphics depicting acts of police brutality and four graphics featuring symbols of social justice

5.5.1 Police Brutality Graphics

The police brutality graphics are used to condemn and demand an end to police brutality as illustrated in Figure 5.12.

Figure 5.12

Police Brutality Illustrations



Frame A in Figure 5.12 depicts a silhouette of a police officer firing at a kneeling, unarmed person (a sign of surrender). The artist places a set of handcuffs in the image to show the police officer had the option of arresting the person but instead chose to shoot. The imagery of blood dripping reinforces the theme of violence. The text that appears in a larger font is a clear call to action. The word '*BRUTALITY*' written in red symbolizes the shedding of

blood. The image also has another text in a smaller font '*mayouth tunakufa roho ju hatuna job alafu tukufe tena na bullet??*' (we the youth are demoralized because we have no jobs then we die again by the bullet??) The text appears in first person point of view denoting the message is relayed from the youths' perspective. It underscores the compounded struggles young people face, from economic hardships to encounters with violent police.

Frame B has the silhouette of an officer standing over a person already subdued while pointing a gun at that individual. The posture suggests execution, highlighting the misuse of authority. The image of a gun and a question mark icon at the right-hand corner symbolizes the questioning of how police officers use their guns. It calls for accountability and legitimate use of guns. The text in the image is a straightforward call to the end of violent police actions. The contextual statement '*The badge does not grant the position of judge, jury and executioner*' speaks against extrajudicial killings. It underscores the message that the police should not overstep their mandate by taking up the role of judicial officers.

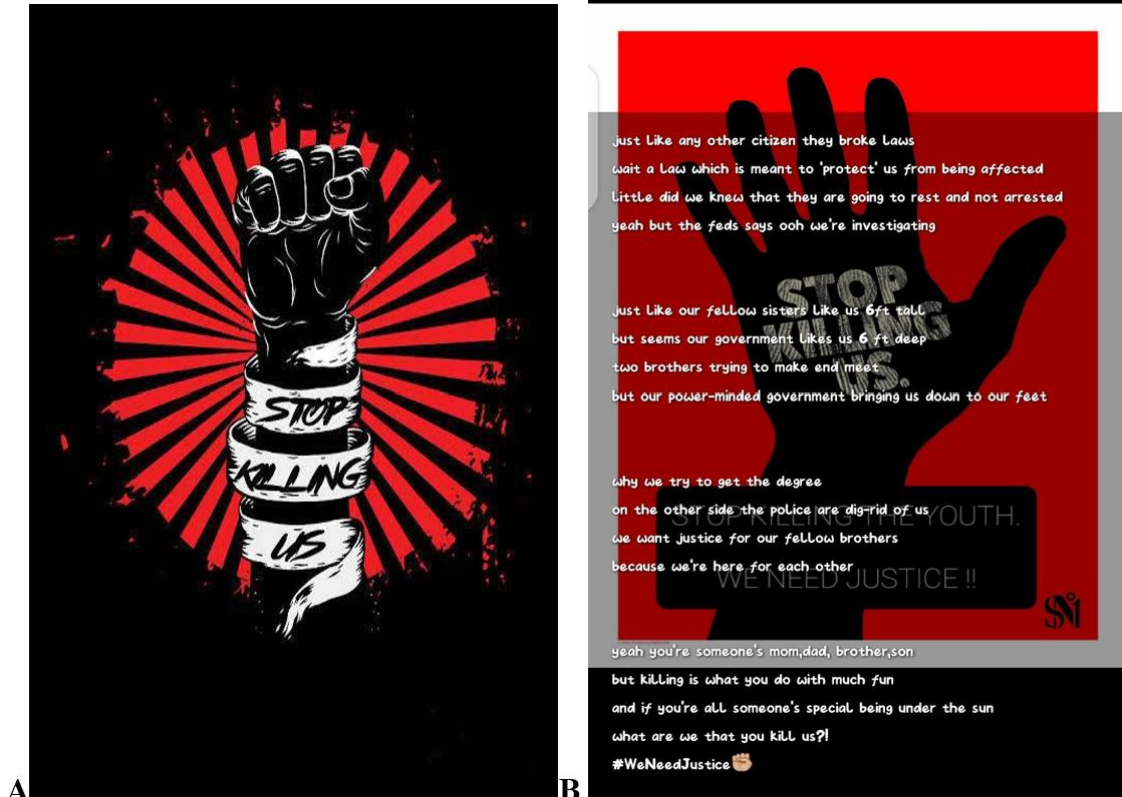
The illustrations in Figure 5.12 exemplify how protest visuals strategically use symbolic imagery and anchoring texts to construct a discourse of state brutality and citizen victimhood. From an MCDA perspective, these multimodal resources foreground unequal power dynamics, with surrendering civilians contrasted against armed officers to highlight and critique the misuse of state power. Text overlays, especially those using first-person narration and rhetorical questioning, position viewers to empathize with the youth and align with the protest cause. The interplay of image and text constructs powerful representations of injustice which can potentially mobilize emotional engagement and collective resistance. By combining critique with calls to action, the visuals operate as ideological tools in the wider digital protest discourse.

5.5.2 Social Justice Symbols Graphics

The tweeters also created illustrations using symbols commonly associated with social justice movements as illustrated in Figure 5.13.

Figure 5.13

Illustrations with Social Justice Symbols



The raised fist symbol used in the image in frame A of Figure 5.13 has a long history as a symbol of solidarity and against oppression (Davidson & Blair, 2018). The symbol has globally been used by many social justice movements, and the meaning changes slightly depending on context and other graphic elements used. In frame A, the symbol has been given context by the words “STOP KILLING US” wrapped around the fist. The text thematically places the symbol within police brutality discourses, making it a representation of empowerment and the collective strength of those demanding an end to the brutality. The phrasing of the text as an imperative reflects a sense of urgency and desperation underscoring the need for immediate action.

The red rays emanating from behind the fist can convey different meaning potentials. Firstly, they can symbolize blood, danger and urgency reinforcing the seriousness of the issue. Secondly, they can symbolize the radiating power and influence of the call to action. This can suggest that the activist movement is gaining momentum. Lastly, they serve an aesthetic function. Placing the red rays against the dark background helps draw attention to the central image, making it more striking and impactful.

Frame B has the open hand symbol which is used to signify solidarity and resistance in protest movements. The words “*STOP KILLING US*” at the palm of the hand helps contextualize the gesture as a symbol of resistance against police brutality. The text “*STOP KILLING THE YOUTH. WE NEED JUSTICE!!*” superimposed on the wrist further narrows the protest to the killing of youths. The second layer of text gives a narrative that provides background information about the Kianjokoma brothers’ case while condemning the police acts. The text overlays help to contextualize the universal hand gesture and limit its interpretation to the specific event being tweeted about. The texts also add a stylized topography that increases the visual interest in the image. The open hand is often associated with peaceful protests (Davidson & Blair, 2018), contrasting with the clenched fist which symbolizes more aggressive resistance. In this context, the open hand can be an indicator of a desire for justice through dialogue and reconciliation rather than conflict.

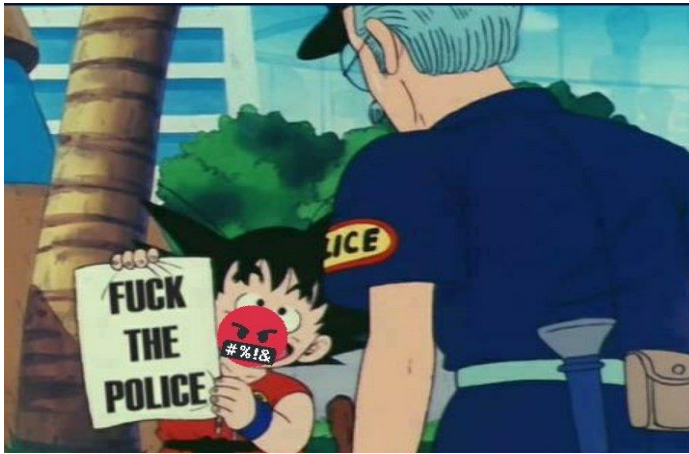
In the context of police brutality, the illustrations symbolize the collective power of people uniting to demand an end to the killings. They convey a sense of empowerment encouraging individuals to come together and stand against oppressive practices. When paired with the emotive appeals in the accompanying texts, these visuals form a collective demand for justice. According to Casas and Williams (2019), visuals with symbolic meanings can generate a sense of collective identity among participants. Similarly, these graphics have the potential to inspire more people to join the cause. Furthermore, the use of symbols commonly associated with social justice situates the Kenyan protest within a broader global movement for social justice. This strategy of linking past events to the present through universally recognized symbols reinforces the narrative and enhances the legitimacy of the call to action.

5.6 Meme

The visual illustration in Figure 5.14 is a computer-generated image categorized as a meme. Memes are a form of visual communication that typically combine recognizable imagery, often drawn from popular culture, with text to convey a message or evoke humour, irony, or critique. This meme uses characters in the popular anime (Japanese animation) style alongside text to communicate its intended message within the context of protest discourse.

Figure 5.14

Police Meme



The image has a character depicting a police officer (symbolized by the dressing) approaching a civilian. The civilian, who is smaller in size, is holding a placard that reads *'FUCK THE POLICE'*. The character's mouth is covered with an emoji conveying an angry expression and superimposed with censorship symbols. The choice of anime characters in the visual leverages on cultural references, such as dressing, that are widely understood. This allows for the interpretation of the characters as representing a police officer and a civilian.

The meme presents a layered critique of institutional power through the strategic combination of multimodal resources. The placard bears an explicit anti-police statement, functioning as an overt act of resistance. The censorship symbols over the character's mouth symbolize the suppression of dissent, suggesting that, even when silenced, weaker voices seek alternative channels of expression. Within MCDA's framework of social actor

representation, the disproportionate size and positioning of the police figure index structural dominance, whereas the smaller, angry civilian embodies disenfranchisement and subjugation. The affective use of an angry emoji not only intensifies the emotional charge but also signifies collective frustration. By appropriating the aesthetic of anime, the meme subverts popular cultural forms to expose systemic violence. This recontextualization underscores MCDA's view that semiotic choices are ideologically loaded and capable of advancing counter-hegemonic narratives. The meme acts as a site of resistance, using mockery and condemnation to protest police brutality, strategies identified by Okoth (2020) as tools for political critique in digital protests.

5.7 Drawings and Paintings

This category has images created using pencils or paint and brushes as illustrated in Figure 5.15.

Figure 5.15

Drawings of Victims of Police Brutality



Frame A in Figure 5.15 is a painting of 23-year-old Carilton Maina while frame B is that of 13-year-old Yasin Moyo, past victims of extrajudicial killings in Kenya. The paintings are on a public space at the Mathare Social Justice Centre in Nairobi, Kenya. Frame C is a drawing of Emmanuel and Benson, victims of police brutality in the current study.

Drawings and paintings of victims of police brutality can serve as a form of protest and for remembrance. In activism, it is one of the ways to honour and humanize the victims. It also acts as a constant reminder while calling attention to the injustices and systemic issues that led to their deaths. Having such drawings and paintings on the internet and public spaces is a form of resistance against erasure and dehumanization of victims of police brutality. Using images of past victims in the current activism serves to highlight the broader scope and prevalence of police brutality. They serve as a reminder that the current incident is not isolated, making police brutality a systemic issue. This meaning potential encourages reflection on the systemic problem and underscores the need for sustained efforts to address the injustices.

Additionally, these drawings and paintings serve as a form of art, drawing on the traditions of social realism and public art to create a visual statement. Incorporating them into digital discourse serves the purpose of protesting, remembrance and resistance. It is a visual statement that raises awareness and builds solidarity in demanding accountability and justice for those impacted by police excesses.

5.8 Screen Captures

This category is composed of images captured from phones and computers screen displays. Screenshots turn content (visual or textual) into a still shareable image. They include screenshots of social media posts, web pages and newspaper reports. The screen capture format contributed to 8.4 percent of the images in the corpus. There were more screenshots of social media posts than the newspaper report captures. This mirrors findings by Okoth (2020) on how KOT use visuals for political protests. This similarity, despite the two studies dealing with different thematic areas, could be a pointer that KOT utilize information from social media platforms more than from the print media.

5.8.1 Screen Captures of Social Media Posts

The corpus has screenshots from Twitter, WhatsApp, Facebook, and Instagram. Twitter screenshots include images of past and current tweets from the DCI, the IG of police, top politicians and local and international media houses. Twitter screenshots are shared to provide an authentic record of information posted by users. Figure 5.16 illustrates Twitter screenshots.

Figure 5.16

Twitter Screenshots



Frame A is a screenshot of the DCI's Twitter handle, displaying their tweet about unrelated issues. It functions as a critique of how the investigative body is managing the case by highlighting that they are providing updates on other matters but have remained silent on the Kianjokoma brothers' case. Frame B is a screenshot of a tweet from one of the leading politicians commenting on the Floyd case in America. This screen grab offers evidence that the politician had spoken out on a police brutality case abroad but had not commented on the local incident. This points to the political leadership's disdain and lack of engagement with domestic cases of police brutality.

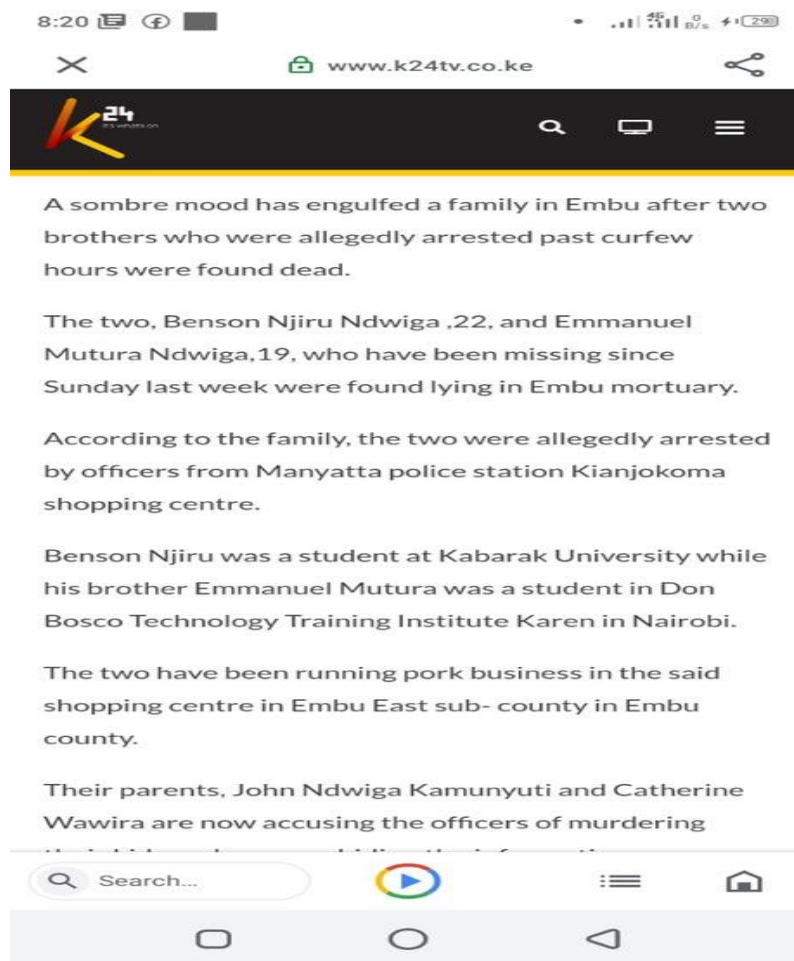
WhatsApp screenshots are mainly personal chats on explanations around what happened to the brothers and status updates on events during the funeral. Despite the privacy implications of sharing WhatsApp chat screen grabs (Thelwall et al., 2016), tweeters still converted what was supposedly a private chat message into an image and publicly shared them to serve as evidence and authenticate the message. The Instagram screenshot is a news report with a witness account of the story.

5.8.2 Screen Captures of Web Pages

The webpage screenshots are stories related to how the brothers met their deaths as illustrated on Figure 5.17.

Figure 5.17

Web Page Screenshot



The webpage screenshot in Figure 5.17 is used to convey important information exactly as it appeared on the original source. Attaching screenshots of webpages may reflect a desire to communicate complex messages accurately without having to rewrite or summarize them in tweet form. Notably, although Twitter allows users to share hyperlinks to online news sources, tweeters in this dataset preferred to use screen captures. This choice may suggest that they found visual forms of information sharing to be more impactful and immediate than hyperlinking.

5.8.3 Screen Captures of Newspaper Reports

Captures of newspaper reports were mainly images of sections that gave accounts of what happened to the two brothers. Figure 5.18 gives samples of the screenshots captured from newspaper reports.

Figure 5.18

Screen Captures of Newspaper Reports



The newspaper report capture on frame A in Figure 5.18 gives a summary of the chronology of events during the brothers' last moments and the family's movements before

learning about their death. This is the most shared image in the category of newspaper report captures. Frame B is a report of a witness account on what happened on that fateful day while frame C is a report questioning the police account on what happened to the brothers. This demonstrates that tweeters were keen to share images of sections of newspaper reports that attempted to answer the question on what exactly happened to the brothers.

Captured pictures of sections of newspaper reports help to communicate a sense of sharing factual news. Tweeters leverage on the perceived authority and credibility of newspaper sources to share information. Sharing captures of such reports carries an implicit endorsement of the contents therein and its credibility. The emphasis on what exactly happened shows the significance of that topic. This can be attributed to the desire to counter the police narrative on how the brothers met their death.

Screenshots provide a convenient and efficient way of passing information than explaining it in the tweeter's own words. The visual format also helps in asserting the authenticity of the information shared. Additionally, they compensate for the character length limit on the tweet text, by allowing the sharing of more information. Using screenshots instead of hyperlinks aligns with the fast-paced nature of Twitter platform.

5.9 Text-Based Images

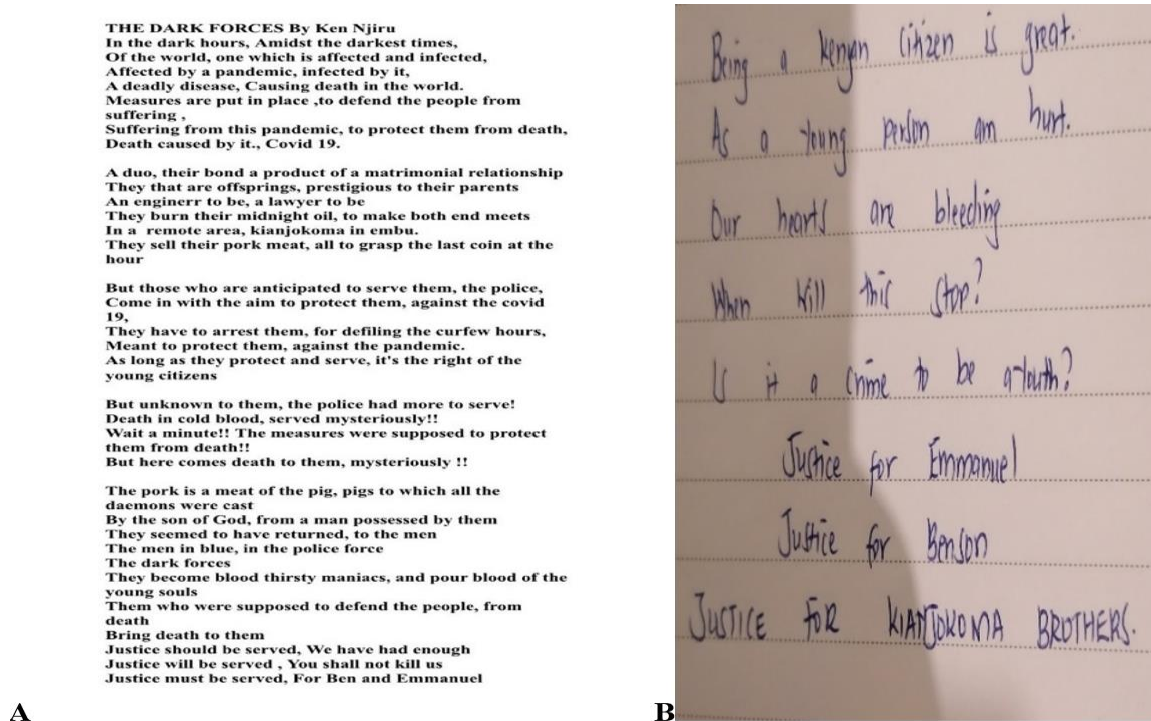
These are images used to display written content visually. Text images made up 2.8 percent of the total image shares in the corpus. The text images are classified into images of plain texts, images of documents and textual graphics.

5.9.1 Plain Text Images

Figure 5.19 illustrates examples of images of plain texts used in the data.

Figure 5.19

Plain Text Images



Frame A in Figure 5.19 is an image of a poem titled ‘The Dark Forces’ which addresses the Kianjokoma brothers’ incident while frame B is an image of a handwritten note. The use of plain text images in the corpus can be attributed to various reasons. One, it could be a strategy to beat the character limit when the text is a long one (Thelwall et al., 2016; Yoon & Chung, 2016). For example, the poem in frame A is longer than 280 characters but when captured as an image the sender communicates the message without having to worry about exceeding the character limit. This illustrates that Twitter’s character limit has led to what Morin et al. (2019) refers to as inventive plasticity where texts are not restricted within their designated spaces. Users leverage on technology to move texts to the image spaces by turning them into static visuals.

The handwritten image on frame B is less than 200 characters and it could easily have fitted into a tweet text. However, the tweeter chose to attach an image of the note to probably add depth and nuance to the message. The handwritten image adds a personal touch, authenticity, credibility and emotional weight to the communication. The personal touch

may reflect that the writer is deeply affected by the killing of the young people. The unique style of a handwritten image can evoke emotional responses from the audience, making them engage with the CTA. Additionally, a handwritten note visually stands out in a digital platform dominated by typed texts. The visual distinctiveness can draw attention to the message making it more memorable. In turn, the memorability can encourage the viewers to engage with the hashtag. Finally, the note conveys the vulnerability of the writer through exposing their raw emotions and thoughts. This vulnerability can foster a stronger connection with the audience, making them be empathetic and supportive to the cause.

5.9.2 Document Images

The images of documents included in this category are a postmortem report of the deceased and a section of the constitution. There were four pages of the postmortem report detailing the cause of death. The report is signed by the pathologists who carried out the autopsy and bore the county criminal investigations officer's rubberstamp, indicating it was an official document. The other document was a section of the Kenyan constitution on human dignity as shown in Figure 5.20.

Figure 5.20

Image of a Document

Human dignity.

28. Every person has inherent dignity and the right to have that dignity respected and protected.

Freedom and security of the person.

29. Every person has the right to freedom and security of the person, which includes the right not to be—

- (a) deprived of freedom arbitrarily or without just cause;
- (b) detained without trial, except during a state of emergency, in which case the detention is subject to Article 58;
- (c) subjected to any form of violence from either public or private sources;
- (d) subjected to torture in any manner, whether physical or psychological;
- (e) subjected to corporal punishment; or
- (f) treated or punished in a cruel, inhuman or degrading manner.

The image of the document on Figure 5.20, communicates the legal provisions on human dignity and freedom. Presenting the information as an image helps create a visual emphasis

on the message. The image also acts as a direct source reference that lends authority and authenticity to the information. Using an image helps to capture the information accurately preventing misinterpretation or misquoting of the legal provisions which might occur if the provisions were to be typed out. Highlighting the legal foundations creates a basis for the argument about the call for justice.

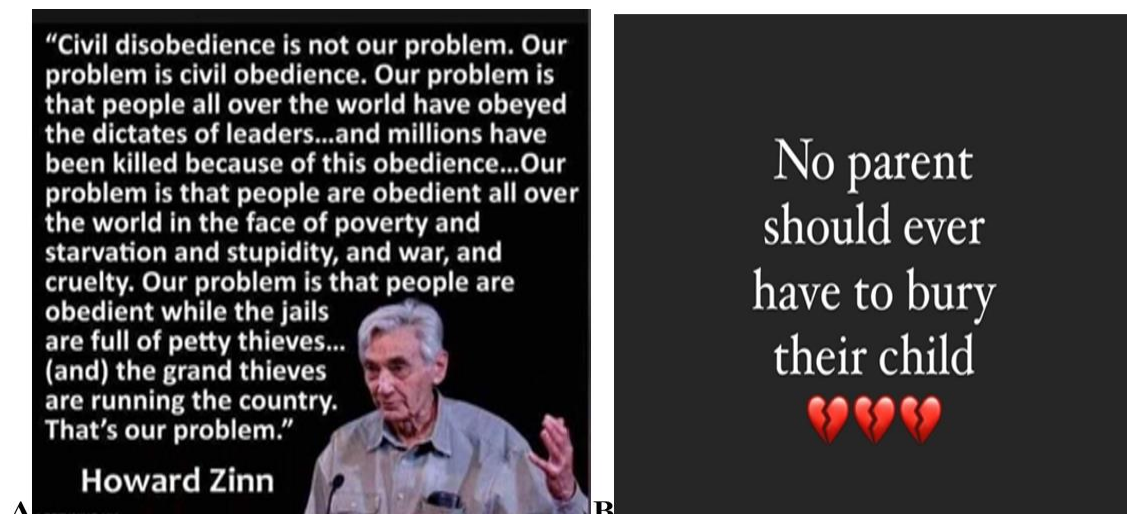
The postmortem report, which will not be shared here due to the privacy, legibility and graphic nature of the contents, serves as undeniable official document. It gives evidence on what caused the deaths of the two brothers, directly supporting claims of police brutality. Sharing the report online encourages readers to scrutinize the evidence, ultimately disproving the police's version of events and exposing the grim reality of such brutality. The report's graphic details about the cause of death highlight the severity of the violence inflicted on the victims. By sharing these documents, tweeters aim to establish authenticity and credibility, providing a factual foundation for demanding investigations, legal action, and systemic reforms. This reinforces and legitimizes the call to action (CTA), making it more compelling and difficult to ignore.

5.9.3 Textual Graphics

The last classification of text-based images are textual graphics. These graphics consist of attributed and anonymous quotes as illustrated in Figure 5.21.

Figure 5.21

Textual Graphics



Frame A on Figure 5.21 is an image of a quote featuring words attributed to an individual with their picture included while frame B are words posted anonymously, and which can be classified as either proverbial quotes or universal statements.

Textual graphics are used for an artistic flair and to create a visual impact. The use of an attributed quote lends authority and credibility to the message. The quote conveys a message about social injustices with powerful insights that prompt the readers to reflection and critical thinking. Such quotes encourage the readers to engage with the information at a deeper level and develop their own perspectives, which might lead them to support the fight against injustices.

The statement in frame B addresses the grief and unnaturalness of a parent losing a child, one of the most heart-breaking experiences. It highlights the tragic loss that befell the Kianjokoma family, implicitly condemning the circumstances linked to the deaths. The message also expresses sympathy for the family, evoking empathy from the readers. The broken heart emojis further amplify the emotional impact of the message. The simple yet emotionally charged quote serves as a tool to raise awareness about the impact of police brutality especially when meted on young people. When quotes align with the intended message, they can mobilize support for the cause, helping to address the social injustices brought about by police brutality.

5.10 Digital Posters

Virtual environments have liberalized posters through facilitating the creation and distribution of graphic design files (JPG or PNG) that depict what a physical poster would look like. Posters are an avenue for flash communication with artistic representations that condense messages in form of views, opinions or simply information (Safaian & Teune, 2022). Digital posters can be shared online or even downloaded and printed into physical posters. The posters identified in the tweets account for two percent of the image shares. They include four calling for justice for the slain brothers, two calling for justice for the Kitengela four, one on the candle lighting event, one detailing the funeral arrangements and one celebrating the youth international day through condemning the killing of youths. All the posters in the corpus were hybrid images, incorporating both textual and graphic elements. Figure 5.22 shows examples of the posters.

Figure 5.22

Digital Posters



The poster in frame A of Figure 5.22 uses an artistic expression of activism against police brutality. It is an international youth day celebration poster that condemns police violence on the youth. In the poster, the digital artist appropriates the historical raised fist symbol, associated with solidarity and resistance, to create a digital remix, producing a poster that has a recognizable cultural symbol. The text in the poster expresses views regarding violence against the youth.

Frame B is a poster that announces a candle lighting vigil. It gives information about the date, time and venue for the event. The poster combines visual and verbal cues to convey the message. Based on Ledin and Machin's (2018a) toolkit of visual elements, the analysis centred on the visual cues such as photographs, colour and texts. The poster has photographs of the deceased which carry some meaning potentials. The portrait at the top left corner serves to humanize and identify the victims for whom the candle lighting is being held. The one at the bottom right corner has images that seem to be fading away,

potentially symbolizing their departure from the physical world. The placement of the two images, one at the top left and the other at the bottom right, seem to indicate a transition from life to death.

Secondly, the choice of black as the background colour of the poster can symbolize mourning. Using a colour traditionally associated with mourning and grief suggests the poster is related to a sombre and serious occasion even before one reads the words. Colour black might also symbolize the ‘darkness’ mentioned in the text within the poster. This may refer to the painful period the families and community are going through after the deaths.

Thirdly, the announcement of a candle lighting event emphasizes the theme of remembrance and vigil. It symbolizes the act of keeping the memory of the deceased alive. Lastly, the words in the text express love, prayers and a wish for strength. This reinforces the communal support and solidarity at a time of grief. The poster makes use of imagery, colour and text to create awareness, convey collective grief, for remembrance and to offer support to the bereaved family. This implicitly connotes a silent protest for the injustices.

Posters, often used for publicity, play a crucial role in raising awareness by sharing additional information about the issue and related events. They help ensure that the incident remains in the public consciousness, keeping the victims' memories alive. Event posters, such as those for candle-lighting ceremonies and funerals, signal active engagement and participation in organizing these gatherings, subtly functioning as acts protesting injustices. These events offered public spaces for mourning, remembrance, and demands for change. Beyond their informational role, posters serve as powerful tools for community mobilization, calling for participation and encouraging collective support for the victims' family. In the discourse on police brutality, posters serve as more than mere communication tools; they embody solidarity, mourning, protest, and advocacy.

5.11 Videos

Videos are dynamic discourses that incorporate the visual, audio and verbal modes to construe meaning (Han & Zappavigna, 2023; Yao & Zhuo, 2018). There are 28 videos shared in 35 tweets in the corpus, contributing to 5.4 percent of the total media items

shared. All the videos are short, with a mean length of 42.5 seconds. Only three out of the 28 videos have a length of over 60 seconds. As mentioned earlier, the maximum length allowed for videos on Twitter is 140 seconds. This means the length of the videos shared was slightly less than one third of the length afforded by the platform, indicating underutilization of the affordance. This could be attributed to the preference for brevity and the need to maintain viewer attention on a fast-scrolling platform. Short videos are also easier to upload, more data-friendly, and often sufficient to capture key protest moments.

The description of the videos is organized around the categories of video content established during the coding process. The categories include events, artistic expressions, memorial or tribute, personal stories and testimonials and meme videos as shown in Table 5.4.

Table 5.4

Summary of Video Categories in the #JusticeForKianjokoma Dataset

Video Category	Sub-categories of Footage	Frequency
Event Videos	• Protest Footage	43 percent
	• Police Harassment Footage	
	• Candle Lighting Vigil Footage	
	• Funeral Footage	
Artistic Expression Videos	• Music Video	29 percent
	• Spoken word Poetry Video	
Memorial or Tribute Videos	• Single image Video	14 percent
	• Multimodal Collage Video	
Personal Stories and Testimonial Videos	• Parents' Testimonial	11 percent
	• Collage of mourning parents	
	• Witness Account Video	
Meme Video	• Ironic Meme video	3 percent

Table 5.4 gives a summary of the video categories and their distribution in the dataset. The subsequent sections discuss each of the categories listed in Table 5.4. The analysis is centred on the descriptions of the categories, the semiotic resources in the videos and the meaning potentials of the videos.

5.11.1 Event Videos

This category includes all recorded footage of events or actions as they were happening. The videos entail real-world footage with real people and places. The events videos account for 43 percent of all the videos in the dataset. These videos cover four main events: protests, police harassment of civilians, candle lighting vigil and the funeral.

a) Protest Footage

The protest activities videos cover past demonstrations and the Embu protests. One of the past protests videos is undated while another is from a protest by activists opposed to constitutional amendments initiatives in Kenya, under the #LindaKatiba (safeguard the constitution) movement, started in 2021. The use of videos from past protests illustrates a video sharing practice on Twitter where users dig up video clips from past events to use in support of a current one. A similar practice was reported by Thorson et al. (2013) when analysing the ‘Occupy Wall Street’ movement videos.

The Embu protest footages are professional videos borrowed from social media platforms of mainstream media organizations. With the advent of online news platforms many media organizations have a social media presence, where they upload news clips as they report on current news. News clips posted on these pages were downloaded and reposted on Twitter accounts of individual users. These videos combine footage, images, narrations, interviews and graphics recorded by the media team when reporting the happenings. Two news clips with the Embu protest footage are shared on the tweets, one from The Star Kenya and another one from Nation Television (NTV) Kenya. The borrowed videos are appropriated exactly as they appear in the original source with no modifications. This practice produces what Thorson et al. (2013) refer to as a cut and paste video.

The footage from The Star Kenya has images of protestors burning tyres, carrying twigs and placards as they chant anti police and justice slogans. It also has narrations from the

victims' mother and other residents condemning police for the killings and other atrocities. The video communicates information related to how and why the demonstrations are taking place. The footage acts as a visual testimony to the public outcry, showcasing solidarity and public engagement for the cause. The audio part communicates raw emotions of grief from the mother and those of anger and determination from the protesters. This can have an emotional impact on the viewers, potentially evoking empathy and anger. The narrations provide the viewer with an understanding of the protesters' sentiments. This emotional and cognitive impact on the viewers can strengthen their resolve to join the digital protest.

b) Police Harassment Footage

In the police harassment videos, one footage shows two uniformed officers of the national youth service beating up a passenger in a public service vehicle (PSV), for allegedly asking one of the officers why he did not have a mask on. The other footage has uniformed armed police officers ejecting commuters from a PSV while beating them up. Both videos are not dated, making the context unclear. The videos are user generated short videos (UGSV). Such videos are created by regular social media users (not professional videographers or production companies) mostly using smartphones and basic editing software. They are created from live events the individuals participate in or witness subsequently recording the footage.

Despite the lack of a full context in some of the clips, the footage clearly shows that the use of force was excessive and uncalled for. The recurrence of such videos in the corpus communicates that police brutality is not an isolated incident, but a systemic problem embedded in the police culture. The practice of ordinary citizens recording and disseminating videos of random police harassment exemplifies the concept of 'sousveillance' (Thorson et al., 2013), where power is monitored from below.

From a critical discourse perspective, these videos carry ideological, emotional, and discursive meaning potentials. Ideologically, sousveillance functions as a counter-hegemonic practice that subverts dominant institutional narratives by exposing abuses of power and advancing discourses of justice and accountability. It reframes the citizen as an empowered agent of surveillance rather than a passive recipient of authority, thereby

challenging the legitimacy of state violence. Emotionally, the graphic nature of the videos evokes strong reactions such as anger, fear, and empathy. These affective responses can galvanize resistance, strengthen collective identity, and reinforce solidarity among those who feel similarly oppressed. Discursively, the videos shift narrative authority away from institutions to ordinary citizens. They recast instances of police violence as systemic rather than isolated, thereby participating in the construction of an alternative protest discourse. As such, each shared video becomes not just a record of abuse but a performative act of resistance that memorializes injustice and mobilizes support.

The practice of sousveillance transforms digital spaces into sites of visibility, accountability, and resistance, contributing to the broader narrative of anti-police brutality activism. This element of accountability is particularly relevant in Twitter-based activism, where video clips are reshared enabling them to quickly circulate, amplifying their reach and impact.

c) Candle Lighting Vigil Footage

There are two different candle lighting events captured on video. One took place at the university where one of the deceased was a student while the other was at their home on the eve of the funeral. These videos are UGSVs, captured by people who participated in the vigil. The footage focuses on the large number of attendees at the events and the lit candles. The vigil footage, though seemingly solemn and ceremonial, operates as a communicative act within protest discourse. The videos carry layered meaning potentials that become salient when examined through the critical lens. Iconographically, the candle serves as a multifaceted symbol. In many cultural and religious traditions, it signifies remembrance, purity, and the sanctity of life. The repeated visual motif of lit candles operates as a visual metaphor for hope, resistance, and continuity of memory. The flickering flames visually contrast with the darkness (both literal and symbolic) suggesting that even in the face of brutal state power, the community retains hope and emotional resilience.

The crowd captured in the events functions as a visual indicator of solidarity and collective consciousness. From a critical perspective, the focus on large numbers of attendees and the

ritual of lighting candles visually situates the act of mourning as both a social indictment and a form of solidarity. In protest discourse, such visuals can foster collective memory, strengthen group identity, and mobilize viewers emotionally and politically. The filming and dissemination of these moments turns them into acts of visual testimony, reframing grief as a form of civic resistance. It reclaims public memory and space, asserting that the lives lost were valuable and their deaths unjust. These UGSVs symbolically resist erasure by documenting the communal refusal to forget. The vigil becomes a ritualized performance of resistance, reinforcing the idea that mourning itself can be a form of protest.

d) Funeral Footage

Three funeral UGSV are shared: a speech by a local politician rallying mourners to demand justice, a procession of hearses and vehicles leaving the mortuary, and another procession leaving the funeral ceremony grounds. The funeral footage transforms mourning into a politicized act of protest. While funerals traditionally mark private grief, these videos, reposition the event within public discourse, aligning it with wider calls for justice. From an iconographic perspective, the funeral imagery and large turnout of mourners evoke the finality of loss as well as the magnitude of public outrage.

The video of a politician's speech rallying the mourners to demand justice and police reform serves as a semiotic anchor that aligns the funeral with broader calls for structural change. The speech blurs the boundary between grief and mobilization, transforming the mourning space into a platform of political address. Within MCDA's lens of discourse as social action, such footage illustrates how death becomes a discursive resource, used to challenge dominant narratives and call attention to state failures in upholding justice.

The videos are emotionally charged, conveying the finality of loss through burial imagery. Objects like the mortuary gate, hearses, and mourning attire symbolize the emotional and material consequences of police brutality, making the tragedy tangible to the audience. The documentation of grief not only memorializes the victims but functions rhetorically to mobilize outrage and solidarity, particularly among Twitter users engaging with the hashtags. The results were visible in the upsurge of tweets immediately after the funeral, propelling the hashtag to the top position in the Twitter trends rankings for Kenya. This

demonstrates how such footage operates as a catalyst for renewed engagement in digital protest cycles.

The visual emphasis on the large turnout through capturing the motorcycles, cars, and pedestrians in the procession, is a visible display of solidarity that amplifies the scale of dissent. It highlights how police brutality affects not just individuals but entire communities. The funeral footage through its symbolic imagery and social circulation contributes to the framing of police brutality as a public crisis that demands justice and reform.

5.11.2 Artistic Expressions Videos

This category has UGSVs that utilize various forms of art such as music and the spoken word poetry. The category contributes to 29 percent of the videos in the corpus and includes six different music videos shared in seven tweets and two shares of spoken word poetry. The spoken word poetry is produced by a renowned spoken word poet in Kenya who goes by the stage name ‘Ogoti the boychild’ and another by an unidentified person. The songs include *Justice* by Charles Marvelles, which was specifically composed as a dedication to the Kianjokoma brothers. Another is a clip from a live performance by popular Kenyan musician Juliani. The collection also features the national anthem and a song directly addressing police brutality. In addition, there is *Kuna Siku Youth Wataungana* (There is a day the youths will unite) by Sir Bwoy, and *Buffalo Soldier* by Bob Marley.

In one of the spoken word videos, *Ogoti the boychild* uses visual and verbal modes to communicate his message. The image in Figure 5.23 visually illustrates the setting of the performance.

Figure 5.23

Spoken Word Poetry Setting



The poet uses the setting illustrated in Figure 5.23 as a form of visual symbolism. The performance is conducted from behind a veranda enclosed with metal grills all over. Metal grills serve as a security feature in buildings to prevent unauthorized entry or exit. Such a setting symbolizes confinement which effectively communicates the themes of oppression, helplessness and vulnerability of the group represented by the artist. The imagery reflects the confinement circumstances youths find themselves in due to the actions of law enforcers. The setting can also symbolize the helplessness and pain experienced by those affected by police brutality.

The spoken word performance portrays the police as trigger-happy when dealing with the youth, highlighting their pain and hopelessness in the face of unchecked brutality. The poet reflects on the personal impact of the Kianjokoma brothers' deaths, expressing the shared grief and despair experienced by the youth. Through a mixture of English, Kiswahili and Sheng, codes strongly associated with youth identity, the poet ensures his message resonates with the audience. The combination of the poet's words and the visual symbolism, intensifies the reality of the youths living under oppression and fear.

Additionally, it can serve as a visual protest from the poet who is ‘behind bars’ (figuratively) and demands attention and action from the audience. The message underscores the systemic nature of the issue, framing police brutality as a symptom of broader societal problems. The setting further enhances the emotional impact of the message on the viewers, evoking empathy for the youth and victims of police brutality. This powerful combination of words and visuals amplifies the message, encouraging viewers to join the social justice movement and advocate for change.

5.11.3 Memorial and Tribute Videos

This category includes creative remixes used to commemorate the life and times of the brothers in a sentimental way. The videos show significant moments and personal aspects of the deceased lives. They make up 14 percent of the videos in the corpus. Tribute videos are UGSV, created either using a single image or through editing a collection of images and adding soundtracks to make the video, that is, remixing images and adding texts and music.

a) Single Image Videos

Among the videos using a single image is one that has the photograph of the brothers, edited with the cloud filter. The video is 10 seconds long and has a short audio from the second stanza of the song *See You Again* by Wiz Khalifa featuring Charlie Puth. The selected lyrics ‘*Everything I went through you were standing there by my side. And now you gon’ be there with me for the last ride. It’s been a long day without you, my friend*,’ communicate strong emotions of grief, remembrance, and enduring companionship. The “last ride” metaphor signifies the final journey, suggesting the permanence of death while also evoking continuity of memory and the hope of reunion. The use of the cloud filter places the deceased in an ethereal realm, commonly associated with the afterlife, and invites reflection on their unjust deaths.

From an MCDA perspective, this video functions as a semiotic artifact that mobilizes emotional and ideological meaning potentials. The combination of soft visuals and emotive lyrics creates affective resonance, enabling audiences to engage emotionally with the loss. The image of the brothers framed by clouds, taps into established iconography of

transcendence, elevating them as innocent victims. This symbolic framing underscores the moral weight of their deaths and critiques the broader issue of police brutality without the need for explicit language.

The song selection further amplifies this critique. Thematically centred on friendship, loss, and remembrance, the track invites the audience to share in mourning, transforming private grief into a public and politicized experience. The emotional intimacy of the lyrics supports a narrative of solidarity and collective memory, presenting the brothers as individuals whose lives mattered rather than anonymous casualties. This is consistent with MCDA's view that semiotic choices are ideologically loaded and capable of shaping discourses around justice and identity.

The video also employs intertextuality by recontextualizing a mainstream cultural product within a protest setting. This practice of remixing familiar media aligns with the creative strategies of digital activism, allowing protesters to draw on widely recognized cultural forms to make their messages more relatable and emotionally impactful. In this way, the tribute video not only commemorates the deceased but also acts as a subtle but powerful tool of resistance, reinforcing the ideological stance that their deaths were unjust, and their memory should inspire continued calls for justice.

b) Multimodal Collage Video

The multimodal collage tribute videos in the dataset illustrate how Twitter users repurpose existing semiotic materials such as images, music, and text overlays, into new protest artefacts. These videos reflect what Thorson et al. (2013) call cut-and-mix videos and align with Han and Zappavigna's (2023) notion of the multimodal collage, where fragmented semiotic resources are remixed to create new meanings within digital spaces. From a MCDA perspective, these tribute videos operate as affective and ideological texts, transforming personal mourning into acts of public resistance.

One example is a 30-second video comprising photographs, screen captures, tribute posters, and a musical excerpt from the Christian hymn *In the Sweet By and By*. The video was transcribed into six thematic frames to create a story board as outlined in Table 5.5

Table 5.5*Description of Multimodal Collage Tribute Video One*

Frame	Story Board	Background Lyrics
1	Photograph of the two brothers with their mother	<i>In the Sweet By and</i>
2	Screen capture of the newspaper report on the chronology of events	<i>By-</i> And by faith we can
3	Photograph of the two brothers (VP3)	see it afar
4	A tribute poster. At the top the words TRIBUTE FOR THE BROTHER'S. FOR BEN AND EMMANUEL. FINAL TRIBUTE TO BEN AND EMMANUEL. A photograph of the brothers (VP1). At the bottom the words RIP comrades Ben & Emmanuel.	For the father waits over the way To prepare us a dwelling place there
5	Photograph of the two brothers (VP3)	In the sweet by and by
6	A tribute poster. At the top the words TRIBUTE FOR THE BROTHER'S. FOR BEN AND EMMANUEL. FINAL TRIBUTE TO BEN AND EMMANUEL. A photograph of the brothers (BP1). At the bottom the words RIP	We shall meet on that beautiful shore In the sweet by and by We shall meet on that beautiful shore

The arrangement of visual resources as presented in Table 5.5 shows an alternation between photographs of the deceased and a visual resource talking about their death, either a newspaper report or a tribute poster. The alternating sequence creates a visual rhythm that interweaves personal memory with public accountability. Photographs of the deceased in joyful moments foreground their humanity, while the inclusion of the newspaper report serves to contextualize their deaths within broader socio-political discourse. This interplay highlights not only the tragedy of their loss but the injustice surrounding it, thus positioning the video as a critical intervention in digital protest discourse.

The hymn in the background adds an emotional and spiritual layer. Its lyrics, commonly used in funerals and memorials, evoke peace, hope, and the promise of reunion in the

afterlife. The references to a '*beautiful shore*' and '*dwelling place*' symbolize transcendence and consolation, soothing grief while asserting that the victims are now in a better place. From an MCDA perspective, the hymn functions as a cultural resource that resonates across communities, transforming religious comfort into a collective affective strategy. It draws on shared cultural memory to assert meaning in the face of violent loss.

The song was initially written by an American Fillmore Bennet and the music done by Joseph Webster in 1868. Over the years, there have been many renditions recorded by gospel and country music artists. Christian blogs indicate that the song is widely used at memorial services, funerals and tributes highlighting its role in providing comfort and hope in times of a loss. The use of a hymn originating from 19th-century America, and commonly repurposed across various cultures and eras, illustrates the semiotic power of intertextuality. The hymn's adoption in a Kenyan protest context repositions it within a new ideological frame. This act of resemiotization, that is, repurposing a Western gospel hymn in a local digital protest, reflects both a shared mourning ritual and an effort to draw symbolic attention to the value of the lost lives.

A second tribute video, 24 seconds long, uses visual and musical elements to tell a different yet similarly affective and ideological narrative. The visual resources include video snippets and photographs of the brothers, as well as funeral-related objects such as coffins, banners, hearses, and graves. The background audio is an excerpt from the song *Tuonane Bandarini (See You at the Harbour)* by Tanzania's Blessing Voice. The video was transcribed and divided into eleven thematic frames, presented in Table 5.6.

Table 5.6*Description of Multimodal Collage Tribute Video Two*

Frame	Story Board	Background Music
1	Video snippet of the brothers playing with their dogs	<i>Tuonane Bandarini</i> (See You at the Harbour)
2	Picture of the two coffins	Nenda vita umeimaliza
3	A video snippet of one of the brothers washing his hands	Simanzi zimetawala Umelala kama utaamka Hivi ni kweli umeondoka Umetuwacha
4	A photograph of the 2 nd brother	Kama machozi yangeweza
5	Photograph of the coffins and memorial portrait	kukuamsha Leo ungeamka shujaa.
6	Photograph of the two brothers	(Go your fight is over
7	Photograph of memorial banner	Grief has taken over
8	Photograph of one of the brothers	You sleep like you will wake up
9	Photograph of the front page of the funeral programme	So, it is true you have gone You have left us If tears could wake you up Today you would rise a hero)
10	Photograph of hearse at the mortuary gate	
11	Photograph of the prepared grave	

This video begins with joyful footage of the brothers interacting with their dogs and concludes with an image of their grave, visually mapping the journey from life to death. The integration of funeral objects such as coffins, hearses, banners, makes the deaths tangible, reinforcing their finality. From an MCDA perspective, these objects are not neutral; they function as powerful semiotic tools that confront the viewer with the irreversible outcome of state violence.

The background song, *Tuonane Bandarini*, was composed in 2021 as a tribute to the late Tanzanian President John Magufuli. It has since gained widespread popularity in Kenya, frequently played in funerals and used as background music to many tribute videos posted on social media platforms. The lyrics used in this video open with an acknowledgement of

the finality of death and expression of grief. The excerpt has phrases that show denial and the wish that the departed could return. Its lyrics express sorrow, denial, and reverence, aligning with the themes of grief and mourning. By calling the departed a “hero,” the song elevates the brothers’ status and affirms their worthiness, thereby reclaiming their dignity in the face of their unjust deaths.

In both videos, the multimodal resources are strategically arranged to produce layered meanings. The emotional cadence of the music complements the visual narrative, enhancing the affective register of the videos. The sequencing of visuals, from life to death, constructs a temporal and ideological frame that moves the viewer from empathy to reflection. This interplay exemplifies what MCDA identifies as affective meaning-making, where emotions are mobilized not only to express grief but also to build solidarity and critique power structures.

These tribute videos operate within a broader digital protest ecology. Through resemiotization and intertextuality, they transform private grief into collective political statements. They do not merely commemorate the deceased; they also challenge the conditions that led to their deaths. The recontextualization of familiar cultural artefacts, whether hymns or viral tribute songs, demonstrates the agency of social media users in crafting counter-hegemonic narratives. In doing so, they reject dehumanization and insist on remembrance, asserting that these lives mattered.

5.11.4 Personal Stories and Testimonial Videos

Videos in this category capture people sharing their stories and experiences with the deceased and how life has been since their departure. This group accounts for 11 percent of the videos in the corpus. One of the videos features the parents recounting their sons’ character and personalities. Another one is a collection of both moving and still images of distraught parents of past victims of extrajudicial killings and those of the mother to the brothers (MP3 and MP4) in a slide show mode. The last video is a footage of a witness recounting what he saw happening to the brothers on that fateful day.

The parents’ testimonial about their sons focuses on the positive characters of the deceased and the love the family has for them, serving to humanize them. Through these stories, the

victims are portrayed as good people who had a promising future rather than just anonymous persons adding to the statistics of victims of police brutality. The stories enable the viewer to get a glimpse into the lives of the deceased helping to establish an emotional connection with them. The viewer gets a sense of having personally known the victims. This can evoke empathy and compassion making the audience support the CTA. These testimonials implicitly highlight the injustice of their death.

The video with a collection of images of distraught parents is a visual representation of profound grief and suffering caused by police actions. The video conveys raw emotions of persons directly affected by the killings, conveying the human cost of such brutality. Including images of parents of both past and present victims, creates a narrative of continuity implying that police brutality is an ongoing issue affecting numerous families over time. It situates the injustice within a broader context as a systemic issue, implicitly emphasising the need for action. The video reinforces the view that police brutality is a widespread problem that requires urgent and collective action.

Testimonial videos play a role in personalizing and contextualizing the police brutality issue, making the injustices more relatable to the public. They serve as a mobilization tool that emotionally appeals to viewers to join in demanding for justice.

5.11.5 Meme Video

This is a type of video that features a very short video clip (5 seconds) that gained internet popularity and was repurposed to convey a message related to the hashtag. While the clip's original context is unrelated to the deaths of the two brothers, its symbolic use resonates with the critique of authority. The clip has a group of people in a setting resembling a press briefing, with multiple microphones from media houses placed on a podium. The speaker, in a shaky voice, utters the words "*I say we don't have the capacity*" then immediately breaks down. Another person in the group steps forward to comfort the speaker by placing a hand on their shoulder.

The clip mimics a reaction of people, presumably in authority, to a situation. Press briefings are typically associated with authority, accountability, and control, where speakers are expected to provide important updates or address crises with confidence. The phrase "*I say*

we don't have the capacity” starkly contrasts with these expectations, representing inadequacy, helplessness, or unpreparedness. This ironic juxtaposition between the situation’s gravity and the speaker’s inadequacy amplifies the absurdity of the scene.

The irony of this video lies in the disparity between what is expected in a press briefing and what is presented in the clip. Within the context of police brutality, the meme video critiques the failure or hypocrisy of those in authority in addressing the case. By repurposing this widely recognizable clip, the video draws attention to the inadequacies of leadership while engaging audiences through humour and irony.

5.12 GIF

The third type of media item in the data is a GIF. These are typically a collection of bodily gestures and facial expressions represented by images in motion depicting a sequence of brief movements and used to show a reaction to something (Gradinaru, 2018; Veszelszki, 2015). Since there are only two GIFs in the data, they contribute to a negligible part of the media forms. The GIFs in the data are both reaction GIFs. There are many collections of GIFs on the internet and communicators choose the one they prefer to use. One of the GIFs, extracted from a popular movie, is illustrated in the screenshot in Figure 5.24.

Figure 5.24

Surprised Face GIF



The GIF in Figure 5.24 is a surprised face reaction GIF’ available at the GIPHY online repository. It has a character depicting a surprised face to illustrate the reaction. The second

one is a hopeless disappointed GIF, depicting a state of hopelessness in the characters. The GIFs are used to depict and express reactions of surprise and disappointment. These reactions can suggest something about how the tweeters feel towards police brutality discourses. They imply that the KOT is both surprised by the government's handling the case and disappointed in the police's actions. These GIFs also serve as a subtle form of social commentary (Glynn & Brown, 2023). The surprise and disappointment reactions are a social critique to government's (in)actions regarding the brutality.

The minimal use of GIFs against the backdrop of studies pointing to the feature being ubiquitous in social media platforms inclusive of Twitter (Glynn & Brown, 2023; Gradinaru, 2018; Miltner & Highfield, 2017; Veszelszki, 2015), raises concerns. The minimal use could be attributed to the seriousness of the subject matter propagated by the hashtag, that is, justice for the victims of police brutality. The KOT might have felt that the light-heartedness and humour normally associated with GIFs (Miltner & Highfield, 2017; Veszelszki, 2015) is inappropriate in this case and its use could undermine the gravity of their messages.

5.13 Summary of the Chapter

This chapter examined and categorized the visual resources used in the #JusticeForKianjokomaBrothers corpus, providing detailed descriptions of their forms, usage patterns, and meaning potentials. The discussion highlights how visuals contribute to the communicative force of the tweets, offering a nuanced understanding of their semiotic power in digital activism. The findings underscore the central role of visual resources in constructing meaning, shaping interpretations, and fostering emotional engagement within protest discourse. As integral elements of digital narratives, visuals enhance message delivery, deepen audience connection to the cause and perform an ideological function by contesting dominant narratives and affirming shared values of justice and accountability. Having illuminated the meaning potentials of both textual and visual resources, the next chapter explores how these two modes interact to construct meaning within the multimodal structure of protest tweets.

CHAPTER SIX

TEXTUAL-VISUAL RELATIONS

6.1 Introduction

This chapter addresses the third objective of the study which explores the relationship between meanings derived from the textual and visual resources in the tweets, focusing on their combined contribution to meaning making within the multimodal ensemble. While fully acknowledging that text and images may interact from both ways, the chapter begins by analysing the text-visual status relations. The equal and unequal intermodal status relations of complementary interdependent, complementary independent, visual subordinate and text subordinate are discussed. Subsequently, the chapter delves into the logico-semantic relations between the texts and visuals. The relations of elaboration, extension, enhancement and contradiction are discussed. The chapter ends with a discussion of a distinct category of tweets that exhibit multiple logico-semantic relations. Throughout the chapter, the analysis of the status and logico-semantic relations is grounded in a modified version of Martinec and Salway's (2005) model for understanding image-text relations.

6.2 Intermodal Status Relations

Table 6.1 provides a summary of the status relations between the textual and visual resources in the corpus, arranged according to the frequency.

Table 6.1

Distribution of Intermodal Status Relations in the #JusticeForKianjokomaBrothers

Dataset

Status Relation	Sub-Type	Total (N-496)	Percentage
Equal	Complementary Interdependent	319	64.3
	Complementary Independent	117	23.6
Unequal	Visual Subordinate	35	7
	Text Subordinate	25	5

The findings reported in Table 6.1 indicate that four subcategories of the equal and unequal status relations are present in the data. The tweets predominantly feature the equal complementary interdependent status relation at 64.3 percent followed by the equal independent at 23.6 percent, then the unequal visual subordinate status at 7 percent and lastly the unequal text subordinate at 5 percent. The findings corroborate Martinec and Salway's (2005) claim that new media is prone to exhibit text-image relationships with equal status. They show KOT's preference for tweets where the textual and visual resources are both important and intended to be interpreted together. The status relations are elaborated with examples in the subsequent sections.

6.2.1 Complementary Interdependent Status Relations

This status is achieved when the modes rely on each other to complete the tweet's message without any of them being subordinate to the other. This subcategory is modified from Martinec and Salway's (2005) complementary status relation. Here, both modes convey different aspects of the message while their interdependency signifies that the meaning from one mode is incomplete without the other. For the audience to get the full impact of the message, they must engage with both the text and the visual as they are mutually dependent in creating meaning. The tweet in Figure 6.1 illustrates this relationship.

Figure 6.1

Complementary Interdependent Status

This statue is called "EMPTINESS" and was created by a grieving parent. It describes how a parent feels after losing a child 😭. May God give this family strength. It's really painful to lose two sons.
[#JusticeForKianjokomaBrothers](#)
[#JusticeforEmmanuelandBenson](#)
😭😭



11:55 PM · 13 Aug 21

The tweet text in Figure 6.1 describes the pain a parent goes through after losing a child and explicitly connects this to the Kianjokoma brothers' case through the hashtags. The visual, a grieving sculpture, visually embodies the sorrow described in the text. The image and text rely on each other to fully express the author's meaning. Without the image, the emotional power of the text message would be diminished and without the text, the specific context of interpretation of the sculpture would be missing. The two are equal and complement each other, with the text providing the narrative and context while the image provides the emotional and symbolic impact.

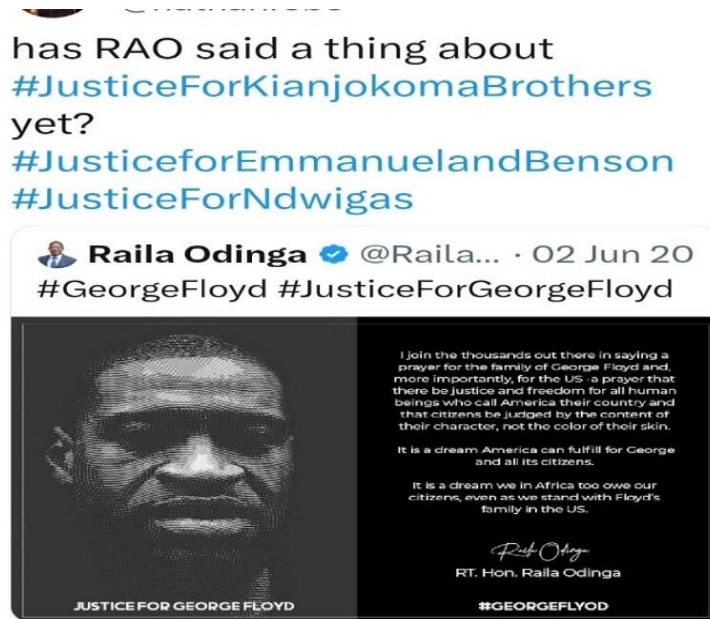
The dominance of the complementary interdependent status suggests that there is multimodal cohesion in most of the tweets. The textual and media parts of the tweets interact closely to form a cohesive message. This reflects a deliberate effort by the tweeters to maximize on the multimodal resources by crafting tweets where each mode provides different but complementary information.

6.2.2 Complementary Independent Status Relation

This subcategory includes tweets where the two modes are independent but complement each other. This subcategory is an expansion of Martinec and Salway's (2005) equal independent category. Martinec and Salway limit the equal independent status to cases where the information provided by both the image and text exists in "parallel and does not combine to form part of a larger syntagm" (2005, p. 343). However, in the analysis of the tweets, cases of modes presenting independent information which interacts to form a deeper meaning were identified. In such tweets, each mode conveyed distinct information that enriched the overall meaning without either being subordinate to the other as illustrated in the tweet in Figure 6.2.

Figure 6.2

Complementary Independent Status



The tweet text poses a question about whether RAO (Raila Odinga) has commented on the Kianjokoma brothers' case. The image, a screenshot of Raila's past tweet, shows his reaction to a case of police brutality in America. The text and visual in this tweet each convey distinct information about two separate issues: the silence from Raila regarding the Kianjokoma brothers' case and a call for justice for George Floyd in the American case. The two are independent in meaning and each can be interpreted separately. However, they are complementary as they both work together to highlight a contrast and create a specific meaning. The juxtaposition of the two, silence on a local case while the American case was addressed, sends a message about Raila's perceived selective attention to issues.

Additionally, interaction between the text and image produces a deeper meaning of criticizing the Kenyan political leader for responding to international issues while being silent on similar injustices within the local context. This aligns with Aiello (2012) argument that placing two resources side by side can evoke a third effect on the viewers, driven by implicit comparison. The image further complements the text by providing evidence of the

leader's engagement, hence strengthening the tweet's critique which would not have been clear if either text or image existed in isolation.

The existence of complementary independent status at 24 percent, suggests that in nearly a quarter of the tweets, the texts and visuals remain autonomous in meaning while operating in thematic alignment. This indicates that in multimodal tweets, texts and visuals carrying different meanings are combined to create a deeper meaning. Moreover, it suggests multimodal flexibility where different multimodal resources can work together without being tightly integrated.

The equal status, both complementary interdependent and complementary independent, is an indicator of tweets crafted in a way that relies on the combined effect of texts and visuals to create a holistic meaning. The high prevalence of the status in the corpus (88 percent), suggests that in most of the tweets, all the modes used are meaningful components that contribute to the overall message. This indicates a balanced approach to the use of communication modes in protest tweets.

6.2.3 Unequal Visual Subordinate Relations

This status occurs where the text carries the core message of the tweet while the visual supports that message by providing a context or visual evidence but does not convey any new or autonomous meaning as illustrated in Figure 6.3.

Figure 6.3

Unequal Visual Subordinate



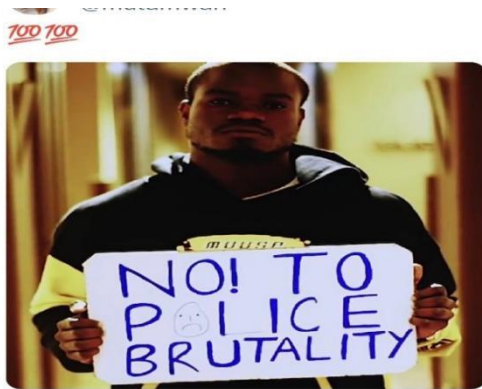
The tweet text describes an incident where police shot one person as they dispersed angry residents at Kianjokoma. It also tags media outlets and public figures while linking the event to the anti-police brutality protests using the hashtags. The text provides both information and context. On the other hand, the visuals are a photograph of the shot person and that of a bullet casing. These images support the text by visually providing evidence, but they do not provide any new information beyond what is in the text. Therefore, in the tweet, the text is dominant while the image is subordinate.

6.2.4 Unequal Text Subordinate Relations

This status is achieved when the image conveys the core message while the tweet's text is simply a commentary of the image. An instance of this status is exemplified in Figure 6.4.

Figure 6.4

Unequal Text Subordinate Relations



In Figure 6.4 the tweet's text has the '👍👍' emojis which express agreement but does not provide a detailed message on its own. The visual communicates a clear stand against police brutality hence carries the core message of the tweet. The text in the tweet cannot be understood independent of the visual. Visually driven tweets had a low frequency, at 5 percent, implying very few tweets relied on visuals to convey their main message.

In tweets where this status occurs, the image has strong visual cues or is self-explanatory, with the text being a caption or commentary of the visual. The low occurrence of tweets with the unequal status suggests that tweeters in this protest discourse aim for a multimodal balance, where no single mode is overwhelmingly important than the other.

6.3 Intermodal Logico-Semantic Relations

Table 6.2 provides a summary of the intermodal logico-semantic relations found in the corpus.

Table 6.2

Distribution of Logico-Semantic Relations in the #JusticeForKianjokomaBrothers

Dataset

Logico-Semantic Relations	Sub-Types	Total (N-496)	Percentage
Elaboration	• Content Elaboration • Contextual Elaboration • Emotional Elaboration • Illustrative Elaboration	203	40.9
Extension	• Additive Extension • Clarifying Extension • Illustrative Extension	93	18.8
Enhancement	• Causal Enhancement • Emotional Enhancement	65	13.1
Contradiction	Contradiction	5	1
Multiple Relations	Elaboration, Extension and Enhancement	130	26.2

Table 6.2 shows a predominance of elaboration relations at 40.9 percent followed by a significant number of tweets with multiple logico- semantic relations at 26.2 percent. Tweets with extension relations stand at 18.8 percent, enhancement at 13.1 percent and lastly a low occurrence of contradiction relation at one percent. The logico-semantic relations are further expounded in sections 6.3.1 to 6.3.5.

6.3.1 Elaboration

This relationship holds when one mode does not necessarily provide new information but provides more details on the information already communicated by the other mode (Chan,

2011; Martinec & Salway, 2005). The visual might provide additional details, explanations or specifications on the tweet's text or vice versa. By comparison, this relation resembles ideational concurrence (Unsworth, 2007) and comparative logical relations (Liu & O'Halloran, 2009). However, unlike Martinec and Salway's (2005) model which has two subtypes (exposition and exemplification), the current study identifies four subtypes; namely content, contextual, emotional and illustrative elaboration. The analysis combines both the grammatical and discourse based analytical approaches, which entail looking at the type of cohesion that generates semantic ties of elaboration between the meanings communicated by the textual and visual resources. Subsequent sections discuss each of the elaboration subtypes that emerged from the data.

a) Content Elaboration

This elaboration subtype relates directly to the subject matter of the message. It occurs when the visual or text adds more information or detailed description, expanding the content posted in the other mode. Figure 6.5 illustrates content elaboration.

Figure 6.5

Content Elaboration



In Figure 6.5, the tweet text has the statement '*the last moments of the Embu Kianjokoma brothers by @StandardKenya.*' The visual is a screen shot of a newspaper report providing

a detailed chronological account of the events leading to the disappearance of the brothers and the eventual confirmation of their deaths. The visual elaborates on the textual message by giving detailed information that helps the reader understand the subject on the ‘last moments of the brothers’ mentioned in the text. This subtype is similar to exposition (Martinec & Salway, 2005). But unlike Martinec and Salway’s exposition, content elaboration in tweets does not necessarily have visuals and tweet texts presenting the same level of generality. In most cases the subject matter is expanded on, creating different levels of generality.

Content elaboration creates a tweet message that is rich and deep. The presence of this relationship implies that one of the modes in the tweet is used to expand on the core content expressed in the other mode, providing a fuller explanation of the message. This shows the tweeters’ commitment to ensuring the audience fully understand the nuances of the protest discourse. Tweets with this relation aim to offer a comprehensive account of the information being communicated.

b) Contextual Elaboration

Contextual elaboration occurs when one mode provides additional context or background information that the other mode does not have. This information helps explain the message in the other mode as illustrated in Figure 6.6.

Figure 6.6

Contextual Elaboration

Fuck the rogue police workforce
[#JusticeForKianjokomaBrothers](#)
[#JusticeforEmmanuelandBenson](#)
[#LetsNduthis](#)



2:01 PM · 13 Aug 21

The tweet text in Figure 6.6 expresses a strong condemnation of the police and a call for justice. The visual is a photograph of the two coffins with a portrait of the two young men, indicating a funeral setting. The photograph elaborates on the textual condemnation by showing a powerful representation of the consequences of police actions, that is, loss of two young lives. The image adds a crucial context to the tweet text, which helps the reader understand why the strong emotions are expressed in the text. The tweet text and visual together create a tweet that legitimizes the CTA.

Contextual elaboration helps the reader understand the situation, setting or circumstances related to the message expressed in the other mode. This relation signals that the tweets are focused on giving the audience a clear understanding beyond the message stated in one mode. Contextualization in the corpus places the messages within the broader struggles against injustices. It also helps provide key information that enhances the relevance of the message being communicated.

c) Emotional Elaboration

This subtype of elaboration involves one mode amplifying or reinforcing the emotional tone expressed in the other. Figure 6.7 presents an example of emotional elaboration in a tweet.

Figure 6.7

Emotional Elaboration

#JusticeforEmmanuelandBenson
@Shikohkihika: I see her pain!
Words fail me !
May the killers never know peace!
#JusticeForKianjokomaBrothers



The tweet text in Figure 6.7 expresses the tweeter's empathy for the mother's pain, a loss of words, a curse upon the killers and a demand for justice. The image of a mourning mother visually depicts her profound grief and despair. The text elaborates on the visual by offering a verbal emotional reaction to the mother's pain. The text enhances the emotional impact of the message by adding an emotional layer that underscores the depth of the mother's grief. The visual depiction of the mother's intense emotions combined with the verbal emotional response and condemnation of the killers, creates a tweet that has a moral and emotional stance, making the appeal for justice more compelling.

Emotional elaboration focuses on intensifying the emotional impact of the message to achieve emotional engagement and persuasion. The presence of this type of elaboration in the corpus implies that the tweets are focused on evoking strong emotional responses from the audience. By elaborating on the emotional aspects of the message, the tweets are likely to connect with the audiences' emotions of empathy, sadness and anger helping emphasize the cry for justice. Emotional elaboration also suggests that the tweets are designed to emotionally resonate with the audience, making them not only understand the message but also feel the gravity of the situation. Emotionally charged content often influences people to participate in collective actions (Kharroub & Bas, 2016), which drives the activism. Therefore, emotional elaboration can serve to motivate action on the part of the audience.

d) Illustrative Elaboration

This elaboration subtype involves one mode providing a visual or verbal example that illustrates the point made in the other mode. The illustration helps to reinforce or concretize the message expressed. An instance of illustrative elaboration is exemplified in Figure 6.8.

Figure 6.8

Illustrative Elaboration

EXTRA JUDICIAL killings is becoming rampant in this country. It is time for JUSTICE! 😊
#JusticeForComradeEmmanuelAndBen
#JusticeForKianjokomaBrothers



The tweet text in Figure 6.8 gives general information about an increase in extrajudicial killings in Kenya and calls out for justice. The visual is a screenshot of a news report about the Kianjokoma brothers' case, that insinuates police involvement in the deaths. The visual provides an example of extrajudicial killing that helps concretize the point made in the tweet text. This type of elaboration is like the exemplification sub-type (Chan, 2011; Martinec & Salway, 2005) and illustration relation in Morin et al.'s (2019) categorization. The visual and text exhibit different levels of generality, with one mode expanding on the information by citing a specific example.

Illustrative elaboration is used for visualization and reinforcement of the message. This type of relation implies that tweets in this category use visuals to illustrate what the text describes. The use of illustrative elaboration can help make abstract concepts such as injustice more tangible and relatable. By showing concrete examples that align with the text's content, illustrative elaboration helps reinforce the message making the CTA memorable and impactful.

The use of content, contextual, emotional and illustrative elaboration in the corpus reflects a multifaceted approach to the construction of tweets. The subtypes expand on the content, contextualize the messages, engage the emotions and visually illustrate the concepts. This combination provides the audience with a holistic understanding of the issues communicated. It also creates tweets that resonate on the rational, emotional and visual levels. This communication strategy can be effective in protest discourses, where an informed and emotionally engaged audience is paramount to sustaining the CTA.

6.3.2 Extension

This logico-semantic relation occurs when new but related meanings (additional to those in one mode) are represented in the other mode (Chan, 2011; Martinec & Salway, 2005). The new information provided extends the message, offering additional perspectives or further details. This relation has similarities with Morin et al.'s (2019) complementary category. Extension is achieved through adding more details, clarifying the message and providing specific examples.

a) Additive Extension

This occurs when the visual adds extra information that is complementary but not necessarily the same as the content already provided in the other mode. An instance of additive extension is exemplified in Figure 6.9.

Figure 6.9

Additive Extension



The text in the tweet criticizes the police for going against their mandate of offering protection, offers condolences to the victims and calls for justice. The attached media is a video of a spoken word poetry that conveys a message about the suffering of the youths and other consequences of police brutality. The video broadens the scope of the textual information by adding new information that exposes police brutality and other police vices as a systemic problem. The combination of the text and video conveys a message that shows the Kianjokoma incident is not an isolated one and youths in society are facing deeper problems in their encounters with police. The depth of the tweet makes the CTA more compelling and relatable to the audience. This relation is like inter-semiotic additive relation (Liu & O'Halloran, 2009) and the concept of augmentation (Chan, 2011), where one mode adds new information to the other.

The presence of additive extension in the corpus suggests that the use of different modes in the tweets is aimed at expanding the message conveyed by the other mode. The addition of new but related information can help provide a more holistic view of the issues being communicated. It further indicates the use of a communication strategy where the tweeters use each mode to provide additional layers of meaning.

b) Clarifying Extension

In this subcategory, the text or visual extends the message in the other mode by providing an explanation, a clarification or further details that help make the message clearer. Figure 6.10 is an example of extension through clarification.

Figure 6.10

Clarifying Extension

Good morning to everyone except
this gentleman here, who is so out
of touch with humanity.
[#JusticeForKianjokomaBrothers](#)
[#JusticeforEmmanuelandBenson](#)



In Figure 6.10, the tweet text is a criticism of the civil service. It calls for its abolition due to their perceived colonial attitudes and inhumanity. The hashtags link the text to the case of the Kianjokoma brothers. The message suggests the tweeter's deep frustration with the civil service. The visual is a screenshot from NTV Kenya, featuring the then PS in the Ministry of Interior speaking. The caption in the visual is a statement about curfew enforcement where the PS says that people who cannot be home by 10.00 p.m. are the problem, and not the police. The screenshot provides new information that shows the attitude and insensitivity of the PS, underscoring the perceived lack of accountability and inhumanity of civil servants. The visual extends the message by providing background information that clarifies why the tweeter expressed the criticism in the text, helping to contextualize the textual message. In the tweet, the text provides a critical and emotional perspective which the visual extends through contextualization. Together they create a powerful justification for systemic reforms within government institutions reinforcing the call for justice.

Clarifying extension indicates the use of one mode to make what the other mode is communicating clearer. The presence of this type of extension suggests that the tweeters focus on precision and clear communication to ensure the audience grasp the intended meaning.

c) Illustrative Extension

This involves one mode providing a specific example to extend the information provided in the other mode. An instance of illustrative extension is exemplified in Figure 6.11.

Figure 6.11

Illustrative Extension

We must ensure that
justice is served @IPOA_KE.
#JusticeForKianjokomaBrothers
#igmustgo
#JusticeforEmmanuelandBenson
#RestInPeace



In Figure 6.11, the tweet text communicates a commitment to seeking justice that incorporates IPOA Kenya into the conversation using the mention feature. It also includes

a demand for the IG of Police to resign, along with a condolence message expressed through hashtags. The visual element, a poster for a candle-lighting vigil, symbolizes a silent protest for injustices. The visual complements the textual message by illustrating one specific way of pursuing justice. It extends the general statement in the tweet by providing a concrete example of justice-seeking actions. The combination of text and visual resources creates a cohesive and expanded message, demonstrating what justice entails and enhancing the impact of the call to action.

Illustrative extension points to a high degree of alignment between the image and the text. It demonstrates that images in the tweets are not mere decorative elements, but resources to help the audience visualize the concepts, events or emotions expressed in the text. Since illustrations make an argument more tangible and relatable, this strategy can help enhance the persuasiveness of the CTA in the tweets.

The use of additive, clarifying and illustrative extension in the corpus suggests that the texts and images in the tweets work together to construct meaning. Tweets with extension relations show that images are used to introduce additional information that goes beyond the text. This points to a collaborative multimodal strategy, where both the text and visual contribute distinct yet interconnected pieces of information. It can also be a strategy to overcome Twitter's character count limit, by distributing the information to be communicated between the two modes. The use of extension can further be interpreted as a strategy to increase audience comprehension and engagement. Through extension, the tweets are likely to sustain attention and help the audience understand the issue of police brutality from multiple angles. The different forms of extension also help the tweets cater to various audience needs. This multimodal strategy allows the tweet to engage both users who prefer additional information and those who are visually oriented or influenced by illustrative examples.

6.3.3 Enhancement

This logico-semantic relationship involves one mode enriching or intensifying the meaning expressed in the other mode by adding information on circumstances such as cause, manner, time, place or condition (Martinec & Salway, 2005). In the current corpus,

enhancement is achieved through adding information related to the cause or reason and amplifying the emotional intensity of what is expressed in the other mode. The two subtypes of enhancement identified in the tweets are causal and emotional enhancement.

a) Causal Enhancement

This type of enhancement occurs when the image or text provides reasons or justifications for the actions, stance or events described in the other mode. An example of causal enhancement is illustrated in Figure 6.12.

Figure 6.12

Causal Enhancement



The tweet text in Figure 6.12 calls on the audience to resist police brutality, expresses solidarity through raised fist emojis, and links the message to the Kianjokoma brothers' case using hashtags. The accompanying image depicts a grieving mother surrounded by mourners, serving as a visual representation of the impact of police brutality on the immediate family and the wider community. Through the photograph, the tweeter invites readers to witness the human cost of such violence. The image visually reinforces the

necessity for redress and pursuit of justice, amplifying the stance conveyed in the text. Together, the text and visual establish an implicit cause-and-effect relationship, delivering an emotionally charged and compelling call to action.

b) Emotional Enhancement

This subtype of enhancement occurs when one mode has information that helps to amplify the intensity or degree of emotions elicited in the other mode. The instances of enhancement in the current corpus are dominated by the emotional enhancement subtype. An example of emotional enhancement is illustrated in Figure 6.13.

Figure 6.13

Emotional Enhancement

Tunawazika leo. R.I.P 🥹🥹🥹
#JusticeForKianjokomaBrothers
#JusticeforEmmanuelandBenson
#justiceformuturaandnjiru



In Figure 6.13, the text ‘*Tunawazika leo* (we are burying them today). *R.I.P* 🥹🥹🥹’ conveys a sombre tone, reflecting the sadness surrounding the brothers' final farewell. The tweeter expresses grief over the events of the day. Accompanying the text, is a short video showing the brothers during a joyful moment in their lives. The video contrasts sharply with the sorrowful context described in the text, heightening the emotional impact of the tweet. By revisiting a happy memory, the video emphasizes the tragedy of their untimely

deaths and reinforces the sentiment that they did not deserve such fate. Together, the text and video create a deeply emotional message, strengthening the call for justice by amplifying the tweet's emotional resonance.

The corpus exhibited emotional and causal enhancement but conspicuously lacked other types of enhancement such as temporal, spatial and manner which have been identified in other contexts (Chan, 2011; Liu & O'Halloran, 2009; Martinec & Salway, 2005). The absence of these enhancement subtypes suggests that the tweets prioritize conveying emotional and moral appeals over providing detailed contextual information, such as when, where, or how events occurred. The emphasis on causal and emotional enhancement reflects the focus of protest tweets on eliciting emotional responses and presenting moral justifications. By highlighting cause-effect relationships, the tweets aim to persuade the audience on the need for redress against police brutality.

Emotional enhancement further amplifies the impact of the messages by evoking strong emotional reactions, making the issue of police brutality feel more personal and engaging. This approach can motivate the audience to act or express solidarity with the cause. Additionally, enhancement relations highlight the strategic use of texts and visuals to strengthen the persuasive power of the tweets. This aligns with the principles of MCDA, which emphasize how different modes are employed to achieve specific communicative goals, shaped by the context of the message. In the context of hashtag activism, where mobilizing support is a key objective, the use of enhancement effectively increases the persuasive impact of the tweets.

6.3.4 Contradiction

This relationship occurs when the different modes in the tweet convey conflicting or opposing meanings. Tweets with this relationship are not common in the dataset contributing to one percent of the entire corpus. Figure 6.14 presents an instance of contradiction.

Figure 6.14

Contradiction

Hey @DCI_Kenya Hope now you
are happy

#JusticeForKianjokomaBrothers



The text of the tweet in Figure 6.14 is a statement directed to the DCI, stating that they should be happy with the outcome of the police actions. The tone of the text is sarcastic and carries an implied criticism of their (in)action as an investigative body. It also suggests the frustration caused by the grief. The two images attached are funeral photographs, with one showing the portrait of the brothers with the casket visible and the other of a grieving mother. The photographs depict tragic and sorrowful events, which starkly contrast with the expectation of happiness stated in the text.

The juxtaposition of the notion of happiness and the visual representation of the reality of death and mourning creates a contradiction that highlights the irony and sarcasm inherent in the tweet text. The combination creates a tweet that criticizes the investigative body while underscoring the gravity of the loss of lives. It also brings out the perceived failure of the authorities in performing their duties, highlighting the emotional disconnect between the authority's perceived stance and the suffering brought by the deaths. This helps persuade and mobilize public sentiments against police brutality making the call for justice more compelling.

Contradiction in the corpus is used to achieve a deliberate effect. The relation serves as a conscious rhetorical strategy to highlight the evils and hypocrisy. It helps draw attention to the irony, hypocrisy or paradox on how the government was handling the situation. The low occurrence of tweets with the contradiction relation could indicate that protest tweets aim for coherent and unified messages between the texts and images. It suggests that tweeters considered the seriousness of the subject matter and intentionally avoided contradictions to ensure the messages were direct and clear.

6.4 Multiple Logico-Semantic Relations

In the corpus, 26.2 percent of the tweets exhibited multiple intermodal relations within a single tweet. These tweets have more than one logico-semantic relation between the text and image(s). This is a unique category of relations as it has not been identified in other type of discourse. The relations were exhibited across tweets regardless of the number of visuals attached to text.

For instance, the dataset had tweets where a single image had more than one logico-semantic relation with the text as illustrated in Figure 6.15.

Figure 6.15

Elaboration and Enhancement in a Tweet with One Visual

Evertime I see @PoliceKE I see a
grim reaper 🗡️

#JusticeForKianjokomaBrothers
#JusticeforEmmanuelandBenson



In Figure 6.15, there are two types of logico-semantic relationships between the text and visual: illustrative elaboration and emotional enhancement. The tweet text is a metaphorical statement comparing the Kenyan police to a grim reaper. It draws a direct comparison between the police and the grim reaper (an agent of death) to communicate the tweeter's perceived danger and lethal nature of the Kenyan police. This perception makes the tweeter run away as illustrated by the man running emoji. The image illustratively elaborates on the text by visually depicting the grim reaper. The symbolic layer added by the image serves to elaborate on the text's concept by visually exemplifying the grim reaper as a scary image holding a scythe. The alignment between the text and the visual aids in making the metaphor clear, memorable and impactful.

Additionally, the visual of a scary looking grim reaper amplifies the emotional tone of the text by invoking a sense of fear and danger. The image serves to both elaborate by illustrating the grim reaper and heighten the emotional intensity of the claim that police are agents of death. The combination of the text and visual in the tweet conveys a message that the police are perceived as perpetrators of death. The multimodal ensemble evokes a strong emotional response towards the police. This message, about the perceived threat posed by the police, helps solidify the urgent need for justice for the victims, further legitimizing the protests. Together, they make the tweet's message more impactful.

In other cases, tweets with two images also exhibited multiple logico-semantic relations as illustrated in Figure 6.16.

Figure 6.16

Extension, Elaboration and Enhancement in Tweets with Two Visuals



The logico-semantic relations between the tweet text and the accompanying visuals are those of extension, elaboration and enhancement. The text calls for solidarity, expresses determination in the face of adversity through an emoji sequence, conveys gratitude to those speaking out, and demands justice using the hashtags. The first visual, a raised fist symbol universally associated with resistance and solidarity, extends the textual message by linking it to its symbolic ties with global movements against oppression. By incorporating this symbol, the tweet situates its call for justice within a broader historical and global context of resistance, reinforcing the demand as part of a universal fight for human rights. The words 'Stop Killing Us,' inscribed on the wrist, directly addresses systemic violence, particularly police brutality in this case.

The second visual, a screenshot of a newspaper report, provides a detailed timeline of the brothers' final moments. This visual elaborates on the textual message by offering contextual background about the events leading to the deaths, thereby grounding the call

for justice in reliable information. The inclusion of this report lends credibility to the tweet's message. Together, the raised fist and the newspaper report enhance the emotional resonance of the tweet by intensifying the sense of loss and injustice. The timeline, which implicates police culpability, and the phrase '*Stop Killing Us*' evoke anger and amplify the determination for justice expressed in the text. This emotional enhancement strengthens the reader's connection to the cause.

The combination of text and visuals creates a cohesive and powerful message of solidarity, resistance, and an urgent demand for justice. Through the relations of additive extension, contextual elaboration, and emotional enhancement, the synergy between the modes makes the tweet's message evocative, compelling, and credible, effectively motivating the audience to engage with the cause.

The corpus also had tweets with more than two visuals that exhibited multiple logico-semantic relations as illustrated in Figure 6.17.

Figure 6.17

Extension, Elaboration and Enhancement in Tweets with more than Two Visuals

It's 7th August 2021, Kenya recalls what Terrorism can do. The killing of Emmanuel and Benson Ndwiga by police is enough Terror. Terror is Terror, whether by AlQaeda or by state Government department

[#JusticeForKianjokomaBrothers](#)
[#JusticeforEmmanuelandBenson](#)
[#JusticeForNdwigas](#)



The tweet text in Figure 6.17 links the date to a significant terrorism event (the 1998 American Embassy bombing in Kenya) and draws a parallel between terrorism and the current police brutality. It emphasizes that terror can come from state actors such as the police or non-state actors like the Al Qaeda group. The attached images include a portrait of the brothers with halos, symbolizing their innocence. There is also a photograph of the aftermath of the 1998 American Embassy bombing in Kenya, representing the consequences of terrorism. Another image shows the aftermath of the 2013 Westgate Mall attack, highlighting yet another instance of terrorism in Kenya. Additionally, a photograph of the then president of Kenya is included. All the images illustrate the themes of loss of innocent lives, destruction and authority.

The first three visuals elaborate on the textual information by visually depicting the consequences of terror both state-induced and non-state induced. The portrait of the brothers with halos, represents consequences of police brutality on innocent victims. The visual serves as a form of illustrative elaboration, by visually representing the individuals mentioned in the text. The halo edit extends the representation, by presenting the brothers as innocent victims. The images of the collapsed buildings also elaborate on what terror can do. The photograph showing the aftermath of the 1998 US embassy terror attack illustrates what Kenya remembers about 7th of August, elaborating on the message in the text. The visuals provide additional details by visually depicting real life impacts and symbols of terror.

The visuals also emotionally enhance the message by providing visual evidence that adds onto the emotional and rhetorical impact of the text's message. The visuals of the aftermath of the two major terrorists' attacks in Kenya is a stark reminder of the pain and destruction brought about by terror acts. These two terror attacks are considered historical national terror traumas, evoking strong emotions related to terror tragedies in Kenya. Juxtaposing those visuals with the edited photograph of the victims of police brutality deepens the reader's emotional response and understanding of the message. The analogy between the terror attacks and police killings in the tweet text can stir both grief and anger in the reader, serving to intensify the emotional weight.

The image of the president extends the information by bringing in the aspect of state accountability. The president represents the highest authority in the land; hence the use of his photograph suggests that those in power should bear responsibility for the violence. The use of the image can also suggest that the president, as a symbol of ultimate authority, is complicit in the state system that allowed the killings.

The visuals elaborate, extend and enhance the meaning communicated by the text to create a powerful message on the condemnation of police brutality as a form of terror. This complex combination strengthens the narrative that police brutality should be treated the same as terrorism, with the head of state implicated and held accountable for the systemic issues that lead to such atrocities. Together, they create a powerful message that engages the readers emotionally and in depth, ultimately creating a compelling call for justice.

The presence of a substantial number of tweets (26.2 percent) with more than one logico-semantic relationship at a time in the corpus, reveals several things about the nature of communication on Twitter. Firstly, it underscores the complex layered nature of meaning-making on Twitter. Considering that communication on Twitter is highly dictated by the platform's techno-discursive design, tweeters must find a way of communicating within these restrictions. Combining multiple relations can be interpreted as one way of simultaneously expressing various dimensions of an idea within the space restrictions.

Secondly, having multiple relations in a tweet is a strategic use of multimodal resources which helps convey a lot of information using minimal resources. For instance, the tweet in Figure 6.17 serves to remind the readers about major terrorist attacks, illustrate the consequences of terrorism and police brutality, equate police brutality to terrorism, demand for justice, connect the reader to the victims of police brutality, stir up emotions and hold the state accountable. All these have been achieved using a short tweet text and four visuals.

Thirdly, the multiple relations in the tweets may serve to intensify the emotional, persuasive and informational power of the tweets. These are crucial aspects, especially in hashtag activism, as they can help mobilize audiences more effectively. Lastly, the multiple relations reflect the flexibility and richness of digital discourses, where the interplay between text and visuals cannot always be reduced to a single relationship. It emphasizes

on the fluidity, dynamic and interconnectivity of multimodal resources in digital discourses.

6.5 Summary of the Chapter

This chapter has provided a detailed analysis of intermodal relations in tweets, demonstrating how the textual and visual modes interact to shape meaning in a multimodal tweet. The discussion focused on both status and logico-semantic dimensions. The examination of the status relations revealed ways in which the modes either complement each other or take the lead in the meaning-making process. Equal relations were predominant, suggesting that visuals and texts often work together to contribute to the overall meaning of the tweet. In cases where one mode was subordinate to the other, the relation indicated a clear hierarchy in meaning-making. The discussion on the logico-semantic relations of elaboration, extension, enhancement and contradiction revealed how the modes interact to deepen, expand or intensify the message conveyed. The presence of multiple logico-semantic relations in a substantial number of tweets, underscores the complexity of meaning-making on Twitter discourse. The chapter provides valuable insights into how modes interact, offering an understanding of the interplay between textual and visual resources in tweets. This being the final analytical chapter, the next chapter presents a summary of the findings, conclusions and recommendations.

CHAPTER SEVEN

CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

This chapter presents the summary of findings, conclusions, recommendations, and suggestions for further research derived from the investigations into multimodality in hashtag activism against police brutality in Twitter discourse. The study aimed to account for how Kenyans on Twitter combined different semiotic resources to create meaning in protest tweets. The objectives were to: analyse the meaning potentials of the textual resources in anti-police brutality hashtag activism tweets in Kenya; examine the meaning potentials of the visual resources in anti-police brutality hashtag activism tweets in Kenya; and explore the relationships between the visual and textual resources in anti-police brutality hashtag activism tweets in Kenya. This chapter summarizes the key findings from each objective and draws conclusions on how the interactions of semiotic modes contribute to meaning making in digital discourses. Additionally, recommendations and broad implications derived from the findings on multimodality in digital activism discourses are offered. The chapter ends by making suggestions for future research on multimodality in user generated digital discourses.

7.2 Summary of Findings

This section presents a summary of findings in response to the three research questions. The first was: What meaning potentials are communicated through the textual resources used in anti-police brutality hashtag activism tweets in Kenya? The findings indicate that textual resources in the hashtag activism tweets include tweet length, orthographic features, lexical features, hashtags, mentions, hyperlinks and emoji. Collectively, these features prioritize brevity, emotional intensity, and thematic coherence to effectively construct compelling tweet texts.

Tweets are concise, averaging 153.4 characters, reflecting a deliberate effort to enhance clarity, immediacy, and engagement. Orthographic features such as unconventional punctuation, nonstandard capitalization, and spelling variations amplify emotional intensity and emphasize key messages. These elements convey uncertainty, encourage reflection, and reinforce the emotional and thematic weight of the tweets.

Lexical resources are informationally dense, dominated by nouns and verbs. There is a low occurrence of conjunctions, indicating an avoidance of complex sentence structures. Nouns highlight central themes, identify social actors, and support identity construction. Verbs convey action, urgency, agency, and resistance, while adjectives frame participants within the discourse. Pronouns play a pivotal role in fostering shared identity, enhancing social categorization, and engaging audiences emotionally. They help construct a collectivist narrative, portraying protestors as vulnerable citizens while framing the police and government as external threats, thereby mobilizing public participation. These lexical choices contribute to a coherent, emotionally charged narrative that legitimizes the movement and reinforces the CTA.

Hashtags serve dual purposes, as technical affordances for topic marking and as meaning-making tools. Main hashtags personalize victims, mobilize collective action, identify key issues, and increase visibility, fostering a virtual community. Less frequently used hashtags act as metadiscourse markers, indexing intertextuality and linking the local movement to global ones. Mentions primarily function as engagement markers, increasing visibility, exerting accountability pressure on institutions and individuals, and publicizing demands. They symbolize protest and resistance while appealing for intervention and action. The sparing use of hyperlinks highlights a preference for user-generated content over external sources, reinforcing the centrality of personal commentary and self-expression in hashtag activism.

The relatively low occurrence of emojis reflect the serious nature of police brutality discourse. When used, emojis complement textual messages as emotive markers and tone modifiers, conveying nuanced meanings and reflecting the negative emotional valence of the discussion. Collectively, these textual resources facilitate the creation of a thematically coherent, emotionally charged, and impactful narrative. They humanize victims, critique authority, and mobilize collective action, enabling the tweets to foster solidarity and build a virtual community committed to social justice.

The second research question was: What meaning potentials are conveyed by the visual resources in anti-police brutality hashtag activism tweets in Kenya? The findings

demonstrate the use of diverse visual resources such as photographs, screen captures, posters, illustrations, drawings, memes, text images, videos and GIFs in the tweets. The visual resources convey rich meaning potentials that evoke emotions, humanize the victims, critique institutions, and mobilize collective action.

Photographs, particularly those depicting the victims, are the most prevalent visual resource. These images emphasize the victims' youth and innocence, evoking sympathy, anger, and a sense of injustice. Photographs of the grieving mother illustrate the human cost of police brutality by depicting profound grief and suffering. Event photographs, such as funerals and vigils, symbolize collective mourning and solidarity, while object photographs, like lit candles, convey themes of remembrance, hope, and resilience. Other images highlight perceptions of the power dynamics between police and civilians. Edited photographs enhance emotional depth through artistic filters, collages, and text overlays, which add layers of meaning and reinforce memorialization.

Illustrations serve as symbolic acts of protest, resisting erasure and calling for accountability. They help foster solidarity in the fight for justice. Graphics and memes critique police actions and visually represent the power imbalance between police and civilians, mobilizing public support. Social justice graphics align Kenyan activism with global movements, while drawings humanize past victims and frame police brutality as a systemic issue. Screen captures function as credible evidence, countering police narratives and shaping public opinion by sharing detailed information.

Text-based images extend Twitter's character limit, creatively communicating messages while adding emotional weight and authenticity. These images enhance the legitimacy and memorability of the protest discourse. Digital posters convey messages of justice, mourning, and community action, serving as public symbols of remembrance, communal grief and mobilization.

Videos in the corpus document real-time events, commemorate victims, construct narratives and engage viewers emotionally. Event videos expose systemic police brutality and its human cost, while artistic expression videos such as those featuring music or spoken

word, critique oppression and evoke shared suffering. Memorial and tribute videos humanize victims, fostering emotional connections with audiences, while testimonials amplify personal stories to emphasize the ongoing impact of police brutality. Meme videos offer ironic critiques of authority, highlighting societal hypocrisy.

GIFs, though minimally used due to the seriousness of the subject matter, reflect user emotions, such as surprise and disappointment, serving as social commentary on government inaction and police misconduct. Overall, the visual resources in the tweets are integral to constructing a cohesive, emotionally impactful narrative. They humanize victims, expose systemic issues, and galvanize collective action, reinforcing the power of hashtag activism as a tool for social justice.

The last research question was: What relationships exist between textual and visual resources in anti-police brutality hashtag activism tweets in Kenya? The analysis of intermodal relations between textual and visual resources in the hashtag activism tweets reveals a dynamic and layered interplay that enhances the overall communicative effectiveness of the messages. The relations are examined at two levels: status relations and logico-semantic relations.

In terms of status relations, four main types are identified: equal complementary interdependent, equal complementary independent, unequal visual subordinate, and unequal text subordinate. The most prevalent, equal complementary interdependent, highlights a preference for integrating text and visuals to create unified messages. In contrast, unequal text subordinate relation is the least common, suggesting that visuals are rarely used as the sole medium for conveying core messages. These findings underscore the balanced and collaborative role of textual and visual resources in digital activism.

For logico-semantic relations, four types of expansions are identified: elaboration, extension, enhancement, and contradiction. Elaboration, the most frequent relation, emphasizes on providing additional details or context to connect with audiences on rational, emotional, and visual levels. This relation includes four subtypes: content, contextual, emotional, and illustrative elaboration. Extension relation introduces new but

related meanings through additive, clarifying, or illustrative strategies, enriching the communication with multiple layers of meaning. Enhancement strengthens messages by providing reasons for actions or intensifying emotional impact, thereby amplifying the CTA. The rare contradiction relation, which presents conflicting meanings between text and visuals, functions as a rhetorical device to critique authorities.

A notable finding is the significant proportion of tweets which blend multiple logico-semantic relations. This multifaceted approach demonstrates the versatility of multimodal communication in digital activism, enabling the messages to engage audiences from multiple angles. This multimodal strategy enhances both memorability and the impact of protest messages.

The interplay of textual and visual resources in the hashtag activism tweets reflects a deliberate and sophisticated communicative strategy. By leveraging both status and logico-semantic relations, the tweets effectively convey their messages, engage audiences, and amplify calls for action. This demonstrates the power of multimodality in digital protest and its role in creating impactful, emotionally resonant and cohesive activist discourse.

7.3 Conclusions

This study demonstrates the role of multimodality in shaping hashtag activism discourse on Twitter, particularly in the context of police brutality protests. It reveals how the integration of textual, visual, and technological resources creates messages that amplify calls for justice and mobilize collective action. Several key conclusions emerge from the analysis.

To begin with, the study concludes that the technological affordances in interactive digital platforms are not mere system design features but also serve as semiotic resources. Twitter's technological features, such as hashtags and mentions, integrate seamlessly into the broader semiotic landscape, serving purposes beyond their technical functions. For instance, in this protest discourse, hashtags not only organized conversations but also humanized victims, mobilized collective action, and intensified demands for justice. Similarly, mentions facilitated accountability by directing discourse towards institutions

and officials. This illustrates that Twitter's design features are critical meaning-making resources, expanding the semiotic repertoire of digital protest discourse.

Equally significant is the insight that meaning making in multimodal Twitter discourse is inherently layered and multifaceted. The study shows that meaning does not emerge solely from individual textual or visual elements but from the dynamic interplay among multiple semiotic resources. Tweets often reflect simultaneous logico-semantic relationships, producing hypermodal communication that engages audiences through diverse channels. Hyper-modality here refers to the integration of various modes, each contributing distinctively to deeper and more dynamic meanings. This layered communication contrasts with more traditional forms like print media, where text and image typically form a single, fixed relation. On Twitter, the multimodal synergy enables message amplification, emotional resonance, and the promotion of collective action.

Another conclusion is that semiotic resources in multimodal digital discourse are interactive, adaptive, and shaped by the participatory nature of the platform. Users creatively repurpose resources to overcome constraints and fit specific communicative needs. Orthographic features are employed for tonal shifts, photos are edited to enhance emotional appeal, interactive tools transform Twitter into a participatory space, and screenshots or text-based images are used to bypass character limits. These practices illustrate how users innovate within platform limitations to expand the expressive potential of digital protest discourse

Additionally, multimodality on Twitter is geared towards communication that is both efficient and impactful. Users consistently favour brevity and conciseness, often sharing short texts paired with a single powerful image, despite the platform allowing longer content. This combination produces focused and compelling messages that quickly capture audience attention without overwhelming them. In the fast-paced digital environment, such communication strategies maximize visibility and virality, both of which are crucial for successful protest mobilization.

The study further concludes that multimodal combinations serve persuasive functions by appealing to both rational and emotional aspects of audiences. Emotional engagement, audience comprehension, and the legitimacy of calls to action emerge as central considerations in the choice of semiotic resources. Tweets often pair evocative visuals with concise, impactful text to sway public opinion, increase pressure on authorities, and foster solidarity. In this way, multimodal strategies enhance the persuasive power of digital protest discourse and contribute to the broader goals of social change.

A related conclusion is that textual and visual elements are often deployed in a complementary and integrated manner, rather than hierarchically. Tweeters appear to favour a synergistic approach where each mode amplifies the message of the other. This harmonized strategy helps frame issues, construct identities, express solidarity, and mobilize support. The result is a cohesive and impactful message where the whole exceeds the communicative power of individual modes, highlighting the strength of multimodality in digital protest spaces, even within Twitter's spatial and temporal constraints.

Importantly, this study underscores the need for a refined model of text-visual relations that better accommodates the complexities of digital discourse. While Martinec and Salway's (2005) model offers a foundational framework, its focus on static texts limits its applicability in dynamic, interactive environments like Twitter. This study proposes a refinement that incorporates platform affordances, recognizes greater granularity in intermodal subcategories, and integrates the emotional dimension of meaning-making. The analysis shows that equal complementary interdependent relations are dominant, and that multiple logico-semantic relations often occur simultaneously, a complexity the original model does not fully capture. This revised model thus provides a more comprehensive tool for analysing multimodal communication in digital protest discourse.

Taken together, these findings position Twitter as a powerful platform for transformative activism. Hashtag activism, as evidenced in this study, demonstrates the strategic use of semiotic resources to mobilize support, challenge authority, and amplify calls for justice. Through the deliberate combination of emotionally resonant visuals and context-rich textual resources, users craft persuasive narratives that drive engagement and social

change. As such, Twitter functions not merely as a communication platform but as an influential space for social justice movements to flourish.

7.4 Recommendations

The conclusions drawn from the current study on the use of multimodal resources in hashtag activism on Twitter carry implications for the study of multimodality in digital discourses from both theoretical and practical perspectives. These implications are significant to linguists and policy makers alike.

For linguists, this study recommends that:

1. The multimodal discourse analysis frameworks be expanded to include digital semiotics, to effectively analyse meaning making in digital discourses. This suggests a theoretical shift towards integrating technological affordances and dynamic visual resources such as emojis, videos and GIFs into multimodal studies of digital platforms. Linguists can develop models that account for how interactive and visual resources such as hashtags, mentions, hyperlinks, GIFs, memes and videos, function semiotically alongside linguistic resources.
2. They reconsider how meaning is distributed across modes, recognizing that visual resources may often carry substantial semiotic weight, especially in emotionally charged contexts like protest discourses. In multimodal digital environments, short texts rely on visuals and technical resources to complete or expand the meaning. Theoretical models need to account for the synergistic relationship between texts and visuals, rather than treating them as standalone components.
3. The intermodal relations in digital discourse be reconceptualized to account for the emotive function of textual and visual resources. Existing models overlook how emotion is multimodally communicated; this study's refined logico-semantic subcategories can inform the development of emotion-sensitive intermodal frameworks.
4. A multidisciplinary approach involving experts in machine learning, computer vision, NLP, and multimodality to develop automated tools for annotating images and videos. Given the complexity and scale of multimodal digital discourse analysis, there is a need for software that mirrors the capabilities of NLP and corpus tools in linguistic analysis.

- Such tools can support visual feature detection, object recognition, image-text relation analysis, video transcription, and semantic interpretation to streamline large-scale analysis and advance research in digital multimodality
5. Digital communication be prioritized as a key research area, given the role of platforms like Twitter in amplifying marginalized voices and shaping public discourse. Incorporating corpus analysis and multimodal frameworks into social media research can offer deeper insights into online interactions and ensure linguistic scholarship remains relevant to 21st-century communication practices.
 6. Universities incorporate digital multimodal literacy into their applied linguistics programs to equip students with the skills needed to critically engage with and produce complex messages in digital spaces. Given the multimodal nature of online discourse, such training is essential for preparing learners to navigate and contribute meaningfully to contemporary digital communication.

For policy makers, the study recommends that:

1. Institutions dealing with police reforms and police accountability recognize hashtag activism as a legitimate expression of public sentiment on police brutality. The National Police Service Commission (NPSC) and IPOA should invest in social media monitoring that includes both textual and visuals to better capture the symbolic layers of activists' messages. This can help them interpret public opinion and respond appropriately.
2. Government officials and institutions leverage social media platforms as tools for public consultation and feedback. The demands from widely supported hashtag activism campaigns should inform policy decisions especially on sensitive issues like police reforms and justice for victims of brutality.
3. Policy makers treat hashtag activism as a form of public accountability, where direct appeals to government officials through hashtags and mentions highlight urgent issues and demand responses to police misconduct.
4. In view of the power of social media in shaping conversations, social media companies should strengthen content moderation mechanisms that can flag misinformation without stifling freedom of expression or social justice advocacy. Such controls will

ensure the platforms remain reliable spaces for activism, while addressing concerns about misinformation and false narratives.

7.5 Suggestions for Future Research

Considering that multimodal studies, particularly in digital discourse, remain a relatively underexplored area, several potential avenues for further research emerge. This study lays the groundwork for deeper exploration of multimodality in hashtag activism across digital platforms.

One avenue of exploration is a comparative analysis of the semiotic repertoire used by different online communities. This study provided an overview of the semiotic resources employed in digital protest discourse by the KOT community. Future research could compare these resources with those used in other movements, such as the #EndSARS campaign in Nigeria. Such comparisons could illuminate cultural similarities and differences in meaning-making strategies within digital protest discourses.

Another direction involves investigating how the use and meaning of multimodal resources change over time. While the present study focused on static meaning potentials, a longitudinal approach could trace how multimodal resources evolve across different phases of a protest campaign. This would offer insights into how semiotic choices are appropriated, localized, and recontextualized as the discourse unfolds.

A related area for further inquiry is the examination of intra-modal relationships. Although this study concentrated on intermodal relations, the data reveals that individual modes also integrate multiple semiotic elements. For instance, videos often combine audio, image, and text, while posters and illustrations merge images with written language. Investigating how meaning is constructed within a single mode and how semiotic elements within that mode interact, can deepen understanding of meaning integration in digital discourse.

A further possibility lies in expanding beyond the case study approach used in this study, which focused on a single instance of police brutality. Future studies could examine a wider range of hashtag activism campaigns in Kenya, where citizens have mobilized around diverse political and social issues, including governance, constitutional reform, gender equality, mental health, the high cost of living, and extrajudicial killings. Analysing these

varied cases could yield broader insights into how multimodal resources function across different protest discourses.

Additionally, future research could test the model proposed in this study, which integrates lexical-grammatical and discourse-level analysis while incorporating the emotive function of semiotic resources. Applying this model to other digital protest contexts would help assess its adaptability and robustness. Such validation could refine and establish the proposed subcategories of status and logico-semantic intermodal relations.

Finally, another area worth exploring is the impact of multimodal resources on audience engagement, mobilization, and public opinion. Studies could examine interaction metrics such as likes, retweets, quotes, replies, and comments to identify which semiotic resources elicit the highest engagement. Audience-based research could also explore the emotional and cognitive responses these resources evoke. This would shed light on how multimodal strategies influence social mobilization and shape public perceptions of police brutality and broader social justice issues.

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APPENDICES

Appendix A: Coding Scheme for Message Types

MESSAGE TYPE	DESCRIPTION
CALL TO ACTION	• tweets with messages mobilizing the Twittersphere towards a specific action to further the cause. • They use a strong verb to prompt a certain action • Have a rallying call • Creates a sense of urgency and emphasis for collective power • Use of mentions strategically
INFORMATION SHARING	• Breaking news • Sharing facts and ongoing events about the issue • Spread awareness to get people invested in the issue • Giving updates about the issue
SOLIDARITY	• Messages acknowledging the injustice on the victims and their loved ones • Messages offering support and a sense of community mourning • Repeatedly using the victims' names to emphasize the loss • Expression of empathy and support • Offering a virtual presence • Messages that emphasize on shared humanity and a fight for justice
EXPRESSING EMOTIONS	• Tweets expressing a range of emotions such as grief and sadness, anger and outrage, frustrations and fear • Tweets with a message that has potential to trigger emotions • Direct criticism to the police, authorities and government

CRITIQUING AUTHORITIES	• Highlighting systemic injustices through sharing personal stories and other cases of police brutality • Messages that encourage protestors to put pressure on authorities • Sarcastic commentary criticizing the acts • Messages that hold authorities accountable
SOCIAL COMMENTARY TWEETS	• Messages that spark thoughtful conversations and encourage users to critically examine the complexities of the problem • Open-ended thought-provoking questions • Messages sharing different perspectives • Messages that offer suggestions, brainstorm solutions, advocate for policy change and support reform
CONDOLENCES AND MEMORIALIZATION MESSAGES	• Messages that serve to honour and remember the victims' lives • Messages expressing emotions such as grief, love respect for the departed • Use of tributary language, highlighting the deceased value • Messages with religious beliefs about afterlife • Messages offering comfort to the bereaved family • Messages expressing sympathy and acknowledging the loss.

Appendix B: Coding Scheme for Image Formats

Image Format	Description
Direct Photographs	• Images taken with a camera. • Should have a higher degree of capturing reality as it exists. • Images that have not been visibly modified.
Modified Photographs	• Photographs that have visibly been manipulated using software. • Images that have combined different photographs with other graphical elements such as texts. • Identify the different filters applied to the photograph.
Illustrations	• Sketches and computer-generated images that are communicating an idea or opinion.
Drawings and Paintings	• Images that have appear to have been drawn or painted.
Screenshots	• Images displaying the content of a computer, phone or television screen.
Text- based Images	• Images displaying written content.
Posters	• Artistic representations that are communicating some condensed information.
Memes	• Computer generated images or artistic expressions that use popular characters that can be easily identified and are communicating a message.

Appendix C: Video Classification Scheme

1. Watch the video and record the length.
2. Content origin: Is it a borrowed video or an original video? Borrowed are those videos that come from another source. For instance, a news clip from a media house or music from a music video. Original are the user generated videos that are either scripted, filming an event or interview.
3. Video genre: What content is the video presenting? Using a holistic judgement, classify the video into one of the following categories
 - i) Event – the video could either be borrowed or UGSV that captures a live event happening. State the type of event that is taking place. Is the video dated or not?
 - ii) Artistic expression videos- the videos could either be borrowed or scripted. What kind of artistic expression are they showcasing.
 - iii) Tribute videos- videos that combine photographs, footage and songs to celebrate or remember the deceased.
 - iv) Testimonials and personal stories- videos that capture people talking about their relationship and experiences with the deceased.
 - v) Meme videos- videos not directly related in content to the current case but have a message that is relevant to the message in the tweet.

Appendix D: Penn Treebank Tags

TAG	POS	TAG	POS
CC	Coordinating conjunction	CD	Cardinal number
RB	Adverb	DT	Determiner
RBR	Adverb, comparative	EX	Existential there
RBS	Adverb, superlative	FW	Foreign word
RP	Particle	IN	Preposition or subordinating conjunction
SYM	Symbol	JJ	Adjective
TO	to	JJR	Adjective, comparative
UH	Interjection	JJS	Adjective, superlative
VB	Verb, base form	LS	List item marker
VBD	Verb, past tense	MD	Modal
VBG	Verb, gerund or present participle	NN	Noun, singular or mass
VCN	Verb, past participle	NNS	Noun, plural
VBP	Verb, non-3rd person singular present	NNP	Proper noun, singular
VBZ	Verb, 3rd person singular present	NNPS	Proper noun, plural
WDT	Wh-determiner	PDT	Predeterminer
WP	Wh-pronoun	POS	Possessive ending
WP\$	Possessive wh-pronoun	PRP	Personal pronoun
WRB	Wh-adverb	PRP\$	Possessive pronoun

Note. Adapted from Twitter Part-of-Speech tagging for all: Overcoming sparse and noisy data by L. Derczynski et al. 2013, *Proceedings of International Conference on Recent Advances in Natural Language Processing*.

Appendix E: Formal Descriptions of Emojis in The Corpus

S. R	Emoji type	Formal Description of Emoji
1	 Loudly crying face	Open mouth and heavy tears streaming from closed eyes.
2	 Broken heart	A broken love heart
3	 Raised fist	Fist raised in the air. Modified with light skin, medium light skin, medium skin, medium dark and dark skin tones.
4	 Anxious face with sweat	A face with a pale blue forehead, open eyes, a small open frown, furrowed eyebrows and a single bead of sweat dripping down the cheek.
5	 Crying face	Face with raised eyebrows a slight frown and shedding a single blue tear from one eye.
6	 Dove of peace	A white bird (dove) facing left and flying as it holds a green sprig (olive branch) in its beak.
7	 Loudspeaker	Public address Loudspeaker
8	 Smirking face emoji	Face with a half-smile raised eyebrows and side looking eyes.
9	 Weary Face	Face with closed eyes, furrowed brows, a broad open frown and showing upper teeth and tongue.
10	 Enraged or pouting face	Red face with a frowning mouth and eyes and eyebrows scrunched downwards
11	 Candle	A white pillar shaped candle with a flame and wax dripping down its sides
12	 camera with flash	Classic camera shown with flash going off
13	 Face with rolling eyes	Face with a small, closed mouth with a frown and rolling its white eyes upwards.

14	 Pleading face	Face with furrowed eyebrows, a small frown and large puppy dog eyes.
15	 Hundred points	The number one hundred written in red and underlined for emphasis
16	 Unamused face	Yellow face with slightly raised eyebrows, a frown and eyes looking to the side.
17	 Frowning face	A face with simple open eyes and wide steep frown
18	 Red heart	A heart representation coloured red
19	 Pensive face	Yellow face with closed eyes, furrowed eyebrows and a slight flat mouth
20	 Sleepy face	Face with closed eyes, mouth slightly open and a blue snot bubble coming from its nose.
21	 Flexed biceps	An arm flexing to show its biceps
22	 man facepalming	A person covering their face with the palm of their hand
23	 Backhand index pointing down	Index finger pointing down
24	 Folded hands	Two hands firmly together
25	 Green heart	A heart representation coloured green
26	 Man running (dark skin tone)	A person running
27	 Victory hand	Two fingers held up on one hand making a V sign

Note. Adapted from  *Emojipedia*— *home of emoji meanings*    , by Emojipedia n.d. (<https://emojipedia.org/>). Copyright status unknown.

Appendix F: ISERC Approval

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INSTITUTIONAL SCIENTIFIC ETHICS REVIEW COMMITTEE

Ref: LU/APP/42/2023

9th August 2023

Jacquiline Ondimu
P. O. Box 3900-30100,
ELDORET

Dear Ms. Jacquiline Ondimu,

**RE: Multimodality on Twitter Discourse: A case of Kenyans on Twitter Community
Hashtag Activism on Police Brutality.**

This is to inform you that Laikipia University Institutional Scientific Ethics Review Committee (LU-ISERC) has reviewed and approved your above research proposal. Your application approval number is LU/APP/42/2023. The approval period is **9th August 2023 – 8th August 2024.**

This approval is subject to compliance with the following requirements;

- i. Only approved documents including (informed consents, study instruments, MTA) will be used;
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by Laikipia University Institutional Scientific Ethics Review Committee;
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to Laikipia University Institutional Scientific Ethics Review Committee within 72 hours of notification;
- iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to Laikipia University Institutional Scientific Ethics Review Committee within 72 hours;
- v. Clearance for export of biological specimens must be obtained from relevant institutions;

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Vision: A University for Valued Transformation of Society

Mission: To serve students and society through research, education, scholarship, training, innovation, outreach and consultancy



Laikipia University is ISO 9001:2015 and ISO/IEC 27001:2013 Certified



- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal and
- vii. Submission of an executive summary report within 90 days upon completion of the study to Laikipia University Institutional Scientific Ethics Review Committee.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely



Prof. Charles Nguta PhD

Chairman - Laikipia University Institutional Scientific Ethics Review Committee

Appendix G: Research Permit

 REPUBLIC OF KENYA Ref No: 586967	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION Date of Issue: 24/August/2023
RESEARCH LICENSE	
	
This is to Certify that Ms., Jacqueline Ondimu of Laikipia University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Uasin-Gishu on the topic: Multimodality on Twitter Discourse: A case of Kenyans on Twitter community hashtag activism on police brutality, for the period ending : 24/August/2024.	
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