



UNIVERSITY OF NAIROBI

DEPARTMENT OF JOURNALISM AND MASS COMMUNICATION

**FAKE IMAGES AND DISINFORMATION ON SOCIAL NETWORKING SITES:
CASE STUDY OF KENYA'S 2017 GENERAL ELECTION**

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**A Research project presented to the Department of Journalism and Mass
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the award of Master of Arts in Communication Studies**

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DECLARATION

I hereby declare that this project is my original work and has not been presented for a degree, diploma or certificate in this or any university before in any forum of any nature by any individual or group of individuals

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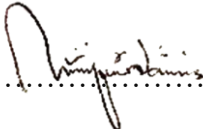
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LIST OF ACRONYMS

CA	Communications Authority of Kenya
MCK	Media Council of Kenya
NMG	Nation Media Group
NCIC	National Cohesion and Integration Commission
SG	Standard Group

ABSTRACT

This study investigated the dissemination of fake images on social networking sites during the 2017 electioneering period in Kenya and the resulting misinformation and disinformation. To achieve this purpose, the study identified how fake images disseminated on Facebook and Twitter were framed, represented, and interpreted. The research design was descriptive and involved both qualitative and quantitative methods. Facebook and Twitter were purposively selected due to their prominence among Kenyans and their extensive use of text and images. The research sampled 560 fake images disseminated on Facebook and Twitter between August 1, 2017 and October 30, 2017 using Google search engine and Foto Forensics software. The researcher further sourced for images from Kenyan communication and media regulatory agencies including the Media Council of Kenya (MCK), National Cohesion and Integration Commission (NCIC), and the Communication Authority of Kenya (CA) mandated to monitor both traditional and digital media platforms. Data was collected through direct observation and textual analysis and was analyzed contextually. The study found out the following; More fake images were published on Facebook (370) compared to 190 published on Twitter. Of the images published on Facebook within the same period, only 30% were authentic compared to 55% authentic images published on Twitter. This suggested that Facebook was the preferred social media platform for publishing fake images during electioneering periods in Kenya. Second, there was 90% use of fake images on Twitter between August and October 2017, against Facebook's 80%. Furthermore, 70% of the fake images were published on Facebook, compared to 60% published on Twitter. Last, 47% of the sampled fake images on Facebook had been contextually misrepresented, compared to 30% of the images on Twitter. The study concluded that a lot of images shared on social networking sites in Kenya especially during electioneering period were fake, sensationalised, and thus amounted to a discourse of disinformation. This study recommends a necessity to verify images found online before consuming, storing or sharing them especially on social networking sites. Sharing of wrong information deliberately or unknowingly is in contrary to ethical information dissemination practices.

CHAPTER ONE

INTRODUCTION

1.1 Background

Growth in Information Communication and Technology (ICTs) is quickly reorganizing communication, politics, culture and economy locally and across borders (Shen et al., 2019). This disrupts traditional role of media in society including; cultural transmission, education and entertainment, correlation and surveillance of the environment. The disruption has also affected approaches to news media content development and dissemination including; citizen journalism, multimedia convergence, and social networking systems. These are enabled by highspeed internet connection, robust ICT infrastructure and increased access to smartphones and computers. The downside is, however, unregulated news production and dissemination characterized by sensationalism, non-factual information, manipulation, misinformation, malice and propaganda (Gross, 2017). The unregulated new media space has been commercialized by companies and individuals seeking business opportunities or wishing to set agenda and influence public opinion (Berghel, 2017). Such interests have overridden media's core responsibility in the society, namely; to inform, educate, entertain and transfer culture. This calls for new approaches to curb the emerging challenge of fake news.

Growth in social media platforms such as Facebook and Twitter is quickly changing mode of media content dissemination and consumption. According to Martin (2018), news media consumers no longer have to wait for news bulletins to receive news or pursue important information. Social media is reorganizing media consumption with immediate dissemination of information or even as events unfold. Facebook for instance is the main source of information with over 2 billion users worldwide on a daily basis receiving breaking news from activated news feeds. Martin (2018) reports a survey

where a half of respondents admitted to have received breaking or latest news from social media before the traditional media stations. They see these news on their feeds and when interested, click on the internet sites to read more on the same. As such, more than half of news readers on the internet have come from social media. The problem, nonetheless, is that the authenticity of the news carried in these platforms is not subjected to media and communication gatekeeping. Some of media content may have been produced for selfish reasons and sometimes with no basis of journalistic ethics, this Martin (2018) questions authenticity of social media content.

Vorhaus (2020) picks up on Martin (2018) discussion expounding that social media users between 18 and 34 are the most likely use these platforms as the main source for their news consumption. On the other, consumption of trustworthy and professional produced print and broadcast media content have fallen sharply. From the social media platforms studies, Facebook was the greatest source of news at 36%, followed by YouTube at 21%, Twitter at 12% and lastly Instagram at 11%. This is what Harper (2010) terms as social media revolution. The difference between traditional media consumers and current multimedia consumers is that traditional media outlets provided limited opportunity for feedback thus were passive consumers. Modern consumers are very active news media consumers, they have freedom to choose what they feel fit their needs as well as they can express their opinions and feedback. This has equally has given a voice to consumers.

Communication researchers have largely focused on fake news, infiltration on news media and impact on consumers. A few researchers have, however, focused on the key tenets of news media, particularly the visual media like photographs that play a critical role in ascertaining media content authenticity. Studies indicate that visual media affects the memory of viewers by distorting their thinking process, for instance, they

enhance the credibility of the news media and affects their decision-making processes. A case in point is during the electioneering period where visual media may affect voting patterns (Treier & Hillygus, 2009). More often than not, the damages from sharing of fake images will surpass attempts to expose it as fake. Fake images propagated through online platforms and social networking sites can deceive, inflict emotional distress, cause panic and influence public opinions and actions. Yet few studies have examined how individuals evaluate the authenticity of images that accompany online stories (Shen et al., 2019).

According to Media Council of Kenya, more than half of the pictures and videos shared on social networking sites in Kenya especially during electioneering periods, conflicts or disasters are not factual, sensationalized, intrude privacy and sometimes are in bad taste.

This research will focus on Kenya's 2017 general election period that saw widespread dissemination of fake news heightened by altered images and videos. Such images, modified either through digital editing or contextually misrepresented to convey incorrect information are herein referred to as 'fake images'. Fake news, however, is not new in Kenya. High speed internet connectivity, robust ICT infrastructure and access to smartphones and computers are enabling production and dissemination of fake news. Kenya, like in other countries had traditional forms of fake news and propaganda that today are propagated via online where individuals or institutions can develop content and disseminate without any form of fact-checking, control or subjection to gatekeeping measures. The old form of fake news in Kenya included anonymous production and distribution of leaflets with misleading information in the streets. These leaflets printed propagandist literature was meant to instill fear, cause panic, distort the truth and attack others. This was widespread during electioneering seasons, ethnic or religious conflicts.

Unlike previous general elections where consumers relied on traditional media for information, Kenya's 2017 elections saw a widespread distribution of fake news largely

through social networking sites. Fake images and fake news were circulated via social networking sites heightening tension and panic. Distribution of fake information instigated political hostilities, retaliation, conflicts, loss of lives and deaths. The then Kenya Red Cross Secretary-General, Abbas Gullett warned that a lot of graphic images and videos being shared on social media; Facebook, Twitter and WhatsApp were malicious and were aimed at creating political tension in the country.

In a news reportage by Al Jazeera Media Network titled; 'How Kenya became the latest victim of 'fake news', digitally manipulated or contextually misrepresented pictures and videos and circulated via social networking sites caused harm as communities acted on false information. Widely shared stories about the 'mayhem' in Nairobi's Mathare and Kawangware slums that had been mapped as violence hotspots in Nairobi were fake. It cannot be dismissed that there were violent confrontations between the police and protesters, which resulted in multiple deaths and injuries, following the announcement of the election result. Some of this post-election violence was not adequately covered by traditional media organisations.

1.2 Problem Statement

More than half of global news consumers today use online sources (Westerman, Spence, & Van Der Heide, 2014). Kenya is not an exception, with information distribution and consumption shifting from traditional media (print media and electronic) to new media characterized by fast-paced production and dissemination of news content. Yet, these digital platforms are largely unregulated or where such regulations exist, they are not effectively enforceable. As Harper (2010) puts it, there are several problems that have emerged from the change in new consumption where professional journalists and media stations are no longer the sole sources news and information. First, bloggers and non-journalist authors are opinionated instead of giving a first coverage of news events.

Second, there is stiff competition for news. Third, certain aspects such as investigative journalism is at a threat due to this new dispensation. Non-journalists will highly likely focus on content that align to their interests and ignore the rest, which then puts to jeopardy news that be of public interest. Consequently, online news content lacks objectivity and truthfulness. Taking this as a starting point, this study focused on one common element of online news: the images. Specifically, it focused on the proliferation of fake images and their role in the wider discourse of disinformation.

Given that the technologies to detect fake images are not popular among online news consumers, the possibility that online news producers may exploit such knowledge gaps to influence actions and decisions of individuals and communities (Gross, 2017) signals a critical communication concern. This problem is forked into two; First, the ease of acquiring technologies to edit digital images and disseminate them for selfish interests (Shen et al., 2019). Second, the inability of the naked eye to replace the need for specialized software and knowledge to detect the authenticity of images (Nightingale, Wade, & Watson, 2017).

On this basis, this study acknowledges the need to contextualize the use of fake images within online communication systems such as news production. The underlying argument is that with the significant role images play in the production of news media content, potential dissemination of fake images and misinformation cannot be underestimated as it influences masses. In critical moments like Kenya's election periods, this becomes critical as was the case in the 2007 General Elections where disinformation stirred tribal and ethnic conflicts. Cognizant of the critical role of images in this instance, this study critically analyzed the use of fake images on social networking sites during Kenya's 2017 electioneering period to demonstrate how such manipulation amounted to message framing. It further demonstrated such usage as a discourse of disinformation.

Inevitably, the study engaged with similar instances before Kenya's 2017 electioneering period and in current times ahead of the scheduled 2022 general elections.

1.3 Objectives of the Study

- i. To analyse the use of fake images on social networking sites during Kenya's 2017 general election period.
- ii. To critique the use of fake images on social networking sites during Kenya's 2017 general election period as a form of message framing.
- iii. To demonstrate such use of fake images on social networking sites during Kenya's 2017 general election period as a discourse of disinformation.

1.4 Research Questions

- i. How were fake images used on social networking sites during Kenya's 2017 election period?
- ii. Did such use of fake images on social networking sites during Kenya's 2017 election period qualify as a form of message framing?
- iii. Could such use of fake images on social networking sites during Kenya's 2017 election period constitute a discourse of disinformation?

1.5 Justification of the Study

The production of fake images using easily accessible advanced technologies or simple software and tools are prevalent, malicious, and detrimental to online news consumers. Unsuspecting content consumers may take such fake images and information as the truth. Further, ignorance and lack of knowledge to discern authentic images from fake images cumulatively contribute to misinformation and disinformation. Repeated use of manipulated information material particularly images and videos has, unfortunately,

become part of decision-making in political and socio-economic spheres, a deviation from media's core responsibility (Nash, Wade, & Brewer, 2009). Working on the hypothesis that sharing fake images using social networking sites during electioneering period in Kenya amounts to manipulation of information, this study investigated such use of fake images as a form of message framing that, in the long run, amounted to a discourse of disinformation.

1.6 Rationale

General elections in Kenya, usually conducted after every five years are highly contentious and emotive. Some of the undesirable consequences include violence, deaths, and loss of property. Continued production and dissemination of fake information shape the messages available to online news consumers. Particularly, altering of images using digital software amounts to a contextual misrepresentation of information – herein termed as disinformation. In the present times characterized by growth in ICT infrastructure, heavy reliance on information from social networking sites, access to highspeed internet connectivity, compact cameras, computers and smartphones, the impact of this practice cannot be underestimated. It is for this reason that this research focused on fake images as contributors of message framing and hence critical in aiding disinformation. By engaging with this aspect of communication, this study created a framework within which the use of fake images in online news reportage at critical national moments may be further investigated or intervened.

1.7 Scope of the Study

1.7.1 Geographical, methodology, population

This study sought to discuss the usage of fake images on social networking sites; Facebook and Twitter during 2017 Kenya's electioneering period between August 1 and

October 31. The research also used data from previous and subsequent general elections, including current use of fake images in relation to the upcoming 2022 general elections, to support the various arguments where necessary. Such critique of fake images is strictly limited to Twitter and Facebook platforms.

1.8 Operational Definitions of Terms

1.8.1 Disinformation

False information spread by social media which is intended to mislead.

1.8.2 Fake images

These are images modified either through digital editing or contextual misrepresentation to convey misleading information.

1.8.3 Fake news

Fake news is deliberate disinformation or misinformation and sometimes unknowing spread of news media material through traditional media channels or the new media. Fake news dates back to even beyond yellow journalism where sensational information was deliberately disseminated via print media to alter the truth, change ideology. In Kenya, fake news would be printed and distributed anonymously on leaflets especially during heightened electioneering seasons. Finneman and Thomas (2018) argued that 'fake news' "Is not, by any reasonable standard, 'news' but rather an attempt to deceive through the mimicry of traditional journalism." Additionally, Johnson and Kelling (2018) defined the term as "Content that is deliberately false and published on websites that mimic traditional news websites."

1.8.4 Message framing

An approach used to foreground how an image in isolation or relation to its accompanying text or caption is interpreted. It aids in constructing information and interpretation of the concepts being conveyed.

1.8.5 New media

These are forms of media that rely on computer technology for redistribution of the news media material. These media are thus interactive and have elements and platforms to store and retrieve. The new media users are active producers and consumers of information.

1.8.6 News media

News media are elements of mass media producing and disseminating news and information to the mass audience or targeted public. They include; the print media (newspapers, news magazines), broadcast news (radio and television), and the internet (online newspapers, news blogs).

1.8.7 Social Networking Sites (SNS)

Social networking sites are online-based forums where users with a common interest form a virtual platform by the creation of public profile where they share information about each other. These platforms have features where users add, search or reject new connections. ICTs are key enablers for SNS. These would include devices like computers, smartphones, and internet connectivity. The devices have tools that can generate media content material (text, pictures, video and sound) that member of an SNS can use in making meaning.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Overview

This chapter discusses scholarly work examining fake images as a major element of fake news stories and disinformation. The review delves into a discussion on the proliferation of fake images into news media, the contribution of images toward disinformation and general impact of fake images and fake news on news consumers. This research examines the role of fake images in the wake of new media and growth of ICTs, putting into context emotive periods that affect individuals and societies; including electioneering periods, disasters, pandemics, civil protests and wars where deliberate motives to distort truth through choreographed news media and propaganda are rife.

The chapter comprises of two sections; review of the literature and theoretical framework. This research looks at scholarly studies carried out globally, at the African level and in Kenya. The study used Media Dependency Theory to build hypothetical framework. The literature review was divided into three broad sections: Proliferation of fake images during the electioneering period, the contribution of images toward disinformation, and lastly, the impact of fake images on news consumers.

2.2. Social media as a source of news

There is plenty of research to show that social media has become a significant source of information, both in the developed and developing world. To begin with, Scheiner (2014) ascertained that there has been a paradigm shift in the last decade or so, which has made external sources become the core of identifying technologies. Social media is just an example of these external information sources, but have impacted many

aspects, including the organizational field. Compared to individual consumers, however, organizations use social media in a minor way compared to other external sources.

In the African continent, Mansour (2016) conducted research in Egypt to see how government journalists in the country not only adopt but use social media to gain information. Out of all the participants, 72.8% used social media to consume information. They were mostly young and with a BA degree while those who did not use social media were over 40 years (27.2%). Most of the journalists consumed social media while both at home and at work. They would share media content, news, blog, comment, and bookmark sites. The aim was to not only find information but also keeping themselves up to date, communicate with colleagues and followers, check for materials, and also engage in discussions. In the end, many accepted that social media was an important source of information for them. However, they had concerns of their own when using such: They did not know how to cite social media sources, some lacked time to access all of the platforms, some news sources lacked credibility, and the quality of the sources was also wanting.

From the study by Mansour (2016), one of the issues with social media being a main source of news or information is on credibility. The research by Sun (2021) looks into this specific issue using user perception. He analyzes social media using three aspects of credibility – Subject, source, and content. The subject refers to the topic being discussed. Different topics have varying degree of accuracy of the credibility. According to him, information on social media can be false, spam, rumor, or extreme emergency. When a person talks about emotional and/or entertainment topic, they will most likely incorporate their emotions, which has no right or wrong measure. This means social media users can exaggerate information depending on the topic and how important it is to them. Scientific topic, however, will tend to be professional with low participation of the

user. As for source credibility, this refers to the source of information, which on social media can be an individual, organization, or technology platform. Experts, professionals, and academic organizations plus government agencies may have a higher level of credibility while posting on social media as compared to individuals. On social media, however, users can share information as much as possible thus forming an intricate network of information, this unfortunately may affect the credibility of information. Last but not least, content credibility refers to the quality of content being disseminated on social media. Things to look at here include grammar, timeliness, composition, and/or rationality. These three aspects of credibility can apply to the images posted on social media as well. In other words, the credibility of a posted image may vary depending on the subject, source, and topic.

2.3. Social media as a tool for politics

Today, politicians across the globe are using social media as a key medium and front to advance their agenda. In other words, political actors are finding it very useful to achieve their political objectives. First, they can gain considerable insights about voters from the platforms and these forums have provisions for response and reactions. These include; comment sections and direct messaging. Secondly, politicians can access big number of following on social media, thus communicate and interact with them with the aim of swaying them towards their political stands. Political class unfortunately turn such platforms to share propagandist messaging and subjective or one-sided messaging, contrary to the traditional rule of thumb in mass media production; objectivity. Politicians often resort to dirty tricks and propaganda to achieve their ends. In the U.S., for instance, Garrett (2019) established that platforms such as Twitter and Facebook have been commonly used during campaigns, but in the process promote misperceptions. Yet, given

that there are millions that use these platforms in any given country, the implication of inaccurate information is far and wide. As of 2012, two out of five Americans admitted to consuming political news from social media. A third of them admitted to have come across promotional political messages with specific candidates in mind of the platforms just before the election. By the time Americans went to the poll in 2016, Facebook was the leading site where people attained political information compared to even well-known news channels such as CNN, Fox News, and ABC, as well as, other leading newspapers. While there may be nothing wrong with this, the unique nature of social media and how it is hard to control the flow of information made it the perfect tool to propagate political falsehoods, both in terms of texts and images. To make matters worse, there was the accusation that outside influence, especially Russia, was behind the 2016 social media propaganda (Garrett, 2019). It is an issue that jeopardizes not only democratic elections but also sovereignty. Such level of influence and misinformation would be hard to execute on national news channels.

Kaur & Verma (2016) echo the same kind of sentiments in Indian elections. According to the two, social media was a tool used by almost all parties in the elections to seek for votes and engage with the public in general to drum up support. Politicians also did use their social media pages to do the same. Political players would use social media to target the young generation, mostly Generation Y because they are the majority on social media. A significant finding by Kaur & Verma (2016) is that Facebook was the most preferred platform by political players in interacting with the voters. With about 65% of the population being under 35 years of age, it means that there are hundreds of millions of social media users in India. They prefer to use and consume news from social media compared to traditional media stations. In view of this, the impact of disinformation and political propaganda can be very damaging to an entire country such

as India. According to Safiullah et al. (2017), social media has become so influential that it can be utilized to predict the outcome of an election. They looked at social media buzz for 100 days during the Indian election period and established that social media had a huge impact on the 2014 general elections.

Gilardi et al. (2021) took a step further to study the usefulness of social media by political participants to set their agenda. They used the case study of Switzerland to discern three sources of agenda – traditional media, parties, and politicians. A significant point they make is that social media has altered the way political actors can set agendas. Traditionally, only those in power or those with access to media stations would use them to set agenda. Today, however, social media has given power and equality to all players. It is up to them to know how to utilize social media to their advantage. What became clear is that social media was a communication tool for politicians to interact with the public and also engage with competitors. They are freer to express their opinions on social media compared to other formal communication avenues. For this reason, social media has become an important tool for politicians and political parties to articulate their stands, thus set agenda. Overall, there are three reasons that make social media a significant avenue: First, it is relevant; second, it has increased the number of players that can set agenda; and third, it allows politicians and parties to reach a wider audience compared to traditional media.

The use of social media for political dispensation, as mentioned before, is not only prevalent in the West or developed world but also other developing nations. Ahmad, Alvi & Ittefaq (2019) document how social media has been used by politicians and political parties in Pakistan, a predominantly Muslim nation. They posit that Facebook is the most preferred platform for the sharing and consuming of political information in comparison to others. The use of social media has altered the way politics is conducted in

Pakistan by increasing participation of youths, especially given that the country has one of the highest number of youth populations globally.

2.4 Proliferation of Fake Images in Electioneering Periods

Fake news has been in existence dating back to historical times of Yellow Journalism of the 1890s and Tabloid Press of 1920s that saw early kinds deliberate misinformation, then to drive a sensational agenda, salacious, comic and satire that branded the press as a profit-making venture witnessed by cutthroat circulation craze at the expense of media's fundamental responsibility. Recent times in Kenya have seen fake news in the form of anonymous leaflets some with coded information being distributed to the masses, basically for propaganda or instilling fear. Fake news, however, became prevalent during the US election in 2016 when US policymakers accused Russia of using fake news to sway the American electorate thus influencing their political inclinations. Then then US President Donald Trump had severally branded mainstream media 'fake news' whenever it disseminated information he held divergent opinions, this regardless of media material objectivity. This section looks at how fake images and fake news has panned out during the electioneering periods in the global, African, and Kenyan contexts.

2.2.1. The power of images on social media

Essentially, social media is a visual platform. Users post millions if not billions of text, photographs, videos, info-graphics, meme, and gifs for others to consume and share. In view of this, Crilley, Manor & Bjola (2020) believe that political actors have become visual narrators of politics. In this role, they narrate stories about themselves, their parties, their political promises, as well as the opponents, using images that they post on different social media platforms. Crilley et al. (2020) also mention that the salience of social media images can be viewed from three contexts – production, circulation, and reception. To

begin with, production is where the critical players invest their resources towards producing important images that improve their image and/or discredit their opponents. After posting the images, the next context is circulation, where the images claim to be empirical truths using their visual nature. People see these images as they scroll through their social media pages. The third context is now the reception where the audience reacts to these images, for instance, by sharing, liking, or commenting. To this end, there is no doubt that social media has altered the way images can be used for political agenda. Unfortunately, disinformation has become rife.

Bleiker (2018) adds to this debate by stating that global politics has increasingly become visual. In other words, political actors have realized that images can depict and shape our world. This is not to say that texts have been abandoned. Instead, images are preferred because they can circulate very fast and to a very wide audience on social media. Before social media, an image would take weeks from the time they are taken to the time they are processed and placed on magazines for audiences to see. Today, this is achieved in a matter of minutes. Another aspect that has made politics visual is its democratization. Previously, only a few actors controlled traditional media and the use of images to set agenda or conduct propaganda. Today, social media is accessible to anyone for use. This has made politics easier but also intricate given the proliferation of fake images.

2.2.1 Fake images and global elections

Researchers have undertaken studies with keen interest around elections where widespread cases of fake news are reported. Lee (2019), examines how fake news played out during the 2016 United States elections that he states threatened democratic elections. He noted that 38% of Americans relied on social media to read, watch, or listen to news regarding the 2016 American elections. Yet, fake news circulated online extensively

during the 2016 U.S. presidential election, leading to speculation this might have influenced the result. He elaborates how fake news is used for strategic political goals. This is confirmed by McNair (2018) research, which ascertains that fake news can be used in deliberate ways for strategic political ends, labelling this 'weaponization', asserting that the current information ecosystem facilitates this strategic political practice.

Former U.S. president Donald Trump weaponized this term, 'fake news', perhaps to initially undermine concerns about fake news during the election campaign, attack and discredit mainstream news media and political rivals (McNair, 2018). Trump claimed that mainstream only covers topics that are aligned to their interests as he seeks to disseminate his interest largely using the Twitter platform, with a preset to reprimand the mainstream media through social media platforms, and branding them fake news; when mainstream report what in his belief ought not to be reported. This was exemplified in January 2017 at Trump's first press conference as president-elect when he shouted, "You are fake news!" at a CNN reporter, from whom he refused to take questions (Carson, 2017).

Farhall et al. (2019) builds on Lee (2019) study to look at how the political elite capitalize on the fake news discourse to achieve their political ambitions and objectives. The researchers establish that there was a lot of fake news usage to attack or discredit opponents during the 2016 American elections from using their websites, tactful dissemination in mainstream media, social media platforms to political debates. Politicians, especially from the conservative side, sought to delegitimize news from mainstream media as well as those from their opponents. For instance, a politician would use his or her website to attack a reputable media institution such as CNN or ABC and claim that it is often plagued by bias and fake news, disguising them as fact. According to Farhall et al. (2019), although this has been rare in Australia, politicians are now starting to use the strategy, thus threatening the trustworthiness of media institutions, who have

been traditional gatekeepers of the elite for a long time. Therefore, this is an emergent societal concern that needs to be looked into.

In Malaysia, Padil and Azahari (2014) found that political parties, in a bid to gain absolute victory, often rely on communication strategies surrounding both print and electronic media to sway the electorate to their sides. Electronic media such as the Internet, TV, radio, as well as print media such as banners, newspapers, posters, and flyers, are very common independent brokers of information. During the political campaigns, the common dissemination of information takes place through paid media or free media. The use of images is very common via the Internet or newspapers as a strategy to help ensure that a party emerges the winner in an election. Through images, the campaigners can tell their stories and also have a huge impact on emotional responses or factual information dissemination. The research by Padil and Azahari (2014) considers the use of images as a powerful way of influencing the beliefs, opinions, and attitudes of people.

2.2.2 Proliferation of fake images in African elections

Fewer studies have been conducted on the use of fake news and fake images in African elections. Nonetheless, this does not mean that the African continent is fake news-free. Research by Wasserman and Madrid-Morales (2019) establishes that fake news becomes prevalent in Africa (especially in Kenya, South Africa, Nigeria and Zimbabwe) during political campaigns resulting in misinformation and disinformation. This is where fake news is used to influence the political agenda. This sentiment is corroborated by (Wasserman et al., 2019) study as well, noting that countries with internet connectivity and established ICT infrastructure are highly affected.

According to the study conducted by Pate, Gambo and Ibrahim (2019), the spread of fake news in Nigeria during the 2019 electioneering period caused significant political,

social, and economic harm. Specifically, the spread of damaging fake news escalated tensions between herders and farmers in the north of the country, religious tensions in the states of Benue, Plateaus, and Taraba, as well war ‘thug-of-war’ between the APC (ruling party) and the oppositions (specifically the PDP).

Cases of fake news are still fresh in Burundi, a country facing political turmoil due to the struggle between the incumbent government and the opposition. According to an online article by the Guardian, the Burundian government discredits information published against them as fake news, as former US President Trump discredited mainstream media. The Burundian government threatens journalists and political opponents in the country ever since the former President Nkuruzinza declared war against journalists for reporting what was happening in their country. Others have been forced into exile in neighbouring countries.

2.2.3 Fake images and Kenya’s elections

Internet penetration, established ICT infrastructure in Kenya opened up new forms of media content development and distributions. Kamau (2017) in his study discusses the proliferation of fake news during the 2017 elections where millions of social media consumers resorted to SNS for news. When people found information that went against their political inclinations, a majority ignored while others blocked, unfriended the person, or deleted the messages. It became clear that Kenyan campaign strategists used social media to recruit volunteers, target certain voters, and mobilize support or report campaign activities. Kamau (2017) concludes that SNS will continue to play a critical role in Kenyan politics going into the future where politicians and their campaign managers use social media to mobilize their political base. It has proved useful to diffuse political message, target voters, and enable interaction amongst voters.

2.3 Contribution of images toward disinformation

The visual media content plays a fundamental role in media and communication spheres. Images, videos, graphics are easily interpreted, memorable and when used together with text, consumers build trust in the news media content. Images, therefore, can enhance or disrupt the credibility of news media content. Media content developers and communication specialists use this element to advance their interests, be it dissemination of news, political goals, or propaganda. Khan and Mazhar (2017) underscore key responsibility photojournalism play in the modern journalistic age. They note that usage of images related to news items build a better understanding of the overall storytelling in the reader's mind. Photojournalism is a common form of journalism cutting across literacy disparities, age, language barriers, geographical boundaries and geopolitics. This section of the literature review looks at the impact of fake images on disinformation from a global, African, and Kenyan contexts.

2.3.1 Global perspective of the contribution of images to disinformation

Fake images have an impact on disinformation. When consumers detect that certain media outlet disseminates fake images and fake news, they do not take their news content seriously and passively enlist as satirical content. This is what researcher Ferrari (2018) found out in the European context of Italy. In his research, he established that media content developers can impersonate prominent personalities, where they develop satirical media content through the creation of fake accounts on prominent social media platforms similar to those of the personalities who include politicians, journalists, musicians among others, and more often than not, are used for satirical purposes. There

was a fake Twitter account impersonating Matteo Renzi, the Italian Prime Minister. The fake account, however, used his name backwards, Renzi Matteo.

What the researcher establishes is a form of political activism that has an impact on satire. The authors of fake accounts are having fun but have a deep connection to politics. The persons behind parody accounts use them to debate the shortcomings and contradictions of politics. With the fact that millions of people rely on social media and other online media as a primary source of information and news, Yatid (2019) establishes that the Southeast Asian countries of Malaysia, Singapore, Cambodia, Indonesia, and the Philippines have all attempted to come up with proposals of how to combat fake news – each country with own measures and strategies. The Indonesia and Cambodian governments, on the other hand, have developed a National Cyber and Encryption Agency with regulatory laws to help, while other countries are still in the process.

According to Yatid (2019), these governments have been prompted by the fact that social media can tamper with the truth, thus the need to take the necessary steps to curb misinformation and disinformation. Even though misinformation and disinformation are not new, social media, with its millions of users, makes it easy to spread fake news deeply, fast, and wide. Consequently, social media has now become the birthplace of truth manipulation and where public opinion can be shaped. The impact is that it can cause religious tensions, racial tension, different election outcomes, and financial difficulties of involved entities.

2.3.2 Contribution of images to disinformation from an African context

Whereas there are a lot of studies on the world stage regarding fake images and its contribution to disinformation, research on the African continent is limited. Yet, like in other continents, Africa has suffered emerging challenges from fake news compounded by the lack of fairly established regulatory authorities and mechanisms to guard against

these challenges. They may be similar to challenges experienced by other continents or unique to the African context.

Of the few researchers to study the impact of fake news in Africa are Wasserman and Madrid-Morales (2019), who establish that fake news has negatively affected trust in mainstream media especially in the countries of Kenya, South Africa, Nigeria and Zimbabwe where the studies were conducted. According to the researchers, fake images in these countries are used to distort information to favour those who make them, be it government or non-government entities. For instance, one group of politicians will use fake images to discredit information from the other party and also counter the news they get from mainstream media. This means that news consumers do not trust media outlets associated with fake images and fake news, and they usually pass them as satirical.

Apart from authentic information, alternative facts in social media make it hard for users to discern the truth from fake information. This confusion means that they cannot properly create shared meanings or hold political representatives accountable for what they post against opponents. Evidence from the study by Wasserman et al. (2019) shows that it is not only political players but also African governments or government officials, who are supposed to be responsible in disseminating truthful information, and also engage in the spread of untrue information not supported by figures or facts.

In South Africa, Wasserman (2020) states that fake news has an immense impact in both politics and social affairs. Subsequently, fake news has been highly politicized in the South African context to the extent that it has affected media professionalism thus threatening journalism practice. The researcher establishes that there is a correlation between high levels of exposure to fake news with lower levels of trust in South African media houses.

While traditional media such as radio, television and print continue to play an important role in the African continent, new media is providing people with avenues of contributing to social and political change in several countries where Internet connectivity and ICTs infrastructure is established.

2.3.3 Fake images and disinformation in Kenya

Kenya is among top countries with fast Internet connectivity and established ICTs infrastructure, this providing Kenyans opportunity, away from the traditional media, to explore new media in the development and consumption of new media content. Therefore, social media plays an important role in information development and dissemination.

According to British Council, the youth population of nearly 10 million, more than 20% of the youth population create, upload and share political information online in the form of photos, videos, and text content. This is how they engage with politicians and with one another on political topics. Furthermore, 49% of the Kenyan population use social platforms to source for news on the general election. This is according to a report conducted in 2017 by a strategic communications consultant *Portland* in collaboration with a mobile surveying platform *GeoPol*. However, social media consistently ranks lower than traditional media on trust. Infiltration of fake news into social networking sites is an area that needs elaborate research, this resulting from the magnitude of and impact of fake news.

Kamau (2017) establishes that social media is a significant source of information for many Kenyans especially the young generation (between the age of 15 and 24 years) forming 20% of the country's population. However, not many believe in the credibility of every information and thus resort to personal ways of critiquing information before they

believe it is true. This is because many users believe that there is a lot of fake news being spread around on social media.

Overall, the issue of credibility in news is important, and more important within the social media context especially when it involves critical information. According to Safori, Rahman and Mohammed (2016), new technologies have changed the way people communicate and receive information, as well as the way through which mainstream media reach their consumers. The process of consumption, the way online news is delivered, and journalism, in general, has been affected by these turns of events.

Some of the communication elements that impact the credibility of news and media include; interactive media, acceptance of technology, exposure to media, and quality of sources. New media has made media more interactive and has sped up the cycle of news dissemination; however, fake news is reversing these positives thus the need for good journalism to make all sources, including social media, reliable and credible as much as possible.

2.4 Impact of Fake Images on News Consumers

Fake news has been in existence dating back to historical times of *Yellow Journalism* and *Tabloid Journalism*. Full growth of new media and ICTs infrastructure globally spurred production and propagation of fake news, anyone with little knowledge and access to these technologies can produce fake news and distribute to millions globally. Unfortunately, such new media content gets to public spheres and replicated within a short time to millions without checking through any form of information gatekeeping.

The 2016 US elections revealed an immense effect of fake news in socio-politics and economics. Research has established that fake news negatively impacts communities who highly rely on information in decision making. This section of the literature review

looks at the impact that fake images have on news consumers – from the global perspective, African, and Kenyan contexts.

2.4.1 Impact of fake images on news consumers from global context

Lee (2019) established that it is becoming increasingly hard to distinguish factual media content from fake content. This is based on the use of advanced digital software to manipulate images, videos and voice that equally needs even more advanced technology to help consumers detect these fake news media materials. The consequence is political polarization resulting from selective exposure of media information that they deem match their tastes and elect to leave out opposing views. In this context, social media developers use algorithms to bring preferred user content that interests them and continually feed them with homogenous material. Social media companies, bloggers and general media content developers exploit this form of political polarization during elections to disseminate both factual news and fake news.

Misinformation perpetuated by forms of fake news can deceive and manipulate consumers and thus prompt them to act wrongly. Fake news inflicts emotional distress, cause panic and influence public opinions. News media consumers are now becoming wary of information they receive especially from the new media platforms. According to Tandoc et al. (2017), social networking sites users are continually finding ways to authenticate news or information they receive from these platforms.

An instance in 2016 saw Singapore Civil Defense Force dispatch a Red Rhino and fire engine trucks in response to social media reports that an apartment was on fire and had collapsed only to find that the alarming information resulted from fake images virally distributed. Tandoc et al. (2017) established that social media users depended on their judgment and that of the source. This further shows consumers depend on external resources when they are not sure about the information's trustworthiness. The challenge,

however, with dependency on external sources is that these content developers build a massive interconnected ecosystem of questionable sites to push homogeneous information (in form of fake news) so that when users seek to authenticate this information through search engines like Google, they find it to be true, yet in the real sense the distributed information is fake.

2.4.2 Impact of fake images on news consumers from an African context

In Africa, the study established that fake news has negatively affected consumers in the African continent singling out Kenya, South Africa, Nigeria and Zimbabwe where misinformation has caused wrong decision making and action, panic. Widespread distribution of fake news is witnessed during electioneering periods, tribal conflicts and wars, disaster situations that result in the wrong action including retaliatory attacks on opponents.

News media consumers, especially in countries that have a prevalence of fake news, are beginning to lose trust in media content and are trying to seek ways to discern the truth from false information. This is affecting the traditional media whose content sometimes is infiltrated with fake information.

In Kenya, Wasserman et al. (2019) establishes that social media users now have to rely on unorthodox way to distinguish factual information and false information. Kenyans, for instance, would trust information from verified accounts on Twitter and Facebook. Information from a political source, is however carefully consumed because in most cases it is subjective and developed to suit their interests.

In Namibia, news media consumers depended heavily on social media news sources to get information and news usually from popular accounts every morning for (Wasserman et al., 2019). The respondents also indicated that they have shared fake news in the past in the form of memes.

Many of the correspondents in Nigeria heavily used Twitter but stated that most fake news is shared on WhatsApp platform (Wasserman et al., 2019). Most of the fake news was connected to politics and entertainment with elements of emotions and patriotism. They would rarely employ fact-checking websites to reveal whether the news is real or fake. South African youths also depend heavily on online platforms to consume information. They liked to share 'weird' or 'funny' information to their friends via Twitter and WhatsApp. Information on health was highly shared more than political news. However, they did not fact-check before sharing information.

Apart from authentic information, alternative facts in social media make it hard for users to discern the truth from fake information. This confusion means that they cannot properly create shared meanings or hold political representatives accountable for what they post against opponents. Evidence from Nigeria shows how governments or government officials can as well as engage in dissemination of untrue information not supported by figures or facts (Wasserman et al., 2019). In Zimbabwe, many people utilized WhatsApp and Facebook more than Twitter for communication with workmates, classmates and friends (Wasserman et al., 2019). Infiltration of fake news equally is rife.

2.4.3 Fake images and news consumption in Kenya

Impact of fake news worldwide is similarly affecting Kenya and even with unique cases to the country. (Kamau, 2017) in his study discloses that users believe that there is a lot of fake news being spread around on social media. The majority, however, lack the technical knowledge to discern the fake news from factual information. They, however, resort to personal ways of crediting information before they believe in it.

His study established that the level of trust on information propagated through social networking sites is low, yet a lot of people rely on it for news. This then corroborates with what Mehrabi, Hassan, Sham and Ali (2009) who disclose that there is

a positive correlation between salience and perceived trustworthiness of both the Internet and television as sources of news. He noted that if the users rely on one news outlet more than others as their source of news, then they will highly likely take news from the outlet to be true.

The proliferation of fake news especially on popular social networking sites is worrying and threatens journalism practice. Fake news in Kenya is largely spread via SNS thereby distorting truths, whipping emotions along political lines, religious grouping and ethnical inclinations and with retaliatory attacks and aggressions that have in the past led to the loss of lives and property.

2.5 Theoretical Framework

The emergence of digital media and social networking sites has empowered citizen journalism and multimedia convergence, reorganizing way of news and information production and consumption. This study uses the Media Dependency Theory proposing that news media consumers would keep using media as long as it satisfies their goals. This study discusses the theory with a context of social networking sites and the consumption of news media content from these platforms.

2.5.1 Media Dependency Theory

Media Dependency as proposed by Sandra Ball-Rokeach and Melvin Defleur in 1976 was used in developing the theoretical framework in this research. The theory seeks to explain the relationship that exists between the media and audiences, or the interaction between media and society. According to its proponents, people who use media have certain goals they wish to satisfy, and the more their goals are satisfied by the media, the more they will use it (Ball-Rokeach & Jung, 2009).

In this case, people who use social media networks to spread fake news have certain goals they wish to satisfy, and their frequency of use will depend on whether their goals are being met. Therefore, those who use social media to spread political messages rely on it because their goals are achieved. On the other hand, consumers continue to use social media networks to access news media content as long as they are satisfied.

Former US President Donald Trump, for instance, used social networking sites and in particular Twitter to disseminate personal messaging and combat the mainstream media. The largely unregulated social media platforms provide users with the opportunity to disseminate single-sided and sometimes false information. Competing parties on the other hand, use these forums to retaliate or advance their agenda.

The level of dependency relies on frequency of use, the significance of the message, as well as the degree of conflict. Besides, Media Dependency theory accounts that choice of news media channel consumers elect to use is dependent on internal and external factors (Ball-Rokeach & Jung, 2009). External factors would include the availability of alternatives to the media as well as constraints on how and what media can be used. Availability of a variety of news media provides consumers with choices of news sources.

Today, social media is one single type of media enjoying dominance, accessible to the masses regardless of geographical borders, religious disparities, race, education and age. Their high level of dependency means that they can trust the messages they receive from the news media channel without taking into consideration credibility. It is in this sense that production, dissemination and consumption of information on social networking sites need forms of gatekeeping.

CHAPTER THREE RESEARCH METHODOLOGY

3.1 Overview

This chapter discusses the methods the researcher utilized in collecting the necessary data to address the study's objectives. This methodology section includes a description of the research design, study area, population, as well as methods and tools used to sample, collect and analyse data. This section also discusses ethical issues that the research encountered and how they were mitigated.

3.2 Research Design

This study used descriptive research design which utilised the elements of both qualitative and quantitative research methods (Mugenda, 1999). The design is useful in testing a large number of samples usually needed for qualitative types of experiments. Descriptive research design allows observation of the population without affecting behaviours. On the other hand, this design allows the collection of qualitative data through textual analysis. Descriptive research design is useful as it allows for the description of events and visual data to help the readers comprehend complex ideas in a study (Mugenda, 1999). Since this study sought to critique fake images in the context of disinformation during Kenya's 2017 general election, a deductive analysis of these images benefitted from descriptive research design rather than mixed methods approach (Creswell, 2003). Through this method, the researcher sought to obtain and present data from a textual critique of fake images.

3.3 Target Population

The target population is defined as the units for which the data collected will be utilized to make inferences (Lavrakas, 2008) and derive generalizations. In this study, the target population were all images identified as fake and disseminated on Facebook and Twitter during the 2017 electioneering period in Kenya. The study sampled 560 fake images. Images from previous and subsequent years, including current use of fake images on social media in relation to upcoming 2022 general elections were also analyzed.

3.4 Sampling

The researcher employed purposive sampling, a common tool in qualitative research that one can use to identify and select information-rich cases (Palinkas et al., 2015). Specifically, the researcher used a criterion type of purposive sampling to come up with the appropriate sample. In criterion sampling, the researcher identifies and selects cases (in this case images) that meet a predetermined criterion of significance. This researcher sampled two social networking sites: Facebook and Twitter, based on their prominence among the majority of online news consumers in Kenya, and their reliance on pictures and text as the main elements of information. The researcher thus treated fake images disseminated on the sampled social media networking sites as the study sample size.

3.5 Data Collection Methods

To collect the data, the researcher used direct observation. Direct observation is a passive method of collecting data where the researcher observes the subjects while taking notes, photos, or recordings (Creswell, 2003). In this study, the researcher observed images disseminated during the 2017 electioneering period using a guiding schedule tool. The study used a combination of four guidelines to identify fake images:

- (a) Analysis of image meta-data using two online-based softwares; Foto Forensic, Jeffy's Data Viewer - <http://fotoforensics.com/> and Google search engine reverse image search <https://images.google.com/>. These software scroll through several online webpages using Error Level Analysis (ELA) algorithms to determine if a picture is real or computer graphics-produced. Thus providing information on image pixels/image size, colour, texture, shadow arrays, intelligence on when and where the picture was uploaded online, list of websites that contain similar image, as well as how frequent picture has been accessed.
- (b) Photoshop image editing software to analyse image error levels – this is through uploading the image to photoshop and analysing image meta-data such as pixel/resolution, exposure, original date image created. Advanced image alterations such as clowning, superimposing, cropping, colour, texture, shadow distortions can also be analysed on photoshop.
- (c) Assessment of contextual use of the image and its manipulation through direct alteration or indirect editing such as caricatures
- (d) General image observation in relation to accompanying text as a baseline for understanding underlying disinformation discourses.

Through these approaches, the researcher critiqued how the identified images contribute to message framing and consequently support disinformation.

3.5.1 Data collection procedure

The researcher sourced for pictures used on social networking platforms during the electioneering period of August 1, 2017, and October 30, 2017, in Kenya, using a google search engine and digital software called Foto Forensics that scrolls several online pages through targeted search.

The researcher also sourced for images from communication, information and media regulatory bodies in Kenya who monitor both traditional and digital media platforms. The institutions included; Media Council of Kenya (MCK), National Cohesion and Integration of Commission Kenya (NCIC) and the Communication Authority of Kenya (CA). The target images that this researcher considered from these institutions had been disseminated during the specified period and had sourced them from Facebook and Twitter networking sites. For logical presentation and compliance with the research objectives, the researcher aggregated the identified fake images into the following categories:

- (a) Stand-alone images that distort the truth.
- (b) Images that contextually misrepresent the truth through alteration or text descriptions.

3.6 Data Analysis and Presentation

Data analysis is the process where the researcher examines raw data to make inferences. Given this, the researcher used content analysis. This is defined as the process of making inferences after objectively and systematically identifying specified themes in the data gathered (Mugenda, 1999). The researcher analyzed the fake images contextually using distinct framing patterns including; political framing, violence, satire and entertainment. To make the process streamlined, the researcher captured data in relation to how the fake images aid message framing and hence demonstrate such use of fake images as a discourse of disinformation. The data was further used as a basis for subsequent arguments on the discourse of disinformation.

3.7 Reliability and Validity

Reliability and validity are important when conducting research. Reliability is about the credibility of the findings while validity is the consistency (Mugenda, 1999). It is very important to deal with items that may hamper the validity and reliability of the research. This researcher independently conducted the study, therefore, there was no vested interest from other parties that would influence results. Secondly, the research sample was large and diversified to ensure that it met research regulations. Third, the researcher carried out a pilot study to pre-test the research instruments to ensure that they collected accurate information.

3.8 Ethical Considerations

Ethical concerns were considered. The researcher accurately critiqued the images without bias.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter discusses findings of the study through a critique of fake images on social networking sites during Kenya's 2017 general election. The chapter discussions are consolidated under the research objectives namely;

- i. To analyse the use of fake images on social networking sites during Kenya's 2017 general election period.
- ii. To critique the use of fake images on social networking sites during Kenya's 2017 general election period as a form of message framing.
- iii. To demonstrate such use of fake images on social networking sites during Kenya's 2017 general election period as a discourse of disinformation.

4.2 Fake images usage on social networking sites during Kenya's 2017 election period

4.2.1 Basis of image distortion, misinformation and patterns of communicative image framing

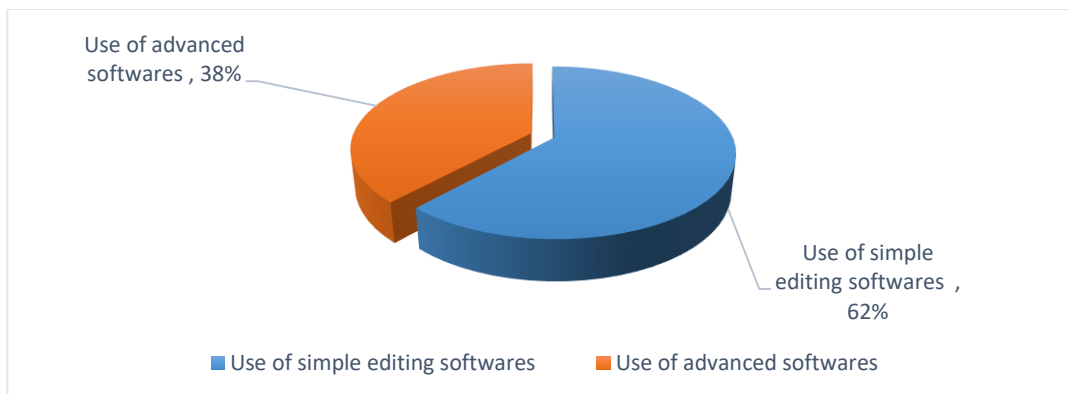
There are several ways, both online and offline through which an image can be discerned as authentic or manipulated. This study looks into manipulated images, termed as fake. For the purposes of this study, the method used to detect the extent of image manipulation was Error Level Analysis (ELA), a forensic method that makes use of algorithms to determine if a picture is real or has been tampered with (Paganini, 2013). The effectiveness of ELA is that it provides information on many aspects of the image including the megapixels, size, color & texture, shadow, where the picture has been uploaded (online), and the frequency of this access on which websites. The researcher

utilized two web-based software that provide ELA services – Foto Forensic (<http://fotoforensics.com>) and Google’s Reverse Image Search (GRIS) - <https://images.google.com>. The Google-based platform, GRIS sifts through several online pages to analyse frequency of image publishing and dates published.

The researcher also utilized two other offline-based image analysis software – Photoshop Editing Suit and Lightroom.

The Error Level Analysis process revealed that fake images disseminated on social networking sites during Kenya’s 2017 general election were edited using simple tools and others using complex tools such as Photoshop Suit, Lightroom and Adobe InDesign. The analysis of meta-data panel (missing or tampered meta-data) that typically contains details of images including size, image exposure settings, colour templates, original date and time pictures were taken. This is evidence of distortion and tampering of image components and subjects such as colour, texture, shadows, and pixels. With the use of complex tools, such fake images creators would clone individual’s face into other person’s image to alter context. Dissemination of such images widens possibilities of message distortion, misinformation and disinformation. Figure 1 below demonstrates extent of editing of images in both Facebook and Twitter during the study period.

Figure 1: Level of Image Editing



As depicted in Figure 1, most of the images (62%) were edited using simple editing software compared to 38% edited using advanced software. From analysis of pixels algorithms, colour, texture and image size, extent of image editing can be revealed. General observation, and combination of online-based Error Level Analysis tool and off-line editing software; Photoshop and Adobe InDesign were used in defining images minimally and adversely edited. This implies that the widespread dissemination of fake images during the study period could be attributed to the fact that general public have access to simple editing tools and softwares either on their phones and computers.

Demonstration of fewer images that were developed using complex softwares against those developed using simple tools implies that general population cannot access or do not have knowledge to use such tool. Further, efforts by people seeking to use complex tools that demand resources imply that such developers have pre-determined intentions.

Also comparing results from Figure 1 above and Table 1 below, images that were edited using complex tools were virally disseminated than those edited using simple tools.

From the continuous patterns of deliberate image manipulation and viral manipulation, individuals carrying out such propagation of falsehood had framed agenda to achieve and execute, and in some instances, they equally used misleading accompanying text.

This cumulatively misinformed and disinformed audience using communicative image framing. As the study by Shen et al. (2019) confirms, manipulated or fake images shared on digital platforms can deceive, influence public opinions, cause emotional distress, and also lead to destructive actions such as violence.

4.2.2 Frequency of the dissemination of fake images

From an analysis of the frequency of the sharing of images conducted by the researcher, they were categorized into three as shown in the table one below; minimally published, averagely published, and virally published.

Table 1: Frequency of dissemination of fake images

	Minimally published (1-15 times)	Averagely published (15-50 times)	Virally published (more than 50 times published)
Facebook 370	157	116	97
Twitter 190	85	59	46

Out of the 370 images analysed from Facebook, 157 of them were shared minimally, 116 averagely, and viral images amounted to 97. Out of the 190 images analysed from Twitter, 85 of them were shared minimally, 59 averagely, and 46 were shared virally. An immediate observation from the statistics is that Facebook was the more preferred medium of sharing the fake images as compared to Twitter.

The results imply that most of the individual fake images were distributed on social media as many times as possible since one can easily share an image on their smartphones or computers without having to subject the media content to gatekeeping measures.

This is consistent with the findings of a study by Hunt and Matthew (2017) which indicated that people tend to share fake news without authenticating it as they may believe it to be factual (i.e. fake news resembles credible journalism). Further, Hunt argues that fake news is made viral through social bots that spread it rapidly, thus severely limiting the receiver's fact-checking capacity (Jun et al., 2017).

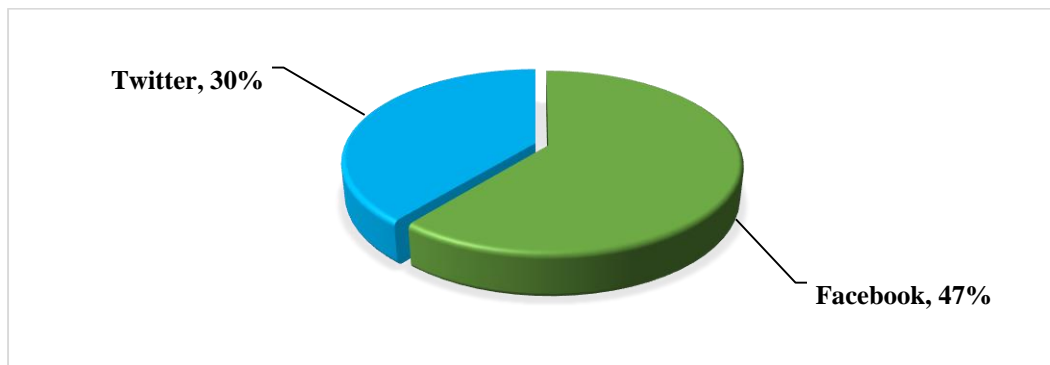
The impact of the viral sharing of such images cannot be understated. According to Shen et al. (2019), such images can distort the audience's memory, this with continual exposure to the images. Consequently, they influence the consumer behaviour, whether it is about voting or engaging in violence or hate. Even if the viewer eventually becomes aware that the images shared were not true. As Friggeri, Adamic and Eckles (2014) affirm, the distribution of fake images often surpasses the distribution of correction and any attempt to expose the fake images.

4.2.3 Contextual misrepresented images

Apart from altered images, there were instances where social networking site content users would publish authentic images but with a misrepresented context. These are referred to as contextual misrepresented images. They are images purported to have been lifted from different context, for instance, a violent scene in Congo, and posted to represent violent scenes in Kenya. Such images would lead to misrepresentation or an agenda-based information sharing given that many were shared virally. The researcher employed two online software platforms to analyse the images to show their meta-data, the digital footprints (where the images were shared), and the dates they were published. The two software are; Foto Forensic, <http://fotoforensics.com/> and Google search engine reverse image search <https://images.google.com/>. The softwares traced some of the images that had violence context were first published in Congo, Nigeria and in Kenya during the 2007 post-election violence.

The researcher sought to establish the percentage of fake images that had been contextually misrepresented and presented results in Figure 2.

Figure 2: Contextually misrepresented images



The results show that most (47%) of the sampled fake images had been contextually misrepresented on Facebook, compared to 30% of the images on Twitter that had been contextually misrepresented. This implies that fake images are more likely to be contextually misrepresented on Facebook than on Twitter.

From the deliberate misrepresentation of these images during the 2017 election in Kenya, online users who published such images had deliberate agenda to depict violence or voter fraud with misleading magnitude of events.

4.3 The existence of message framing in the fake images shared

Publishing of images on social networking sites during the period of this study were themed with patterns that amounted to message framing. The researcher classified some of the elements emerging from fake images disseminated during the period into four categories: Political propaganda, violence depiction and enhancement, satirical purposes, and for mere entertainment.

4.3.1 Political propaganda framing

To begin with, political propaganda refers to those images that were shared with political messaging or attached political agenda. Propaganda is a tool used for many years by states, governments, and political parties. The aim is to not only manipulate but sway

the way the public perceives certain events (Mare, Mabweazara & Moyo, 2020). For instance, one can use propaganda to paint themselves in a positively and the opponent in a bad light. The term cyber propaganda is used because it was conducted using social media and other digital media platforms rather than the traditional media platforms (Mare et al., 2020). There were two main political rivals during the 2017 elections, and each party engaged in the spreading of fake images to portray the opponent in a bad light.

4.3.2 Violence framing

The second category is depiction of violence and elements to fuel retaliations. Such image producers shared images showing people carrying weapons and engaging in violent activities against opponents. One of the images showed '*Mungiki*' in police uniforms and allegedly deployed to attack opponents. *Mungiki* is a ragtag militia group predominant in central part of Kenya. Such images were fabricated to purport that the state was sponsoring violence, thus communities should arm themselves in defense. Yet, these images were adversely edited to portray such scenes and drive both political propaganda and violence agenda.

4.3.3 Satire framing

The third category, satirical purposes, refer to images that were meant to mock political opponents. These were images that did not have a violent tone or political messages, but were meant to mock competitors or simply for comic. For instance, an image would showcase the leader of a party in a sarcastic attire.

4.3.4 Entertainment framing

The last category, entertainment framing, these images did not have a political angle, neither did they have a violent tone. However, they were directly linked to the

elections, especially events that were happening during the research period, for instance, a person in line voting but with funny attire.

Taking all of the above into consideration, the researcher concluded that indeed, the messages shared had patterns of framing. However, the message frames differed according to frequency as shown in Table 2 below.

Table 2: Patterns of fake images framing

	Political/Propaganda Framing	Violence Framing	Satire	Entertainment	Other(s)
Facebook	47%	12%	10%	29%	2%
Twitter	39%	15%	10%	30%	6%

From the total fake images studied herein, 47% that were shared on Facebook and 39% that were shared on Twitter had a political propaganda frame; 12% on Facebook and 15% on Twitter had violence frame; 10% on Facebook and 10% on Twitter had satirical frame; 29% on Facebook and 30% on Twitter had an entertainment frame; and the remaining 2% on Facebook and 6% on Twitter had other non-classified frames. From the statistics, it becomes clear that a huge share of the images had the political propaganda frame, followed by entertainment, violence, and lastly satire. This would make sense given that it was a political season, thus political agendas were widely spread.

So far, the researcher has established the existence of message frames in the fake images shared during the 2017 election; however, it is imperative to point out that there were also other patterns, specifically misinformation and disinformation. By definition, misinformation refers to the inaccurate and/or false information whose intention is to deliberately deceive. There were instances where people would unintentionally share fake images whose purpose was to misinform, although only the authors would have known

inaccuracy of the information. Disinformation is false information whose aim is to mislead or sway the audience. Propaganda and violence frames can call under disinformation. Altogether, consistent patterns from the framing elements and messaging formed a basis of misinformation and disinformation. This finding is supported by Allcott, Gentzkow and Yu (2019), who established that misinformation and misperceptions have for a long time been present in political processes; however, it has grown to an alarming extent in recent years because of the advent of social media. Elements on entertainments and satire did not demonstrate consistent pattern of framing and may not qualify as a form of disinformation. However, elements of misinformation are predominant in both skewed images for the purpose of entertainment and satire. Still, these elements of misinformation may cumulate to disinformation, but dependent on interpretation of these images.

Apart from the sharing of fake images, the researcher also noted a trend with regards to the use of accompanying text to present an image. According to Garcia (2019), there has been an increase in the spread of contextually misrepresented images and accompanying text because of social media, mostly for disinformation and propaganda. This is where an individual or institution seeks to create a false narrative by selecting archive photos to represent a certain frame or story. In the case of this study, the researcher denoted the existence of such contextual misrepresentation and categorized them into three components: First, there were pictures that had completely wrong text on images to deliberately mislead consumers. In this instances, the images were fake just like the texts accompanying them. In the second category, the texts were placed correctly but both picture and the text were contextually misrepresented. For instance, the text would say that the violence in the picture is happening in the country, while the text complements the violence-showing picture. The problem is that they were fake because

the pictures were lifted from somewhere else. The third category includes images published without any text but a specific frame in mind. These leave open interpretation of what these images communicated.

As the researcher established, these images had component of threats, malice, retaliation, and violence. An example was an image depicting that a certain community would be circumcised if they did not support a certain political alignment. Individuals would post and share images showing a boy being circumcised and accompanying text to depict this threat. Apart from violence, there were also messages of propaganda. Herein, images used during this time depicted political lies to whip emotions and convince population of political gain or mileage. These images showed certain political section(s) were winning either by editing out polls reports and republishing, editing out authoritative mainstream news outlets online pages with skewed/misleading headlines.

4.4 A discourse of disinformation

From meta-data Error Level Analysis (ELA) of the fake images collected, there were certain elements of image distortion that ended up forming the basis of misinformation, image framing and communicative disinformation. Individuals distorted or altered the entire images to juxtapose a new image or text, altered the sizes of the subjects in a photo, as well as, color and textures to present a certain frame or misinform consumers. All of these happened during the 2017 Kenyan election. As Bennett and Livingston (2018) posit, the circulation of false information is a big concern to many democracies around the world. It is a way of certain political parties and movements to mobilize their supporters against mainstream parties and elite in the society. Similar scenarios happened in Kenya during the 2017 general elections as parties were garnering support and dissuading voters against other parties and movements.

This then answers the question as to whether or not the textual framing from the fake images amounted to contextual disinformation. On the one hand, there were instances where people shared inaccurate and/or false information whose intention was to deliberately deceive. On the other hand, however, there were instances where people did not know that they were sharing fake images but they ended up misinforming their audiences. Only the authors would have known the inaccurate information.

Apart from these, the contextually misrepresented images also formed a basis of disinformation. The analysis, as mentioned before, traced some of the images that had violence context were first published in Congo, Nigeria and in Kenya during the 2007 post-election violence. Knowingly or unknowingly, people posted and shared these images to make their audiences think that they were happening during the 2017 elections in Kenya, but the purported events never really took place. The agenda, therefore, in this case was to depict violence or skirmishes or voter fraud.

Overall, the extent of the unintended communicative misinformation that resulted to disinformation is shown in the Table 3 below.

Table 3: Unintended communicative misinformation

	Political/Propaganda Framing	Violence Framing	Satire	Entertainment	Other(s)
Facebook	52%	25%	8%	13%	2%
Twitter	47%	23%	13%	10%	7%

The percentage of unintended communicative misinformation with a political frame on Facebook was at 52% while Twitter had 47%. The percentage of unintended communicative misinformation with a violence frame on Facebook was at 25% while Twitter had 23%. The percentage of unintended communicative misinformation with a

satirical frame on Facebook was at 8% while Twitter had 13%. The percentage of unintended communicative misinformation with an entertainment frame on Facebook was at 13% while Twitter had 10%. Last but not least, the percentage of unintended communicative misinformation with other frames on Facebook was at 2% while Twitter had 7%. Clearly, the statistics show that a lot of the unintended communicative misinformation, which then disinformed many of the audiences, were politically inclined. Of course, this is expected because it was a political year and a lot of political activities were going on.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Presented in this chapter are the findings, conclusions and recommendations of the study. The chapter also presents suggestions for further research in relation to the purpose of this study. The study discussed usage of fake images and disinformation on social networking sites in Kenya's 2017 general election.

5.2 Summary and Conclusion

The main aim of this study was to critically analyze the use of fake images on social networking sites during Kenya's 2017 electioneering period to demonstrate how such manipulation amounted to message framing. It also sought to show how such became a discourse of disinformation. The study had three research questions; (i) How were fake images used on social networking sites during Kenya's 2017 election period? (ii) Did such use of fake images on social networking sites during Kenya's 2017 election period qualify as a form of message framing? (iii) Could such use of fake images on social networking sites during Kenya's 2017 election period constitute a discourse of disinformation?

For the first research question, the study established the following using error level analysis; there were evidence of outright distortion and tampering of image components and subjects such as colour, texture, size, shadows, and pixels. These manipulated images were shared a lot during the election time with Facebook being the more preferred medium of sharing the fake images as compared to Twitter. The reason established was that there are more Kenyans using Facebook as compared to Twitter. There were also instances where people would post real images but with a misrepresented

context – contextual misrepresented images. Error level analysis algorithms traced some of the images that had violence context were first published in Congo, Nigeria and in Kenya during the 2007 post-election violence. As Shen et al. (2019) established, the sharing of these images can distort the audience's memory to the extent that they will start thinking it is true. Consequently, they influence the viewer behaviour, whether in voting and voting patterns or engaging in violence or hate.

For the second research question, the study established the following. There were four categories of message frames that emerged from the fake images disseminated during the 2017 electioneering period in Kenya: Political propaganda, violence depiction and enhancement, satirical purposes, and for mere entertainment. A huge share of the images had the political propaganda frame, followed by entertainment, violence, and lastly satire. This would make sense given that it was a political season. Apart from the sharing of fake images, the researcher also noted a trend with regards to the use of accompanying text to present an image. This was referred to as contextual misrepresentation and were in three categories: First, there were pictures that had completely wrong text on images to knowingly mislead the viewers. Second, the texts were placed correctly but both picture and the text are contextually misrepresented. Third, there were images published without any text but a specific frame in mind.

As for the third research question, the study arrived at the following; the meta-data error level analysis of the fake images revealed instances of misinformation, image framing, and communicative disinformation. On the one hand, people shared inaccurate and/or false information whose intention was to deliberately deceive. On the other hand, people did not know that they were sharing fake images but they ended up misinforming their audiences. The contextually misrepresent images also formed a basis of

disinformation. A lot of the unintended communicative misinformation, which then disinformed the audience, were politically inclined.

5.2 Recommendations

Based on the findings and conclusion, the study recommends the following: First, it should be the responsibility of all stakeholders to always verify viral images before sharing on social media. Important stakeholders include government agencies, private businesses, non-governmental organizations, research institutions and social media users. Perhaps, the social media companies themselves have the biggest role to play by setting up mechanisms that can detect tampered or fake images and flag them off. Already, Twitter is using a system that verifies accounts as being backed up by government or personal opinions and not research-based in a bid to combat fake news. This can be extended to viral images as well. Government and private entities can also promote news media literacy and elaborate awareness on fake news and opportunities consumers can take to check for information accuracy.

Secondly, the news media industry should provide high quality journalism in order to build public trust. Many people have turned to social media and the online world to consume news because they have lost trust in media stations as being biased. Digital-based media companies should invest in digital gate-keeping tools, develop ways of penalising peddlers of fake news and disinformation. Educational and research institutions need also to carry out studies on the dynamic field of digital media to be able inform on cause of action to various actors and gatekeepers. On the other hand, digital content user should cautiously consume, store or share content through subjecting them to screening and seeking out for multiple sources of information to be able to dispel disinformation.

All of these are important to achieve as deliberate sharing of wrong information on digital media platforms may pose a threat to democracy. Fake news represents a direct avenue by which inaccurate beliefs have been propagated via social networking sites. In addition, fake information and disinformation on social media platforms is threatening democratic systems especially in countries that have not developed robust policies to handle the dynamic digital media platforms aided by the ICTs, this without undermining the benefits of social networking sites.

Professional journalists can utilize social networking platforms in discharging their duties. According to Harper (2010), journalists can benefit a lot from connecting with their audiences on social media. What they need to do is acknowledge the change from the old technological times where the audiences would approach them for news to current times where audiences have capacity to determine information they receive and disseminate via the ICTs. From this standpoint, they can utilize social media as the avenue to effectively connect with their audiences. This way, journalists and professionals can listen to the audience and thus add value to the new way of media production. Harper (2010) terms this as journalism of partnership where connection and trust are key. Apart from news dissemination, they can as well use social media as an avenue of gathering information. Twitter, for instance, is a platform where journalists can source for news ideas, and relevant information.

REFERENCES

- Ahmad, T., Alvi, A., & Ittefaq, M. (2019). The use of social media on political participation among university students: An analysis of survey results from rural Pakistan. *SAGE Open*, 9(3).
- Al Jazeera Network (2017). *How Kenya became the latest victim of 'fake news'*. Retrieved From: <https://www.aljazeera.com/indepth/opinion/2017/08/kenya-latest-victim-fake-news-170816121455181.html> Accessed on 22.03.2020
- Allcott, H., Gentzkow, M., & Yu, C. (2019). Trends in the diffusion of misinformation on social media. *Research and Politics*, 1–8.
- Ball-Rokeach, S., & Jung, J.-Y. (. (2009). The evolution of media system dependency theory. In R. Nabi, & M. Oliver, *Sage Handbook of Media Processes and Effects*. Thousand Oaks, CA: Sage.
- Bennett, L. W., & Livingston, S. (2018). The disinformation order: Disruptive communication and the decline of democratic institutions. *European Journal of Communication*, 33(2), 122–139.
- Berghel, H. (2017). Lies, Damn Lies, and Fake News. *Computer*, 80–85.
- Bleiker, R. (2018). The power of images in global politics. *E-International Relations*. Retrieved from <https://www.e-ir.info/2018/03/08/the-power-of-images-in-global-politics/>
- Carson, J. (2017). What is fake news? Its origins and how it grew in 2016. *The Telegraph*. Retrieved from <https://grassrootjournalist.org/2017/06/17/what-is-fake-news-its-originsand-how-it-grew-in-2016/>
- Creswell, J. (2003). *Research Design: Qualitative, quantitative and mixed methods approach*.

- Crilley, R., Manor, I., & Bjola, C. (2020). Visual narratives of global politics in the digital age: An introduction. *Cambridge Review of International Affairs*, 33(5), 628-637.
- Farhall, K., Wright, S., Carson, A., Gibbons, A., Lukamto, W., & Gibbons, A. (2019). Elites' Use of Fake News Discourse. *Political International Journal of Communication*, 4353–4375.
- Ferrari, E. (2018). Fake accounts, real activism. *Political faking and user-generated satire as activist intervention new media & society*, 2208–2223.
- Finneman, T., & Thomas, R. (2018). A family of falsehoods: deception, media hoaxes, and fake news. *Newspaper Research Journal*, 350–361.
- Friggeri, A., Adamic, L.A., & Eckles, D. (2014). Rumor cascades. In: *Proceedings of the 8th International AAAI conference on weblogs and social media (ICWSM)*, pp. 101–110. Menlo Park, CA: AAAI.
- Garcia, M. R. (2019, February 13). Text-image contextual misuse in the post-truth world. *Garcia Media*. Retrieved from <https://garciamedia.com/blog/photo-images-in-the-post-truth-world/>
- Garrett, R. K. (2019). Social media's contribution to political misperceptions in U.S. presidential elections. *PLoS One*, 14(3), e0213500.
- Gilardi, F., Gessler, T., Kubli, M., & Muller, S. (2021). Social media and political agenda setting. *Political Communication*.
- Harper, R. A. (2010). The social media revolution: Exploring the impact on journalism and news media organizations. *Inquiries Journal*, 2(3), 1.
- Hunt, & Matthew G. (2017). Social Media and Fake News in the 2016 Election. *Journal of Economic Perspectives*, 31, 211–36.

- Mare, A., Mabweazara, H. M., & Moyo, D. (2020). "Fake news" and cyber-propaganda in Sub-Saharan Africa: Recentring the research agenda. *African Journalism Studies*, 40(4), 1–12.
- Johnson, B., & Kelling. (2018). Placing Facebook: 'trending,' 'Napalm girl,' 'fake news,' and journalistic boundary work. *Journalism Practice*, K 817–833.
- Kamau, S. (2017). Democratic engagement in the digital age: youth, social media and participatory politics in Kenya. *Communicatio*, 128–146.
- Kasra, M., Shen, C., & O'Brien, J. (2018). Seeing is Believing: How People Fail to Identify Fake Images on the Web. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems*, 21–26.
- Kaur, M., & Verma, R. (2016). Social media: An emerging tool for political participation. *International Journal of Social and Organizational Dynamics*, 5(2), 31-38.
- Khan, A., & Mazhar, B. (2017). Effects of Photojournalism on Reader's Exposure and Retention. *Global Media Journal*, 15–28.
- Lavrakas, P. J. (2008). *Target Population*. Encyclopedia of Survey Research Methods.
- Lee, T. (2019). The global rise of "fake news" and the threat to democratic elections in the USA. *Public Administration and Policy*, 15–24.
- Martin, N. (2018, November 30). How social media has changed how we consume news. *Forbes*. Retrieved from <https://www.forbes.com/sites/nicolemartin1/2018/11/30/how-social-media-has-changed-how-we-consume-news/?sh=78d3927a3c3c>
- Mansour, E. (2016). The adoption and use of social media as a source of information by Egyptian government journalists. *Journal of Librarianship and Information Science*, 50(1), 48-67.
- McNair, B. (2018). Fake news: Falsehood, fabrication and fantasy in journalism.

- Mehrabi, D., Hassan, M. A., Sham, M., & Ali, M. S. (2009). News media credibility of the internet and television. *European Journal of Social Sciences*, 11(1), 136.
- Mugenda, O. (1999). Research Methods: Quantitative and qualitative approaches.
- Nash, R., Wade, K., & Brewer, R. (2009). Consciousness and Cognition. *Why do Doctored Images Distort Memory?* 773–780.
- Nightingale, S. J., Wade, K. A., & Watson, D. G. (2017). Can People Identify Original and Manipulated Photos of Real-world Scenes? *Cognitive Research: Principles and Implications*, 30.
- Padil, N., & Azahari, M. H. (2014). The Impact of Photographic Images in Print and Online Media for Political Campaign in Malaysia. *International Journal of Social Science and Humanity*, 214–219.
- Paganini, P. (2013). Photo forensics: Detect Photoshop manipulation with error level analysis. *InfoSec Institute*. Retrieved from <https://resources.infosecinstitute.com/topic/error-level-analysis-detect-image-manipulation/>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). *Purposeful sampling for qualitative data collection and analysis in mixed method implementation research*. *Adm Policy Ment Health*, 533–544.
- Pate, U. A., Gambo, D., & Ibrahim, A. M. (2019). The Impact of Fake News and the Emerging Post-Truth Political Era on Nigerian Polity. *A Review of Literature*. *Studies in Media and Communication*, 21.
- Safiullah, M., Pathak, P., Singh, S., & Anshul, A. (2017). Social media as an upcoming tool for political marketing effectiveness. *Asia Pacific Management Review*, 22(1), 10-15.

- Safari, A. O., Rahman, N. A., & Mohammed, R. (2016). *Perspectives and attitudes on the credibility of news on social networking (SNSS) sites: Urgent need of research work*. *Journal of New Media and Mass Communication*.
- Scheiner, C. W. (2014). The importance of social media as source of information in the technology identification in dependence of external and internal factors. *International Conference on Social Computing and Social Media*, pp. 103-112.
- Shen, C., Kasra, M., Pan, W., Bassett, G. A., Malloch, Y., & O'Brien, J. F. (2019). Fake images: The effects of source, intermediary, and digital media literacy on the contextual assessment of image credibility online. *New Media & Society*, 438–463.
- Sun, J. (2021). Research on credibility of social media information based on user perception. *Security and Communication Networks*.
- Tan, A. (1985). *Mass Communication Theories and Research*.
- Tandoc, E. C., Ling, R., Westlund, O., Duffy, A., Goh, D., & Wei, L. Z. (2017). Audiences' acts of authentication in the age of fake news. *A conceptual framework*. *New Media & Society*, 2745–2763.
- Treier, S., & Hillygus, D. (2009). The Nature of Political Ideology in the contemporary electorate. *The Public Opinion Quarterly*, 679–703.
- Vorhaus, M. (2020). People increasingly turn to social media for news. *Forbes*. Retrieved from <https://www.forbes.com/sites/mikevorhaus/2020/06/24/people-increasingly-turn-to-social-media-for-news/?sh=76c5a5613bcc>
- Wasserman. (2020). Fake news from Africa. *Panics, politics and paradigms. Journalism*, 21(1).

- Westerman, D., Spence, P., & Van Der Heide, B. (2014). Social Media as Information Source: Recency of Updates and Credibility of Information. *Journal of Computer-Mediated Communication*, 171–183.
- Wasserman, H., Madrid-Morales, D., Mare, A., Ndlovu, K., Tully, M., Umejei, E., & Uzuegbunam, C. E. (2019). Audience Motivations for Sharing Dis- and Misinformation. *A Comparative Study. Comparative Approaches to Disinformation Workshop*.
- Wasserman, H., & Madrid-Morales, D. (2019). An Exploratory Study of “Fake News” and Media Trust in Kenya, Nigeria and South Africa. *African Journalism Studies*, 107–123.
- Wasserman, H., & Madrid-Morales, D. (2019). An Exploratory Study of “Fake News” and Media Trust in Kenya, Nigeria and South Africa. *African Journalism Studies*, 40(1), 107–123.
- Yatid, M. (2019). Truth Tampering Through Social Media: Malaysia's Approach in Fighting Disinformation & Misinformation. ., *The Indonesian Journal of Southeast Asian Studies*, 203–230.

APPENDICES

Appendix I: Guiding Schedule

1. From meta-data Error Level Analysis (ELA) of fake images, what elements of image distortion emerged, that may have formed basis of misinformation and may have resulted to patterns of communicative image framing?
2. What was the frequency of the dissemination of fake images? Number of times individual image was published.

	Minimally published (1-15 times)	Average published (15-50 times)	Virally published (more than 50 times published)
Facebook			
Twitter			

3. What message framing elements emerged from contextual misrepresented images? Images purported to have been taken from particular area, yet used to otherwise illustrate inaccurate messaging.
4. From the sampled fake images, what were the recurring patterns of messaging that may have contributed to message framing.
 - (i) If such patterns occurred, did they have elements of; propaganda, violence, satire, entertainment and other.
 - (ii) What was the percentages on patterns of messaging elements?

	Political/Propaganda Framing	Violence Framing	Satire	Entertainment	Other(s)
Facebook					

Twitter					
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5. If messaging patterns predominantly occurred from fake images, did they qualify as message framing, misinformation and disinformation?
6. What components of image framing emerged from textual misrepresentation of images, did such text constitute contextual misrepresentation?
7. From the virally disseminated images, what components of the image framing may have formed basis of political propaganda, misinformation and disinformation?
8. From meta-data Error Level Analysis (ELA) of fake images, what elements of image distortion emerged may have formed basis of misinformation, image framing and communicative disinformation?
9. Did textual framing of images constitute of contextual disinformation?
10. Did the contextually misrepresent images form basis of disinformation? Images purported to have been taken from particular area, yet used to otherwise illustrate inaccurate messaging.
11. From the sampled fake images, what was the extent (percentage) of unintended communicative misinformation that resulted to disinformation? This as per given message framing.

	Political/Propaganda Framing	Violence Framing	Satire	Entertainmnet
Facebook				
Twitter				

Appendix II: Sample of Fake Images

NOTE: Appended images below may be graphical.



Kijana Mdogo

28 October 2017



Hawa maubwa wamechoma kawangware wanafanyanini hapa kiambu/muranga/nyeri nakuingine tuwachome warudi kwao .





Andrew Li Wandicha

29 October 2017



Mungiki wamepigwa na waluhya kawangware hadi wametoroka,hapana cheza na mluhya,that photo defines how strong we are



147

67 comments

Like

Comment

Share



34 mins • Homa Bay •

Thanks to Kenyans of goodwill. The Maa Community just like Kisii, Bomet and Meru DID NOT vote Uhuru Kenyatta for president, those are keyed numbers and to prove, this is what is going on. In Narok, the PO has been found voting in her own house, what NASA is doing is using the public and police of good faith to show this. Kenya for us.





Hesy Wa Dandora ► DANDORA
CRIME FREE



6 hours ago •

I stil repeat members, this welder was shot dead by thugs at light industry, the thugs managed to rob almost half a million in broad daylight:..... he was shot dead after he raised alarm when thugs were escaping,....., plz members, stop using thiz photo to give wrong information to send a bad notion about the police, we all know the current situati...

[Continue Reading](#)





It is never a good morning in the city as we wake up to the sad news of another mass murder of the targeted communities in Riverside-Ruaraka at dawn. Mungiki in police uniforms descended on the unsuspecting residents, brutally hacking several to death as police laid siege on the neighbouring Mathare slums to thwart any attempts by the slum dwellers... [Continue Reading](#)



1 user & 1 friend and 2 others · 3 Comments · 2 Shares





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Kenya Stock Photos and Pictures

Graphic content / A man belonging to the Luo tribe lays motionless on the ground after

Images may be subject to copyright. Find out more

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Mtoto Wa Kuria Moses

29 October 2017

He who choose to live with a bullet dies with a bullet.

The militias who killed our #two #cops in #kayole were cornered and shot death, the fire arms they stole were also recovered.

Well done our intelligence and security forces.

Kawangware bandits and their Militia leaders are now on radar.

Hakuna serikaki ya kike.



HOW IS THAT ?



1. CENTRAL REPUBLIC OF KENYA
2. PEOPLE'S REPUBLIC OF KENYA



Edward Wanyonyi ▸ Group Kenya

14 August 2017 · 🌐

Miinda kazi, mi ndo naamka Wah mungiki yawa. Everybody taja country yako kwa hii because things aren't good right now. Kama ni Canaan bado twaenda don't worry



Burudi M. Jay and 218 others

178 comments



Like



Comment



Share

View previous comments

6 of 119



Esther Hadassah Ollondeh I love the division

Like · Reply · 2y



Aboy Nyakwar Gor 2

Like · Reply · 2y



Isindu Evans Mbona umewacha sgr

Like · Reply · 2y



Dennis Oginga Hapo 2

Like · Reply · 2y



Write a comment...





Reforms > Insiders say ODM pushing for restructuring of elections body as first step

Revealed: Structure of unity government



New reality has created a fierce battle between Deputy President William Ruto (right) and allies of President Kenyatta for the control of Jubilee Party.



The making of an alliance: President Kenyatta, ODM leader Raila Odinga and Kanu chairman Gideon Moi working on a line-up that will see them field a single residential candidate Story on Page 8



Schools will remain closed for 30 days

Back Page



Motorists wait at one end of Mugeri bridge along the Kisumu-Nairobi-Karicho Highway, which was submerged by the swollen Kiamboni River yesterday.

Floods wreak havoc in Rift and Nyanza

From Kisumu, Migori and Homa Bay counties, where thousands of families are sleeping in the cold after their homes were submerged by flood waters, to Narok where the road to Mai Mahiu remained closed

for the third day, and Sothi where Mugeri bridge that links South Rift and Nyanza regions is submerged, the heavy rains pounding parts of the country are leaving untold misery in their trail. Residents of

Kisumu describe the raging waters as the worst floods they've witnessed in decades, while experts attribute the rising level of Lake Victoria to an imbalance between its inflow and outflow. **Pages 10-11**

