

وزارة التعليم العالي والبحث العلمي

MINISTÈRE DE L'ENSEIGNEMENT SUPERIEUR ET DE LA RECHERCHE SCIENTIFIQUE

MOULOUD MAMMERI UNIVERSITY OF TIZI-OUZOU

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DEPARTMENT OF English

قسم الانجليزية



**A Dissertation Submitted in Partial Fulfillment of the Requirements for the
Degree of Master in English**

Domain: Foreign Languages

Field: English Language

SPECIALISM: Didactics of Foreign Languages

Title

*The Impact of Slogans and Graffiti on Public Opinion: Exploring EFL
Students' Perception of Global Climate Change through Multimodal
Discourse Analysis*

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Date de soutenance: 04/07/2024

Academic Year: 2023-2024

Dedication

This dissertation is dedicated to the memory of my precious father **AREZKI**, whose words of encouragement still sound in my ears, a billion thanks for his unconditional love, prayers, and all the joy he brought to my life.

I would like to dedicate this work to whom I love.

To my beloved mother **ZINA** and my dearest sisters **MAYA** and **SARA**.

To my caring uncles: Messaoud, Amar, and Mohamed, who were always right by my side.

To my dear binomial **KOUCEILA**.

Katia OURAMDANE

I dedicate the fruit of this humble work,

To my guiding star, my beloved mother '**FATMA**', whose support illuminated my path during this journey.

In loving memory of my father '**SLIMANE**', whose belief in my dreams shaped the person I am today.

To my cherished brothers and sisters, whose unwavering support and love have been the source of my strength and inspiration. I am forever thankful and lucky because you exist in my life.

To my dear binomial '**KATIA**', with whom I share this work.

To all my beloved ones.

Kouceila OUKAL

Acknowledgments

We are indebted to our supervisors who enlightened our path during the process of writing our dissertation. Their guidance has truly been invaluable in shaping the outcome of this work.

We would like to express our sincere gratitude to Dr. Fatima Challal for her assistance, kindness, and wisdom. Her feedback and encouragement have been essential in bringing this work to completion. Many thanks for lightening the path to knowledge, and making this educational experience so enjoyable.

We sincerely thank Mr. Mohammed Hammou for his valuable guidance, and sage advice. We deeply appreciate his passion for teaching, and engaging learning experiences he created that have made our educational journey both enriching and memorable.

We would like to extend our sincere appreciation to all of our teachers in the Department of English, especially Mr. Akli Aouine for his generosity, and professional guidance.

A special thank goes to the board of examiners who accepted to review and evaluate our work

We want to express our heartfelt thanks to our classmates at the Department of English with whom we shared unforgettable and joyful moments.

Lastly, we thank all the students of the Department of English who took part in our study, your feedback greatly contributed to the completion of this inquiry.

Abstract

Given the complex and global environmental concerns faced by humanity today, slogans and graffiti serve as impactful multimodal platforms through which such matters can be highlighted, including climate change issue. Accordingly, the present study aimed to explore how EFL students at MMUTO perceive these forms and how they can influence their attitudes at the three levels, involving cognitive, affective, and behavioral stage. In order to meet the objectives of the present study, our research relied on Petty and Cacioppo's Elaboration Likelihood Model (1986), which investigated the way third-year, master one and two students engage with climate change slogans and graffiti. The methodology employed in this research is mixed method approach, combining qualitative and quantitative methods. The corpus under investigation, comprising five slogans and five graffiti, was collected from online websites and questionnaires were administered to students of the three levels at the Department of English at MMUTO. The results are analyzed using Multimodal Discourse Analysis with more focus on Halliday's Systemic Functional Grammar for slogans analysis, Kress and Leeuwen's framework of Visual Grammar for graffiti analysis, as well as Qualitative Content Analysis (QCA) for questionnaire data analysis. The findings revealed that slogans and graffiti influenced the cognitive perception of students by raising their concern and awareness regarding global climate change. Additionally, these multimodal media evoked a range of feelings among EFL students, such as responsibility and sadness regarding the actual situation of the planet. However, at the behavioral level, not all students are engaged in action when encountering these multimodal forms of communication.

Key words: EFL Students, Elaboration Likelihood Model (1986), Global Climate change, Graffiti, Multimodal Discourse Analysis, Slogans.

List of Abbreviation

C°	Degree Celsius
DREF	Disaster Response Emergency Fund
EFL	English as a Foreign Language
ELM	Elaboration Likelihood Model
HP	Hypothesis
IFRC	International Federation of Red Cross and Red Crescent Societies
MMUTO	Mouloud Mammeri University of Tizi-Ouzou
QCA	Qualitative Content Analysis
SFL	Systematic Functional Linguistics
US	United States

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General Introduction

Statement of the Problem

Nowdays, the world has become more exposed to diverse natural disasters that still threaten nature, which is vital source of life for many living species on earth. In fact, these phenomena received a significant attention from world organizations like “UNITED NATIONS”, mainly “UNICEF”. Thus, one of the major topics that received intense debate and raised many questions is global climate change.

Climate change is a scientific concept, which is often used by scientists to describe any climate change. The latter can be caused by a combination of natural factors; such as volcanic activity and human activities (Environmental Protection Agency ,2024). Due to the increasing levels of pollution provoked by human daily actions involving household sources, agricultural practices, as well as burning fossil fuels, environmental concerns have become more urgent than before. In other words, pollution plays a major role in exacerbating climate crisis and provoking global warming, which is a substantial contributor to ice melting, sea level increase, in addition to abnormal climate fluctuations resulting in dangerous wildfires (Alieva, and Shemilkhanova, 2023). There is evidence that environmental problems not only affect our planet’s ecosystem, but can pose serious challenges to human health and well-being. As a result, public opinion becomes incredibly important in striving to address such challenges, as it becomes remarkable force that drives individuals to take action and bring positive changes through dynamic activism. However, it is assumed that engaging the target audience in climate change can be difficult. This is because many individuals perceive its impact as uncertain, distant and not personally important (Scannell, and Gifford, 2011). When it comes to persuade people about the relevance of pressing matters, there are various avenues through which ideas and sentiments can be manifested. One such means is through the use of slogans and Graffiti.

General Introduction

In essence, slogans and graffiti can serve as effective mediums for shaping public opinion regarding a variety of important matters on a global scale. While previous research have primarily focused on the impact of slogans and graffiti on the scale of politics and world conflicts, a little attention has been given to their influence in relation to environmental issues, such as climate change.

For instance, at the national level, Selhani and Kerras (2021) conducted a study on the effectiveness of slogans and graffiti during Algeria's "El Hirak Movement". They examined various slogans from the protests using discourse analysis. Their findings highlighted two main catchphrases "Silmiya" (pacific) and "Yetnehaw Gaa" (they are all to be removed). These slogans, have successfully conveyed messages, promoted unity and solidarity, and justified their dedication to the cause. In addition, they served as a means to simplify shared ideas aiming at the immediate political change; this was their ultimate goal lying behind such political forms.

At the international level, an investigation was carried out by Akporuere (2023), to assess the impact of the political slogan "Emilokan" on voters in Benin City during the campaigns for the 2023 presidential election. The study used a survey method to gather data from 380 voters, analyzing it using source credibility and social judgment theory. The findings indicate that, the slogan had both positive and negative effects on voting behaviors. Hence, the majority of the respondents affirmed that the tagline influenced their voting behavior and motivated them to engage in the electoral process. However, a minority held a contrasting view, believing that the slogan "Emilokan" had no impact on their voting choice.

In her dissertation, Buckley (2022) explored the role of graffiti and street art in promoting democratic self-expression values. She examined case studies from the Argentine 'Dirty War' and finds that graffiti can evoke emotions like anger, rebellion, and call for action against authoritarian systems, especially during times of political change. Additionally, graffiti

is one way to preserve collective voice and commemorate important events.

By conducting a multimodal discourse analysis stressing on Kress and Van Leeuwen's Visual Grammar (2006), and Halliday's systematic Functional linguistics (SFL) (2004), we can delve deeper into how these various media can impact individuals and mold their perspectives on climate change. This provides us with valuable insights into their force on affecting mass opinion about important environmental issues.

Aims and significance of the study

The present research contributes to the field of multimodal discourse analysis by examining the power of slogans and graffiti as multimodal forms of expressing ideas, perceptions, and issues related to climate change globally. The primary objective is to analyze how the visual elements contribute to the overall process of meaning-making, while also exploring the role of language and visuals in shaping public attitudes and actions regarding environmental issues.

This study is original and worth investigation as it explores the impact of slogans and graffiti addressing climate change on public opinion, with a particular focus on EFL students' perspective and how they influence understanding, emotions, and attitudes towards world climate change, especially after the Black Summer of Algeria in 2023. Hence, according to the IFRC organization's report (Dref Operation n°MDRDZ009) in this country the recurring threat of wildfires increases from year to year due to climate change that causes drought and heat waves with temperatures exceeding 45°C in June and 50°C in July. Hence in July 24, about 35 wildfires have rapidly spread across the North-east of the country, affecting over 11 regions, this dire situation had a profound impact on families, a total of 30000 individuals were impacted, 34 deaths were registered by the Algerian Government and more than 700 persons were harmed.

The study comprises three objectives. Firstly, it aims to understand the cognitive impact of slogans and graffiti on EFL students at MMUTO. Secondly, it seeks to identify the emotions and sentiments evoked by slogans and graffiti among EFL students. Lastly, it strives to explore the influence of such multimodal representations on EFL students at the behavioral level.

Research questions and hypotheses

This work aims to understand whether climate change slogans and graffiti have an influence on students' perception of environmental issues, and act as powerful multimodal media. Hence, the main research question of this study is: How do slogans and graffiti affect the perception of EFL students on global climate change?

In an attempt to reach the objectives stated above, the following questions are meant to guide our investigation:

- How do slogans and graffiti affect the perception of MMUTO students?
- What feelings do slogans and graffiti evoke among MMUTO students?
- How do slogans and graffiti influence MMUTO student's behavioral reactions toward climate change?

To address the research questions stated above, the following hypotheses have been put forward:

- **HP1:** slogans and graffiti representing global climate change influences significantly the perception of UMMTO students, leading to a heightened awareness and concern for environmental issues;
- **HP2:** slogans and graffiti representing climate change evoke feelings of responsibility and urgency among UMMTO students;
- **HP3:** slogans and graffiti addressing environmental issues influences UMMTO student's reaction towards climate change, by encouraging them to adopt sustainable behaviors;

Research technique and methodology

As an attempt to reach the research aim and objectives of the present study, the mixed methods approach has been selected for both data collection tools and analysis procedures. The former is used to analyze the selected corpus obtained from online websites using random sampling technique relying on Halliday's Systemic Functional Linguistics (2004), and Kress and Van Leeuwen's Visual Approach to Grammar (2006). The latter is adopted to quantify the data gathered from questionnaires distributed to the participants. The information collected is analyzed using descriptive statistics and qualitative content analysis methods. The first technique aims to find out clearer and more precise results, while the second seeks to identify meaningful and coherent categories from the obtained data.

Structure of the dissertation

This dissertation adheres to a traditional simple structure known as the IMRAD, featuring a general introduction, four chapters and a general conclusion.

The General Introduction comprises the problem statement, objectives and significance of study, research questions and hypotheses, methodologies employed, and the structure of dissertation. The first chapter, which is the Literature Review, delves into existing literature related to our research study, it mainly serves as a theoretical background of the study. The subsequent chapter called Research Design and Methodology, deals with the procedures of data collection and analysis. The third chapter is the Presentation of the Findings, it displays the data acquired throughout the study by conducting a questionnaire and a multimodal discourse analysis of ten images. The last chapter is the Discussion of the Findings; it gives an explanation of the study's findings and answers to the earlier stated research questions. The General Conclusion provides a summary of the entire study including suggestions for further research.

Literature Review

Introduction

This chapter is devoted to reviewing the main concepts and frameworks related to the subject of our inquiry. It is divided into four sections: the first one covers aspects related to public opinion and environmental concern. The second section provides definitions of slogans and graffiti, as well as their role in the dissemination of information. Next, it moves to shed light on the development of social semiotics and multimodality, highlighting some key concepts related to these fields. Finally, this chapter ends with the presentation of the theoretical framework used to analyze the corpus under investigation.

1. Public Opinion

1.1 Definition of Public Opinion

The concept “public opinion”, in its contemporary meaning finds its roots in the early days of democracy in ancient Greece and Rome. Back then, it was used to indicate admiration, respect and high regard (Donsbach and Traught, 2008). In this regard, Palmer (1936) stated that “the origins of our conception of public opinion are usually traced to liberal democratic theories of the eighteenth century, with precursors reaching all the way back to ancient Greece”. (As cited in Donsbach and Traught, 2008, p: 2). That is, the idea of public opinion is connected to democratic thoughts from the 18th century, and even older ideas from ancient Greece.

The notion of public opinion is now widely recognized, but there exists a significant difference in the way it is defined, stemming from scholars’ varying perspective on the subject. Indeed, numerous scholars have attributed different definitions to it. In his earliest definition of public opinion, Minar (1960, p: 36) has defined it as “the agglomerate interest of the men of the community” (As cited in Price, 1992, p: 13). In other words, it is a concept that is used to denote the sum of individual’s opinions regarding matters that influence or interest the wider community.

Moreover, Davison (2017) affirmed that public opinion is a shared overall perception, which represents the collective views, beliefs, and aspirations that men hold regarding contemporary issues, events, action or policies. In other terms, “public opinion is best defined as the opinions on controversial issues that one can one express in public without isolating oneself” (Noelle-Neumann, 1974, p: 44). That is to say, it is the feelings, attitude and position favorable, unfavorable, neutral or undecided that individuals take regarding certain topics or issues.

Along with this, a number of researchers argued that public opinion arises from collective debates among various groups, rather than from individual viewpoints (Glynn, Herbst, O’Keefe & Shapiro, 1999). In other words, different entities, such as interest groups, trade associations and nonprofit organizations, play a significant role in influencing public discourse by advocating their position on a particular issue, action or policy. According to Kollman (1999), these organized groups have a greater ability to shape issues, capture the media, and mainly exert influence on policymakers.

The concept of public opinion evolved through time and research; therefore, theorists and scientists of 20th and 21th centuries not only acknowledged the power of public opinion, but also categorized it as a phenomenon of great significance. Lawser, Dwyer & Fisher (2023, p: 3) claimed that “Public policy and its successful implementation are greatly influenced by public opinion”, this means that the collective views, beliefs and sentiment of the general public voiced through protest, media coverage, marches and different cultural movements constitute a compelling and influential force, that has the power to mold political decisions and guides leaders to make choices that align with the prevailing situation. The same thought is articulated by Page and Shapiro (1983, p: 175) who argue that “public opinion is often a proximate cause of policy, affecting policy more than policy influences opinion”. That is to say, governments and decision-makers frequently use public opinion to determine whether the public supports or

opposes particular policies or activities. Moreover the way public opinion influences support or opposition to specific policies is particularly evident in the environmental sector, therefore the environmental authorities rely on the support of the public to advocate for global environmental protection.

1.2. History of environmental concern

The late 1960s, witnessed a significant resurgence in public awareness and concern for the environment motivated by one pivotal event, as explained in the publication of Carson's book, entitled "The Silent Spring" published in 1962. The earth Day organization (2024) affirms that "The book represented a watershed moment, selling more than 500,000 copies in 24 countries as it raised public awareness and concern for living organisms, the environment and the inextricable links between pollution and public health." That is to say, Rachel Carson's publication was a turning point that raised ecological interest into a national spotlight, by warning about the serious ecological consequences of pesticide use, mainly by exposing the unavoidable outcomes of the absence of the government intervention to address the issue.

1.3The impact of Public Opinion on the Environmental Movement

Public opinion is undoubtedly the basis of the ecological movements, as environmental authorities regularly depend on the wider public for ideological support and resources to support environmental preservation (Barkan, 2004). This means that the collective views, beliefs and feelings of the general public, voiced through protest, media coverage, marches and different cultural movements, constituted a compelling and influential force, that has the power to mold environmental policy, and guides leaders to make choices that align with the prevailing situation. This is further supported by Anderson (2017) who argue that public opinion plays a crucial role in shaping the policy choices of democratic governments. Said differently, public opinion has a significant importance for the government, since understanding public's sentiments and preferences help them to create policies that meet the desires of the entire

society. Hence, the history of “First Earth Day” provides the most effective illustration of how public opinion can shape policies mainly the course of events.

1.3.1 First Earth Day

First Earth Day is a famous example of movements influenced by public opinion. It is known as the largest protest in human history, which started in the United States on April 22, 1970. It mobilized more than 20 people, involving citizens, communities and students who participated in marches and educational programs across the country, and they assembled together with a unified voice for global environmental protection. Accordingly, Rome (2010, p: 195) claims that “The huge turnout was a dramatic demonstration of public support for the environmental cause”. In other words, this collective mobilization wanted to shed light on ecological issues caused by industrialization and sent an urgent call for policymakers that the environmental concern is a critical issue which needs to be addressed. In this sense, Freeman (2006, p: 125) states that “The first Earth Day reflected a major increase in public awareness of and concern about environmental problems”.

The idea of Earth Day was established by Senator Gaylord Nelson of Wisconsin, a passionate environmentalist who wanted to bring unity to the environmental movement, and raise awareness of ecological concern. In this regard, Rome (2010, p: 196) argues that “Nelson was in his 50s, balding, a pillar of the establishment—yet he launched a mass protest. He found a way to join the power of the capital with the energy of the grassroots.”

April 22, 1970 is a significant event that gave birth to a powerful movement founded on a shared commitment to preserve nature. However, since this event, there has been a growing prioritization of ecological concern. To illustrate, Luther (2005, p: 1) claims that:

Prior to the 1960s, little formal consideration was given to the potential impact of human activity on the environment, beginning in the late 1950s and into the 1960s, the public became increasingly aware of and concerned about those impacts. During that time, Members of Congress debated the need for a national policy on the environment and for an Executive-level council or committee that could provide advice to the President on environmental policy issues.

That is to say, before the 1960s individuals did not pay attention to how their daily activities affected the environment, but in the beginning of 1960 people started worrying about this critical issue. This led to the discussion of a national plan striving to protect the planet among members of Congress, and having a specialized group that guides the president on environmental issues.

Hence, by the end of 1970, the Environmental Protection Agency was established under the official instruction of Richard Nixon. Its primary mission was to create laws and standards that preserve human and environmental health. Additionally, this movement led to the adaption of other innovative environmental regulations. To illustrate, the Clean Air Act 1970, a national regulation whose primary goal is reducing air pollution caused by stationary as well as mobile sources, involving different types of vehicles and equipment provoking such kind of pollution. Subsequently, occupational safety and health act 1970 were established. According to Morey (2007: 988), this marked “the first comprehensive effort by the federal government to regulate safety and health conditions in the workplace.” Finally, on October 30, 1970 the Environmental Education Act was adopted by the US Congress, since the president Richard Nixon believed that it is essential to develop environmental literacy, aiming at creating educational programs that help in policy understanding, mainly mobilizing support for actions meant to protect the environment and maintain the ecological balance (United States Congress, 1970).

1.4. The Role of Personal Experience in Shaping Climate Change Perception

A person's ability to create judgments about ecological issues depends on the combination of a multitude of factors, comprising the prior knowledge, the current situation, and most importantly the personal experience of people. According to Sambrook et al. (2021), People's personal experience with extreme weather conditions or local weather anomalies has a significant influence on how they perceive and evaluate climate change. In conjunction with this, Marlon et al. (2019, p: 936) claimed that "as more individuals experience unusual weather patterns that are consistent with changing climate conditions, the more their concern about global warming will increase, and the more motivated they will become to respond and address the problem effectively". In other words, these experiences provide individuals with a chance to enhance their understanding and familiarity with the risks associated with climate change, especially its consequences. This is further supported by Spence (2011: 46) who argue that

One of the reasons that people may not take action to mitigate climate change is that they lack first-hand experience of its potential consequences. From this perspective, individuals who have direct experience of phenomena that may be linked to climate change would be more likely to be concerned by the issue and thus more inclined to undertake sustainable behaviors.

Along with this, in investigating the primary factors that influence public's perception of climate change, a study was conducted in the United Kingdom in 2003 to examine flood experiences, as this country have witnessed a series of flood events that have affected millions of people in different parts of this nation. In fact, scientists have directly associated these events with human actions, especially those related with greenhouse-gas emissions. Therefore, research carried out by Spence after major flooding events in 1992 and 2000, revealed that respondents who directly experienced flooding, showed a high degree of concern about climate change in comparison to non-flooding victims (Sambrook et al, 2021).

As a consequence, “those who were more concerned about climate change and those who perceived greater local vulnerability to climate change impacts were more prepared to reduce their energy use” (Sambrook et al, 2021, p:12) . In other terms, after experiencing such events, individuals may become more aware about the local and personal threats caused by climate change; therefore, it may lead to adjustments in energy sources choices, as well as support for climate related regulation.

2. Slogans and Graffiti

2.1. Definition of the key concepts

2.1.1. Slogans

Slogans have a deep-rooted history as they went through different stages of development over time. The term is originated from the Scottish Gaelic ‘*Slough-Ghairm*’ and pronounced as ‘Slogorm’ standing for a battle cry (Abdi, and Irandoust, 2013:62). They are typically a small piece of writing which conveys information and transmits a message in a clear, concise, and compelling manner. Therefore, they are used to express an idea or purpose. In their first appearance, they covered two crucial fields such as, politics and religion. However, with the evolution of marketing and trade, they become an integral part in the realm of business (Abdi, and Irandoust, 2013:62).

Today, slogans gained more popularity as they are expressive and “act as means by which the general public may express their opinion on public issues” (Newsome, 2002:23). That is, they play an important role in capturing attention and creating a strong impact by evoking a persuasive emotion and encouraging people to act one way or another (Newsome, 2002:23).

2.1.2. Graffiti

Graffiti are forms of visual communication; the designation comes from the Italian word '*Graffio*' meaning a 'Scratch'. In other words, they are types of writing and drawing that involve creating images and letters engraved into a surface like a stone, metal or walls (Britannica).

According to Albaik (2023, p: 69), the definition of Graffiti "can vary depending on different points of view". From the artistic Angel, it is a way that demonstrates creativity of individuals. From the cultural perspective, it can be viewed as a reflection of one's own culture, at the same time; it can serve as a form of protest or identity formation used by people from marginalized ethnical groups to maintain their social status threatened by some governmental considerations and policies. Nevertheless, it can be perceived in various ways depending on its influence on the local environment, as well as, the issue it presents (Albaik 2023, p: 69). Additionally, Tsoumas (2011, p: 17) claims that

Being ephemeral by nature, graffiti is an art form that celebrates change and feeds on new ideas. The street is a unique and powerful platform, a front line where it can be expressed, transmitting personal or collective with the public at the same time way as official message.

This means that, graffiti have a significant effect on the viewers, drawing their attention, engaging their senses, and motivating them to express themselves freely. Thus, the street becomes a captivating stage where personal or collective opinions can be shared explicitly with the public.

2.2. The Dissemination of Information

Slogans and graffiti are regarded as the most effective tools that have become a powerful way for individuals to express themselves and make their voices heard. They provide a platform for public self-expression all around the world being them political, religious or humorous. In

a political sense, “they are systematically used by collectives and state interests as a communication device for informing and persuading” (Buckley, 2014, p: 10).

On the one hand, slogans lead to an increased number of awareness and share information by encouraging people to go beyond the literal words to gain a deeper understanding of a given issue, this is more prevalent during social movements and protests (Van De Velde, 2022). Hence, slogans attempt to make things clear, understandable, and simplify complex ideas in order to evoke strong emotions in people. However, it is important to note that sloganeering should be stressed on meaning so that they can achieve their intended goal, so “meaning is key to the success of slogans” (Newsome, 2002, p: 24).

On the other side, graffiti add a fresh perspective to the overall spread of information. They bring a unique and visually captivating approach to sharing messages with a community. In addition to that, “they give voice to the voiceless, make rhetoric and opinion visual and public” (Buckley, 2014, p: 11). This means that, graffiti acts as a medium that transforms rhetoric into a visual form, and permits individuals to make their voices widespread by bringing attention to important issues that can have a significant impact on the public.

3. Multimodal discourse analysis

3.1 Overview of semiotics

Semiotics is a branch that studies signs and how they are related to the process of meaning making. According to Eco (1976, p: 7) “semiotics is concerned with everything that can be taken as sign”. In a semiotic sense, signs take the form of words, images, sounds, gestures, and objects (Chandler, 2002:2). The term ‘Semiotics’ is derived from the Greek word ‘Semieon’ which stands for signs and symbols, it first appeared in John Locke’s *Essay on Human Understanding* (1960).

As a field of study, semiotics witnessed the formation of different schools and trends

over time starting from the structural school of semiotics, which followed the European tradition, and adopted the technics of the French Linguist De Saussure (Dewanti, 2023, p:2-4). Then, the second trend is informed by the American school influenced by the philosopher Peirce. Finally, the last tradition is the social semiotics school, which counts on the work of the British linguist Halliday (Chandler, 2002, p: 3-4). Therefore, the present study focusses on the field of social semiotics, with the aim of providing a clear and valuable understanding of the topic.

3.2 The Development of Social Semiotics

Social semiotics is a recent school (2005). It took its origins and principles from the work of the British linguist MAK Halliday, *Language as a social system* (1978). Hence, his contributions in the field of linguistics were influential, especially with the emergence of Systemic Functional Grammar (Halliday and Mathiessen, 2004).

According to Van Leeuwen (2005, p. 1), “Social semiotics is not a pure theory, not a self-contained field. It only comes into its own when it is applied to specific instances and specific problems”. This means that social semiotics is not an isolated field, but rather comes into its own when it is put into practice by addressing specific situations and issues.

3.2.1 Systemic Functional Grammar (SFG)

Halliday (2004) states that when we use language, it is not just a matter of saying words, but also how we express our ideas and interact with others. This is what he called ‘Metafunction’ (Halliday and Mathieson, 2004:29). He argues that the spoken and written language serve three main functions (purposes) at the same time including ideational metafunction, interpersonal metafunction, and textual metafunction. *In Systemic functional grammar*, a text is examined through four (4) step stages; context, discourse semantics, Lexico-grammar, and phonology.

3.2.1.1. Context

Context is one of the key components within Systemic Functional Linguistics, which helps determine and convey meaning. For Halliday, it is considered to be as ‘choice’ (Fontaine, 2017, p: 1-2). It can be categorized into two (2) main types. Context of situation which refers to language use in specific texts and conversations. This could involve the choice of words, phrases and grammar that depend on particular communication goals, social interactions and shared knowledge associated with that context. Context of culture that goes back to the broader culture in which language is used and influenced by its values, costumes, and beliefs (Fontaine,2017, p: 1-2).

3.2.1.2. Discourse Semantics

Discourse semantics has to do with the three metafunctions of language.

- **Clause as representation (Ideational Metafunction)**

According to Halliday and Mathiessen (2004, p: 168-171), the experiential metafunction in language means that a sentence can be used to describe actions, state facts, or express relationships. At this level, the main concerned system is called ‘Transitivity’, which helps determine the action or state being done by the subject or object. It is realized by verbal groups called ‘processes’ (Halliday and Mathiessen, 2004, p: 172). (See Appendix 1).

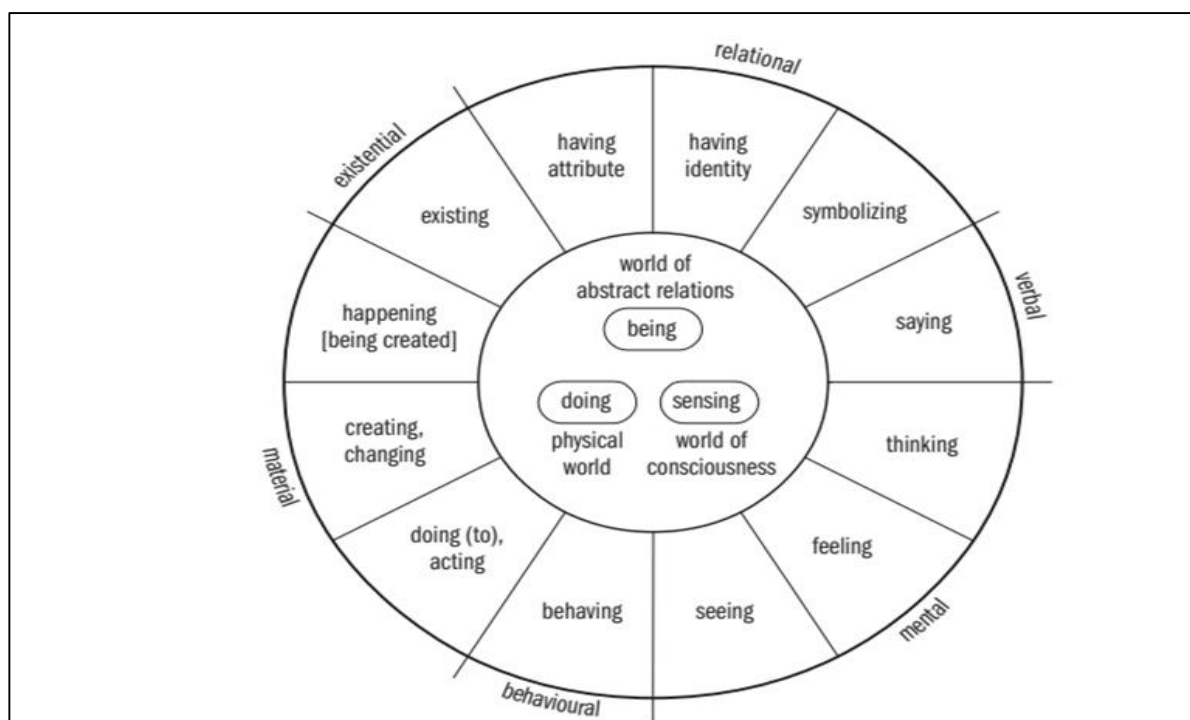


Figure 01. “The grammar of experience: Types of Process in English” Halliday and Matthiessen (2014).

▪ **Clause as exchange (Interpersonal Metafunction)**

When language is used to exchange information, the clause can take the form of ‘proposition’ (Halliday and Mathiessen, 2004, p: 110). This means that, statements and questions become something that can be affirmed, denied doubted, regretted, argued and so one. However, when exchanging goods and services, commands and offers, the term can not be used because it excludes other functions (See Appendix 1).

▪ **Clause as message (textual Metafunction)**

Halliday and Mathiessen (2014:89. Cited in Medan, 2021) suggest that the textual function is closely related to the thematic structure of the clause which contains two important elements: theme and rheme. The theme is the starting point or the beginning of the clause, which organizes the message and gives its focus. The rheme is the additional information or details that come just after the theme (See Appendix 1).

3.2.1.3 Lexico-grammar

It is the combined study of both words (lexicons) and grammar, treating them as one single integrated whole. This implies that it is vital to take into consideration the meaning of the words themselves and how they are grammatically used to effectively transmit the message in an accurate way (As cited in W. Almurashi, 2016, p: 73).

3.2.1.4 Phonology, Orthography and Graphology

These terms refer to the study of “the sound system, the writing system, and the wording system” (W. Almurashi, 2016, p: 73).

Thus, social semiotics including the work of Halliday (1978-2004) became a standard approach that scholars in different fields adopted and relied on. As communication methods evolved, Gunther Kress and Van Leeuwen (1996), realized that meaning is not only conveyed through language, but it goes beyond the words themselves.

3.5 Multimodality

The emergence of multimodality originated from the work of Gunther Kress and Van Leeuwen (1996-2006). The term was first used in their Book *Reading images: The Grammar of Visual Design* (Kress and Van Leeuwen, 1996). It is the development of social semiotics. Kress and Van Leeuwen (2001, p: 20) define multimodality as “The interplay between different representational modes, for instance, between images and written/spoken words. Multimodal representations mediate the sociocultural ways in which these modes are combined in the communication process”. That is, the representation of multiple modes shapes the way we communicate with others and has a strong impact on the social and cultural context.

Kress and Van Leeuwen (2006) claim that language (linguistic mode) and visuals (visual mode) work together to communicate, ensuring that meaning is effectively conveyed and better understood.

3.3.1 Visual Grammar

Visual Grammar is a field within the broader discipline of visual communication. It deals with visuals and how they contribute to the overall meaning making process. It is a recent approach, which considers the work of MAK Halliday (1978-2004) in *Systemic Functional Grammar* as a fundamental basis. According to Halliday (1985, p: 101) “Grammar goes beyond formal rules of correctness. It is a means of representing patterns of experience...It enables humans to build a mental picture of reality, to make sense of their experience of what goes on around them and inside”. That is, grammar is not restricted only to rules to be followed, but it also helps individuals to understand reality and make sense of what they see and feel.

Kress and Van Leeuwen (2006) confirm that “the same is true for ‘*Grammar of the Visual Design*’. Like linguistic structures, visual structures point to particular interpretations of experience and forms of social interaction” (2006, p: 2). Hence, they borrowed Halliday’s conception of metafunction and applied it on a non-verbal communication, mainly the visual mode. They expanded the three metafunctions of language (ideational, interpersonal, and textual) and transformed them into: patterns of representation, patterns of interaction, and principles of composition

Patterns of representation

Each element embedded within an image conveys meaning. The latter is expressed through different types of process.

- **Narrative process:** It indicates the actions that are happening and interactions between participants who are connected by a ‘Vector’ or ‘Arrow’ to indicate that they are doing something to or for each other. Kress and Leeuwen (2006) distinguished three main types of actions; transactional action, which is characterized by a participant (Person or object) doing something to another character or object. Non-transactional action, that is,

when only one participant is involved in the action. Reactional action, which occurs when the participant reacts either to another participant or something that is happening in the picture.

- **Conceptual process:** It focusses on showing participants' state rather than actions themselves. This process is grouped into 3 categories; analytical process which highlights how different elements in the image come together to form the whole concept. Classification process, which brings the participants together in one image to show that they belong to the same category. Symbolic process, which describes the participants without any action, just showing themselves to the viewer (Kress and Leeuwen, 2006, p: 106).

➤ **Patterns of interaction**

Kress and Leeuwen (2006) argue that interaction occurs through:

- **Gaze:** this refers to the eye contact between the participants and the viewers. If they gaze directly at the viewers, it's called "demand" image, where they are asking viewers to do something. In case there is no direct eye-contact, it is called an "offer" image, where the participants are looking at other elements in the image to inform the viewers about something.
- **Social distance:** It shows the closeness of the picture to the viewer, and reflects the three degrees of relationship that exist in real life: intimacy, close, and far distance. These degrees are represented visually by the size of the frame, such as close, medium, or long shot. That is to say, a long shot frame size represents a far personal distance, a medium shot represents a close distance, and a close shot represents an intimate distance.

- **Perspective:** In the view of Kress and Leeuwen (2006, p: 115-140), it refers to how an image is depicted to demonstrate the level of involvement, detachment, and power relations between the viewers and the participants within the picture.
 - 1) Vertical angle (Power relations): In power relations, the angle is a key component. If the viewers look at participants from a high level, they have power over them. However, if they look at them at eye level, it is a relation of equality.
 - 2) Horizontal Angle: It deals with how involved or detached the participants are from the viewers. That is, when they are shown from the front, it is involvement, and when they are depicted from an angle, it is detachment.

➤ **Principles of composition**

According to Kress and Leeuwen (2006), the compositional metafunction consists of

- **Information value:** It is the placement of different elements in a picture which conveys different types of information.
 - a) Given and New structures: this is based on the left-right positioning of visual elements that are connected to known and new information. In simple words, elements in the left side show something already known, while elements on the right side reveal new and important information that needs more attention.
 - b) Center and Margin structures: this means that elements placed in the center are considered the heart of then topic, whereas elements in the periphery may still crucial but less important to the topic.
 - c) Ideal and Real structures: Kress and Leeuwen (2006) suggest that, the top of the image is associated with ideal or ‘heavenly’ things, while to bottom represents real or ‘earthly’ items.
- **Salience:** Kress and Leeuwen (2006) state that ‘salience’ refers to the ability to capture the viewer’s attention through color, font size, capital letters, focus, and tone. This

means, elements that are saturated, highlighted, and foregrounded tend to be more prominent in the visual composition.

- **Framing:** It deals with how the different elements in an image are related or separated from each other to create a sense of coherence. This can be done through boundaries or natural connections using lines, spaces, and icons.

3.4 Discourse analysis

Discourse analysis is an approach to language study. It was influenced by the Hallidayan '*Systemic Functional Grammar*' theory of language (Halliday and Mathiessen, 2004). It suggests that language is not purely structural and focusses on how it is used to convey various meanings and integrate real life interaction.

There are diverse interpretations regarding the term 'discourse'. However, Jaworski and Coupland (as cited in Tannem, Schiffrin, & Hamilton, p. 1-3) provided ten (10) definitions that can be grouped into three main categories: "(1) anything beyond the sentence, (2) language in use, and (3) a broader range of social practice that includes non-linguistic and non-specific instances of language".

Overall, discourse analysis as mentioned in the above definitions, is the study of language in use, focusing on how it is used to create meaning, share information, shape social interactions, and construct knowledge within a specific context (Tannem, Schiffrin, and Hamilton, 2015).

3.5. Multimodal Discourse Analysis

Multimodal Discourse analysis is an interdisciplinary approach, which takes into consideration the study of discourse analysis and multimodality. It emphasizes exploring how different modes of communication interact together to construct meaningful unit within a given community. Handford and Paul Gee (2023, p:140-141) assert that Multimodal Discourse analysis (MDA) is a method that looks at how different modes of communication such as,

speech, writing, images, and more, are connected to each another to create meaning and convey information. Multimodal Discourse analysis recognizes that language alone, is just one part of the overall meaning in a community. Hence, by analyzing different modes used in text, we can gain a deeper understanding of the meanings being conveyed. Handford and Paul Gee argue that “language, whether as a speech or as writing, is one means among many available for representation and for making meaning “(2023, p: 141).

4. Theoretical Framework

Elaboration Likelihood Model (1980) is a Psycho-cognitive theory developed by Petty and Cacioppo, which fits within the field of persuasion. It suggests that individuals' attitudes and opinions towards a message, object or behavior can change depending on the way they process information, and how they think about the arguments through persuasive communication and direct interaction with the message content. It takes into consideration multiple factors that can influence attitude change and how people strongly believe in those changes. At its core, the way people think can vary depending on two crucial factors: motivation and ability (Petty, and Cacioppo, 1986). This means that, the elaboration level and the processing of information can range from no thought or consideration of the message to complete elaboration and integration of the message into their attitudes scheme and beliefs (R. E. Petty, and John T. Cacioppo, 1986, p: 131). In this context, elaboration is a key component in Attitude Change, which refers to the active processing and evaluation of the content that would lead to an increasing persuasion rate. This can be determined by the psychological scale (motivation) and the level of cognition (ability) (Petty, and Cacioppo, 1986, p: 137).

▪ **Motivation and Ability**

Motivation and ability are standard variables through which a person's evaluation of the presented content can occur. Motivation can be defined as “the force or drive that propels individuals towards desired goals” (Sanford, and Wrightman, cited in Khulna, 1999, p: 99). That is to say, motivation is viewed as the energy that pushes individuals to reach their own objectives. In other words, it is the degree of interest and dynamic engagement a person has in relation to the issue or topic being discussed (Petty, and Cacioppo, 1986, p: 137). Thus, motivation plays a major role in fostering positive feelings towards engaging in many different subjects by striving to influence the degree of thinking about persuasive messages. Ability, on the other hand, refers to the cognitive capacity and knowledge that someone has acquired, which enables them to critically analyze the relevance of the issue and make informed decisions (Petty, Cacioppo, 1986, p: 137-138). Hence, cognitive abilities include several mental skills, such as remembering information, paying attention, understanding the different parts of the message, and how they are related to each other (As cited in Gakuin, 2011).

According to Elaboration Likelihood Model, the impact of persuasion variables can differ based on the route of processing. Therefore, two processes can be distinguished; central process and peripheral process (route).

▪ **Central Route**

The central route is characterized by a high level of elaboration, motivation and ability. That is, when people are motivated and capable of critically examining the arguments relevant to a particular issue, they are more likely to take the central route of processing information. Owing to this fact, individuals engage in a careful and thoughtful evaluation of the topic presented or framed in support of particular viewpoint. As a result, this approach will lead to enduring changes in attitudes and beliefs, as it focuses on the relevance, importance and the merits (value) of the message (Wagner, and Petty, 2022, p:7-10).

▪ Peripheral Route

The peripheral process is characterized by a low level of elaboration, motivation and ability. So, when someone lacks motivation and cognitive abilities to analyze and understand the information, s/he embraces the peripheral route. At this stage, persuasion occurs through simple cues without the need to evaluate the content and think about the argument in a deep way. That is, information becomes associated with emotional appeal and source credibility, and the impact of the message on the positive or negative attitude change will lose its durability (B. C Wagner, and R E. Petty, 2022, p: 6-7).

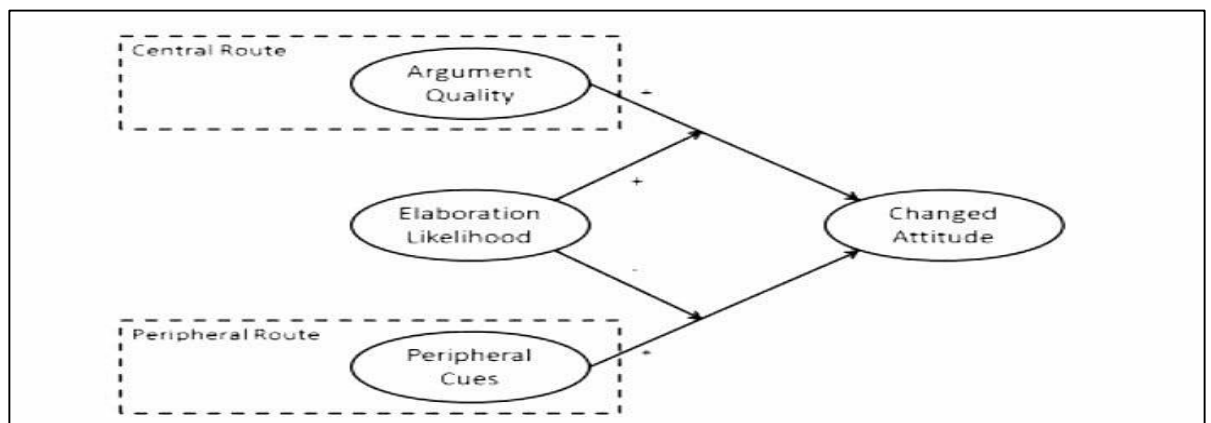


Fig 02. Elaboration Likelihood Model of Persuasion, 1980.

Conclusion

This chapter provides a concise summary of the literature review on the topic under investigation. First, it provides a deep meaning of public opinion and its impact on public policy, as discussed by scholars. Then, it introduces the concept of multimodal discourse analysis as a field of study. Next, it gives background information on the ways slogans and graffiti are used to communicate information to the public, along with highlighting previous works on the topic. Finally, it explains the theoretical framework that underlies this study.

Research Design and Methodology

Introduction

This chapter is devoted to explaining the methodology employed in our research. It describes the techniques and procedures used to obtain and analyze data in order to reach our research aim, which is to determine whether slogans and graffiti influence students' perception of the global climate change problem. Therefore, it starts by identifying the research method of the study, that is the mixed method research. The research design contains two sections, the first looks at data collection procedures and describes the corpus, which consists of ten images for both slogans and graffiti, randomly gathered from various online websites, as well as the context of the survey. The second section focuses on data analysis procedures; it explains the process where the data is analyzed using qualitative analysis for the corpus relying, on Halliday's (2004) Systemic Functional Grammar and Visual Grammar, suggested by Kress and Van Leeuwen (2006), and the questionnaire is analyzed quantitatively using statistical techniques and qualitative content analysis.

1. Research Methods and Design

1.1 Mixed-Method Research

The present dissertation counts on Mixed-Methods Research. It is the procedure that can be used for both data collection and analysis by incorporating quantitative and qualitative approaches in order to gain more insights and richer understanding. Hence, this method gives us a valuable and insightful comprehension of how slogans and graffiti can affect EFL students' perception of climate change in a manner that cannot be achieved through using qualitative or quantitative research separately. It helps researchers as it “offers a number of benefits to approaching complex research issues since it integrates philosophical frameworks of both post-positivism and interpretivism” (Dawadi, Shrestha, and Giri, 2021, p:27).

This research is exploratory in nature and both survey and corpus-based. Thus, the ultimate aim lying behind exploration is to uncover and describe new phenomena or relationships, that were previously unknown. In this case, it is the investigation on the role of slogans and graffiti in shaping the public perception among EFL students, concerning climate change issues. The corpus part involves using qualitative methods to collect and analyze data from online websites, while the survey is both quantitative and qualitative, including a questionnaire as the data collection tool.

2. Description of the Corpus

The ongoing investigation involves a multimodal discourse analysis of ten images. Half (5) of these images are related to slogans prevalent during social protests all around the world, while the remaining half is related to graffiti. The data for this study were collected from different interactive online websites haphazardly, using the random sampling technique. This approach endeavors, not only to ensure a diverse range of perspectives, but also highlights how climate change is portrayed in various public spaces.

3. Data Collection Procedure

The main focus of the present study is to analyze the linguistic and visual elements found in slogans and graffiti, and the way they can impact students' viewpoints on global climate change problems. Therefore, to achieve such a goal, one instrument has been selected as the data collection tool, which is a questionnaire designated to University students in order to know how people in an academic setting react to such kind of issues.

3.1 The Context of the Study

This study was conducted in the Department of English at MMUTO during the academic year of 2023-2024. The questionnaire has been distributed to students of the 3 levels on May 2024.

In order to select the sample of the study, it is necessary to define the specific population from which the sample has been selected. In this case, the group of interest consists of thirty EFL students from different levels, including third year (L3), master one and master two students within the department of English at MMUTO, and each category level includes a specific number of participants. In order to capture a wide range of perspectives, the sample has been selected randomly. However, since the study is conducted in the Department of English, the sample might not be representative of all EFL learners.

3.2 Questionnaire

The research technique employed to gather data is the questionnaire. A structured questionnaire is specifically designed to collect the necessary information from participants on a particular topic. According to Etikan and Bala (2017, p: 219), it is a collection of questions with a space for answers asked for the sake of obtaining data from respondents.

The questionnaire utilized in this research comprises a set of twenty-one (21) questions organized into three (3) sections, each clearly labeled as the following: Students' awareness of climate change, Student's engagement and familiarity with slogans and graffiti, Perceptions of slogans and graffiti. It incorporates both close-ended and open-ended items (See Appendix). Close-ended questions restrict students to a fixed set of response options, such as multiple choice and Yes/No questions. In contrast, open-ended questions allow the participants to provide their unique responses. This facilitates a deeper exploration of the topic and allows for a more personalized understanding.

3.3. Pilot Study

We conducted a pilot study with three EFL students. One student representing each level in order to identify any potential issues with participants' comprehension of the questions. The questionnaire was piloted on the 9th of May 2024. Once we completed the piloting stage, all of

the questions were clear for the respondents. The questionnaire then was administered to the selected participants between The 12th May and 14th May, 2024.

4. Procedures of Data Analysis

4.1 Linguistic Analysis

The slogans are carefully analyzed using Halliday's (2004) framework in Systemic Functional Grammar, encompassing the ideational, interpersonal, and textual metafunctions.

- **Ideational metafunction:** It deals with how language represents and depicts reality and our experience of the world.
- **Interpersonal metafunction:** It is concerned with how language establishes interpersonal relationships among speaker/writer, listener/reader.
- **Textual metafunction:** It is the overall organization of the text, in other words, how a text is structured so it can be a communicative event.

4.2 Visual Analysis

The selected graffiti were analyzed according to Kress and Van Leeuwen's (2006) framework in visual grammar inspired by Halliday's metafunctions by referring to them as: representational, interactive, and compositional.

4.3 Descriptive Statistical Analysis

Dong, Y. (2023, p: 16) defines descriptive statistics as “the simplest form of statistics: it is a tool to help people organize and summarize the inevitable variability in collections of actual observations or scores”. In other words, it is a fundamental method used to organize the data gathered by providing a clear way to analyze and interpret the information. It allows simplifying data and drawing meaningful conclusions.

4.4 Qualitative Content Analysis (QCA)

Qualitative data analysis is an examination of non-numerical data presented in a textual form. This data can be obtained from different research instruments, including surveys like the questionnaire distributed to students. This type of data analysis has to do with researcher's abilities and own understanding of the social context in which the data was collected. Hence, the method of data analysis used in this research is qualitative content analysis. According to Patton (2002) it is the process of reducing a complex qualitative material into meaningful patterns and insights, to facilitate comprehension and interpretation of data. That means, QCA is a well-guided technique which focuses on the examination of recorded communication, and at the core of its method lies the systematic coding and categorization of data. In our work, this technique is used to determine from the participants' feedback obtained by using questionnaires, clear categories and themes including weather anomalies, environmental protection, motivating actions, and message interpretation.

Conclusion

In this chapter, the main focus was on the research design of the study. It introduced the research method that was utilized, and described the data collection tool, which consisted of a questionnaire administered to EFL students. Additionally, it explored the data analysis procedures based on Kress and Leeuwen's (2006) framework in Visual Grammar, Halliday's (2004) Systemic Functional Grammar, as well as quantitative and qualitative content analysis to ensure a clear understanding of the research subject.

Presentation of the Findings

Introduction

This chapter displays the results obtained from the analysis of the corpus, which is composed of ten images representing and portraying climate change globally, as well as the findings of the questionnaire. The first part of this chapter presents the results of slogans analyzed according to Halliday’s (2004) three metafunctions in Functional Grammar including clause as representation, clause as exchange, clause as message, whereas, graffiti are examined using Kress and Leeuwen’s (2006) Visual Grammar, involving representational, interactional, and compositional meanings. The second part highlights the questionnaire’s findings through qualitative content analysis and descriptive statistics.

1. Results of the Multimodal Discourse Analysis

1.1 Discourse analysis of slogans

This part shows the results of the discourse analysis of slogans which appear in appendix. The five images of these slogans are analyzed following Halliday’s metafunctional system.

A. Clause as Representation

	Process	Participants	Circumstance
Image 1	“are destroying” is a material process. It represents the activity or action being performed.	“you” is the actor, which refers to the person or group being addressed. “our future” is the goal, which refers to the object being affected by the action.	\
Image 2	“Is” is a relational process. It represents the state of existing or being	“There” is the token, which refers to the existence of something. “no planet B” is the value, which is the lack of alternative option.	
Image 3	“can’t runaway” is a material process. It represents a negation of an action being performed.	“You” is the actor, which refers to the person or group being addressed.	“from climate change” is the consequence that cannot be escaped.

Image 4	“is” is a relational process. It represents the state of being.	“Our future” is the carrier, which refers to the object being carried. “Our hand” is the attribute, which describes the condition of the carrier.	\
Image 5	“will die” is a material process. It represents something happening in the future.	“you”, “we” are the actors. “You” refers to the person or group being addressed, while “We” refers to the group of addressers.	“of old age”, “of climate change” are the causes represented by the process.

Table 01: Ideational Metafunction in Slogans

Table 01 displays how slogans in social protests express the ideational metafunction, encompassing processes, participants, and circumstances. We notice that image 1, 3, 5 show material processes involving an actor and a goal. While, image 2, 4 represent relational processes featuring either a carrier and attribute, or a token and value.

B. Clause as Exchange

	Mood of the clause	Commodity exchanged
Image 1	The mood is “Declarative”. It makes a statement and describes actions.	It involves “Giving information”, asserting that someone is causing harm or destruction to the future.
Image 2	The mood is “Declarative”. It makes a statement and expresses relationships.	It includes “Giving information”. It implies that there is only one planet, and emphasizing the importance of taking care of it.
Image 3	The mood is “Declarative”. It makes a statement and states facts.	It involves “Giving information, claiming that climate change is a pressing issue that cannot be escaped or ignored.
Image 4	The mood is “Declarative”. It makes a statement and expresses relationships.	It involves “giving information”, emphasizing on the importance of responsibility and the need to take action and making choices to shape the future.
Image 5	The mood is “Declarative”. It makes a statement and states facts.	It includes “Giving information”, highlighting the potential consequences of climate change on human beings.

Table 02: Interpersonal Metafunction in slogans.

Presentation of the Findings

Table 2 depicts the interpersonal metafunction expressed in slogans, focusing on the mood of the clause and the commodity exchanged. We notice that all the images have a declarative mood describing actions, stating facts, and expressing relationship. Additionally, all images have one single purpose, which is giving information in many different ways.

C. Clause as Message

	Theme		Rheme
	Type	Class	
Image 1	Unmarked	Pronoun “You”.	are destroying our future.
Image 2	Unmarked	Pronoun “There”.	is no planet B.
Image 3	Unmarked	Pronoun “You”.	can’t runaway from climate change.
Image 4	Unmarked	Noun phrase “Our future”.	is on our hands.
Image 5	Unmarked	Pronoun “You”, “We”.	will die of old age. will die of climate change.

Table 03: Textual metafunction in Slogans.

Table 3 demonstrates the textual metafunction used in slogans, specifically highlighting the theme and rheme of the clause. We notice that all images in the table have unmarked themes, which predominantly contain noun phrase and pronouns, mainly personal ones as starting points of the slogans.

1.2 Visual Analysis of the Graffiti

This section presents the results of the social semiotic analysis of graffiti that appear in appendix. The five images have been analyzed using Kress and Leeuwen’s framework in Visual Grammar.

A. Representational Meaning

a) Narrative Representations

	Actors	Vectors	Goal
Image 1	The young girl and terrestrial globe.	The girl’s gaze and posture direct the viewer’s attention to the melted globe.	The melted globe symbolizing natural degradation, is the focus of the girl’s attention and it is the main issue.
Image 2	The silhouette of a young boy and woman, and the globe.	The gaze of the woman and the boy looking up at the globe direct the viewer’s attention to the burning globe.	The burning globe symbolizing natural degradation is the focus of both woman and young boy, and the central issue.
Image 3	The human eye itself is seen as an actor in this scene	The gaze of the eye depicted with a blue iris in the form of globe and fire emanating from it direct the viewer’s attention to the burning globe.	The fire situated within the eye may suggest an action or concept related to “Earth day” mentioned in the graffiti, and it is the main issue.
Image 4	The polar bear is the primary actor in this scene.	The polar bears’ gaze directs the attention to the arctic landscape turned into a lava sea.	The arctic landscape turning into a lava sea symbolizes the urgency of global warming, which is the bear’s attention and the major issue.
Image 5	The shark is the primary actor in this image.	The shark’s gaze and posture trying to escape from the dried ocean direct the viewer’s attention to the impact of climate change on aquatic animals and vegetation, creating a narrative of panic.	The vibrant landscape turned into a devastating scene of fires represents the loss of biodiversity, while the ocean transformed into a desert symbolizes the destruction of marine ecosystem affecting the survival of many species, which is the major issue.

Table 4: Narrative Representations in Graffiti

Table 4 describes the narrative processes found in graffiti. We notice that in images 1, 2, 4 the actors are real depicting either animals or humans. Whereas, image 4 shows abstract elements that display visual metaphors.

b) Conceptual Representations

	Symbols	Emotions
Image 1	The terrestrial globe melting like ice cream is metaphor for global warming.	The girl's sad and helpless expression represents the emotional impact of environmental issues on the youth.
Image 2	The burning globe consumed by flames is a metaphor for high temperature and planet's warming	The woman with a worried expression and the boy in the state of shock conveys a sense of urgency and danger of climate change on human beings.
Image 3	The eye is a universal symbol of seeing and observing, while fire could symbolize energy and transformation.	\
Image 4	The chunk of floating ice symbolizes the diminishing of the arctic habitat, and the sea burning like lava is a symbol of destructive effect of global warming.	The bear's sad and distress expression reflects the vulnerability of animals to environmental changes caused by global warming.
Image 5	The colorful landscape transformed into a scene of devastating fires, and the ocean turned into a desert symbolizing that no ecosystems is immune from the impact of climate change.	The look of terror and the shark's distress expression show how animals suffer from global climate change.

Table 5: Conceptual representations in Graffiti

Table 5 indicates the conceptual processes in the selected graffiti which consists of symbols and emotions. We notice that all the images involve symbols addressing certain issues and all of them display emotions, except image 3 as it includes only the human eye.

B. Interactional Meaning

	Gaze	Social distance	Angle	
			Horizontal	Vertical
Image 1	The girl is not making eye contact with the viewer creating an offer image	The medium shot of the girl and the globe creates a close distance.	Frontal	Medium angle

Presentation of the Findings

Image 2	The woman and young boy are not making eye contact with the viewer creating an offer image	The long shot of the boy, woman, and globe creates a far distance.	Frontal	High angle
Image 3	The human eye is making eye contact with the viewer creating a demand image	The close-up shot of the human eye creates an intimate distance.	Frontal	Medium angle
Image 4	The bear engages in direct eye contact with the viewer creating a demand image.	The medium shot of the bear and the lava sea creates a close distance	Frontal	High angle
Image 5	The shark is not making eye-contact with the viewer creating an offer image.	The close-up shot of the green landscape with the shark, ocean, desert, and the scene of devastating fires create an intimate distance.	Frontal	Low angle

Table 6: The Interactional metafunction in Graffiti

Table 6 reveals that images 1 and 2 are offer images, whereas, 3 and 4 are demand images. In terms of distance, close distance is realized in images 1 and 4, while a far distance between participants and the viewers is created in image 2. Besides, intimate distance is shown in image 3. Concerning the horizontal angle, in all the images the participants are viewed from frontal angle. In relation to the vertical angle, images 1 and 3 are at eye level, whereas, in images 2 and 4 the participants are viewed from a high angle.

C. The Compositional Meaning

	Information value	Salience	Framing
Image 1	Both woman and the melted earth are placed in the center. Thus, they are considered the most important elements in the image representing the decline of the environment.	The girl's outfit and bright colors draw attention to her as a central figure, making her emotions and actions salient. The distressing imagery of the melted globe is salient due to its central placement.	The contrasting colors keep the viewer's focus on the central theme. The lack of clear boundaries between the and the globe symbolizes the interconnectedness of humans and environment.
Image 2	The central placement of the globe emphasizes its importance. The placement of the woman on the left side represents the current state of awareness, whereas the right placement of the boy indicates the uncertain future.	The bright colors of the burning globe draw attention to it as a main element. The boy, woman and dark colors stand out against the background drawing attention to environmental destruction.	The lack of boundary between the globe held in the woman's hand and the boy suggest human's engagement and responsibility towards nature.
Image 3	The central placement of both the eye and fire representing potential destruction emphasizes their importance in this scene.	The bright colors of human eye with the globe's flame draw attention to it as the main element, making it salient to the viewer.	The lack of boundary between the human eye and the burning globe suggests that humans are experiencing the effects of earth warming and their lack of awareness about the state of the planet
Image 4	The bear is placed in the center of the image, making it an important element that characterizes the broader impact of the climate crisis on wildlife, and the struggle for survival.	The bear's white colour and its placement against a red background draws attention to him as a central figure, making his action and emotions salient.	The lack of clear boundaries between the bear, lava sea, and the chunk of floating ice suggests that arctic animals are facing the effects of global warming.
Image 5	The shark is placed in the center of the image. Thus, it is an important element which represents the destruction of marine ecosystem. The placement of the green landscape on the left side represents the current state of the planet, whereas the right placement of the devastating fires, dead flowers and desert indicates the loss of biodiversity and the upcoming state of the globe.	The distressing imagery of the shark in his habitat which transformed into desert is salient due to its central placement.	The contrasting colors keep the viewer's focus on the central theme. The lack of clear boundaries between the green landscape, the shark, the ocean, the desert, and the devastating scene of fires symbolize the interconnectedness of ecosystems and the effects of climate change on biodiversity and underwater habitat.

Table 7: The compositional metafunction in graffiti

As shown in table 7, images 1, 2, and 3 place the globe in the central position to indicate that it serves as most valuable element in the graffiti, while image 4 places the bear in central placement to demonstrate its importance. In terms of salience, the portrayed participants in the graffiti are given salience. As regards framing, the presented participants are characterized by the lack of boundaries indicating their interconnectedness.

2. Results of the Questionnaire

The findings obtained from the distributed questionnaire are clearly organized into tables, as well as, straightforward diagrams.

Section One: Participants' Profile

This section presents the information about respondents' general profile, comprising gender and level of study.

Question 1: specify your gender

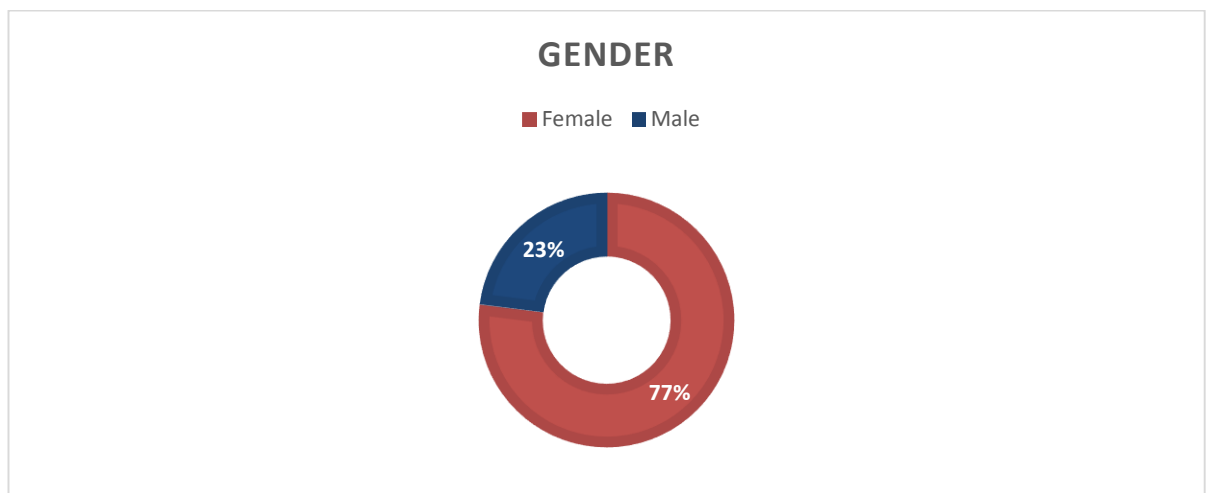


Diagram 1: students' gender

Diagram 1 illustrates the distribution of the respondents according to their gender. Females comprise the majority of the participants with 77%, while the remaining represent males (23%).

Question 2: Specify your level of study

Level of study	License	M 1	M 2	Totality
Number of Participants	12	5	13	30
Percentage	40%	17%	43%	100%

Table 8: Students' level of study

Table 8 demonstrates the number of participants starting from licence to M2. The total number of respondents is 30 students, including 40% for licence, 17% for M1, and 43% for M2.

Section Two: Awareness of Climate Change

The second section aims to assess students' awareness and how much knowledgeable they are about climate change.

Question 3: How frequently do you seek information about climate change?

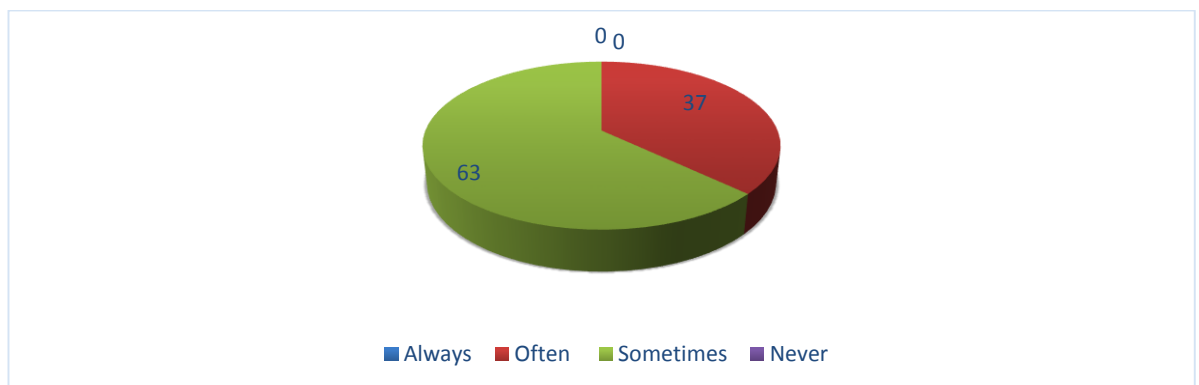


Diagram 2: Frequency of students' information seeking about climate change

Diagram 2 illustrates how frequently students seek information about climate change. Out of the responses, 37% of the participants often seek climate change information, 63% sometimes, while none of them always seek information.

Question 4: Have you noticed any changes in weather patterns that you believe it might be caused by global climate change?

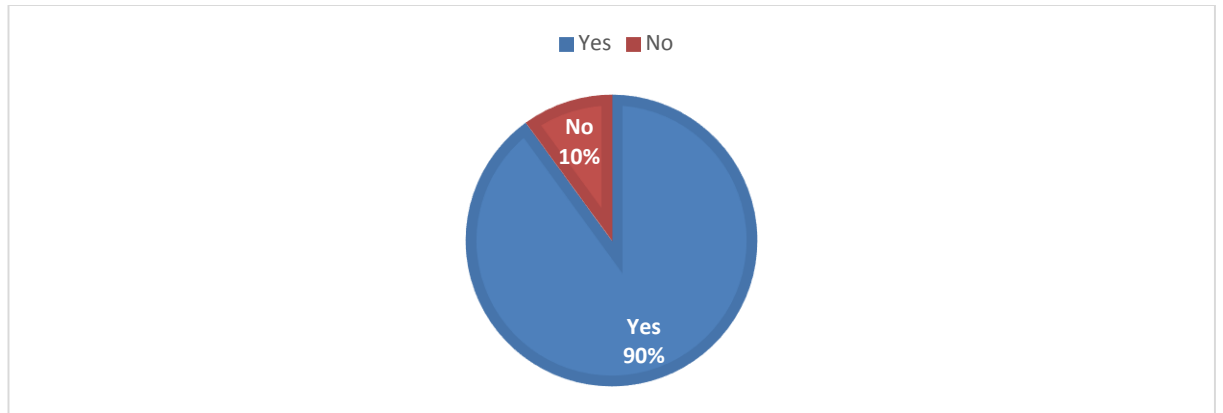


Diagram 3: Students' observation of weather changes caused by climate change.

Diagram 3 shows weather changes caused by climate change, as observed by students. The majority of the participants (90%) believe that weather fluctuations are related to climate Change, while the minority (10%), think that there is no relation between the two phenomena.

Question 5: To what extent do you worry about potential consequences caused by global climate change?

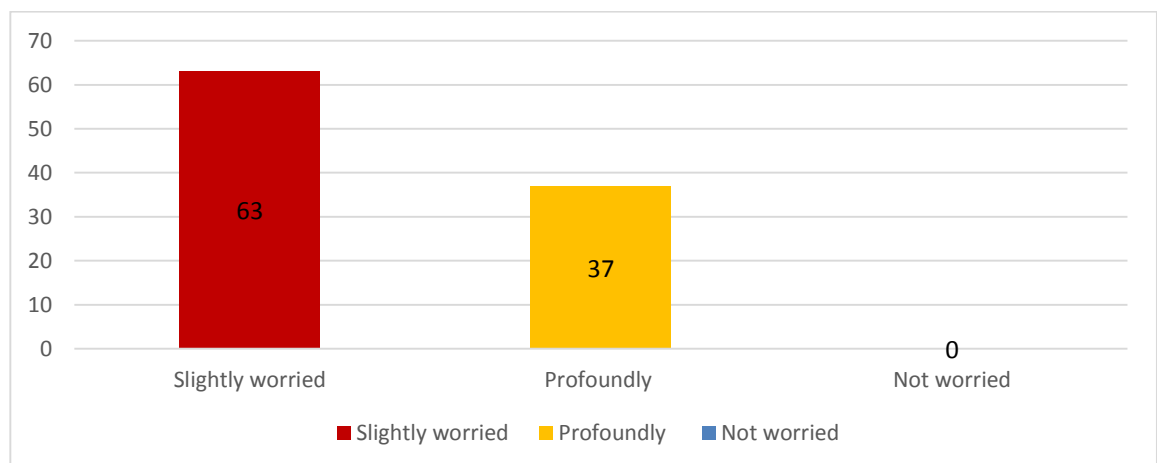


Diagram 4: Students' degree of worry about effects of climate change

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Diagram 4 indicates students' levels of concern regarding the impact of climate change. The results show high percentage of 63% of the total number of participants who affirm that they are slightly worried about climate change's consequences, whereas the remaining assert that they are very worried about the climate change effects.

Question 6: Have you personally found yourself in a situation where you directly experienced the effects of climate change?

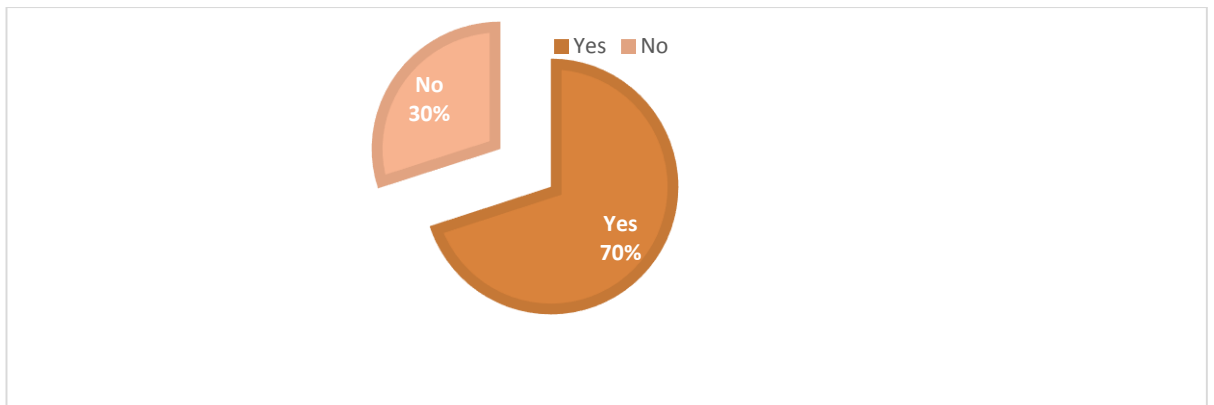


Diagram5: student's direct experience of climate's change consequences

In this question, the participants have been asked whether they have encountered the effects of climate change, and if so, they are required to substantiate their response by presenting a specific example. The results show that the majority of respondents, constituting 70%, reported experiencing the consequences of climate change, they supported their claims by citing examples such as weather anomalies, wildfires, and experiencing multiple seasons in one single day. Whereas the remaining minority (30%) claimed that they did not encounter such effects.

Section Three: Students' familiarity and engagement with slogans and graffiti.

Question 7: How many times do you see slogans and graffiti in your environment?

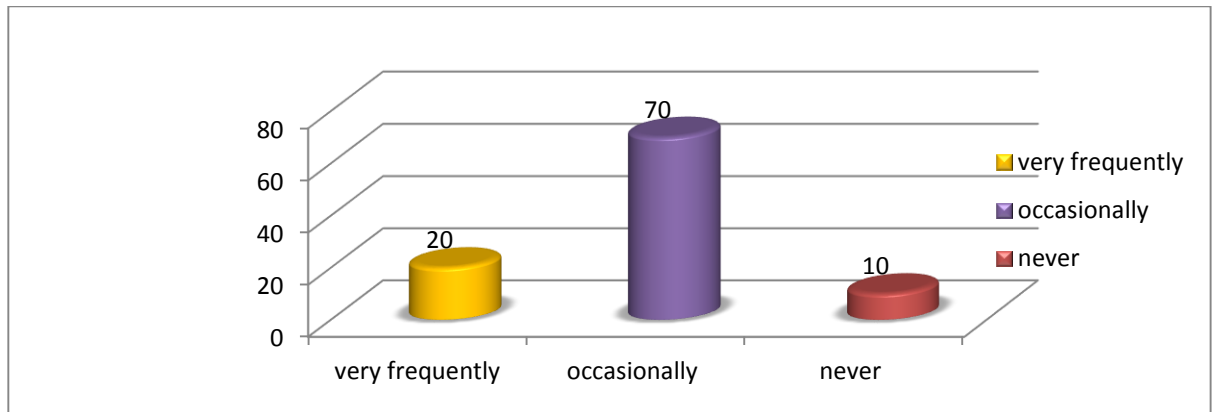


Diagram 6: Students' frequency of encountering slogans and graffiti.

In diagram 6, most students, around 70%, come across slogans and graffiti, 20% see these forms very frequently, while 10% do not encounter them.

Question 8: what type of slogans and graffiti do you see?

Options	Political	Artistic	Both	Total
Participants' number	4	18	8	30
Percentage	13%	60%	27%	100%

Table 9: Types of slogans and graffiti students encounter

In this table, the results indicate that the majority of students see artistic forms with a percentage of 60%, 13% of them face political slogans and graffiti, whereas, 27% encounter both.

Question 9: Have you ever come across slogans and graffiti related to climate change?

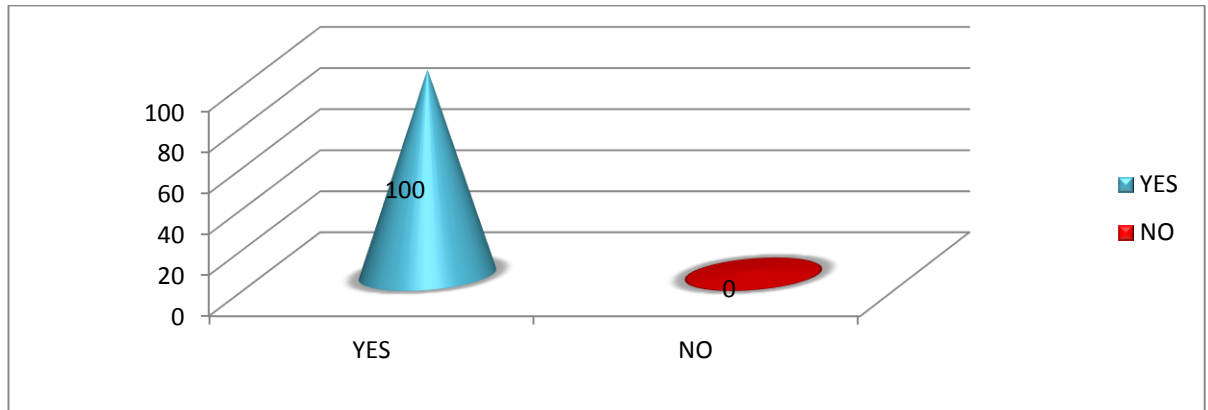


Diagram 7: Climate change slogans and graffiti encounters by students

In this diagram, all the participants are exposed to slogans and graffiti associated with climate change.

Question 10: When you see slogans and graffiti related to climate change, do you usually take the time to read or observe them?

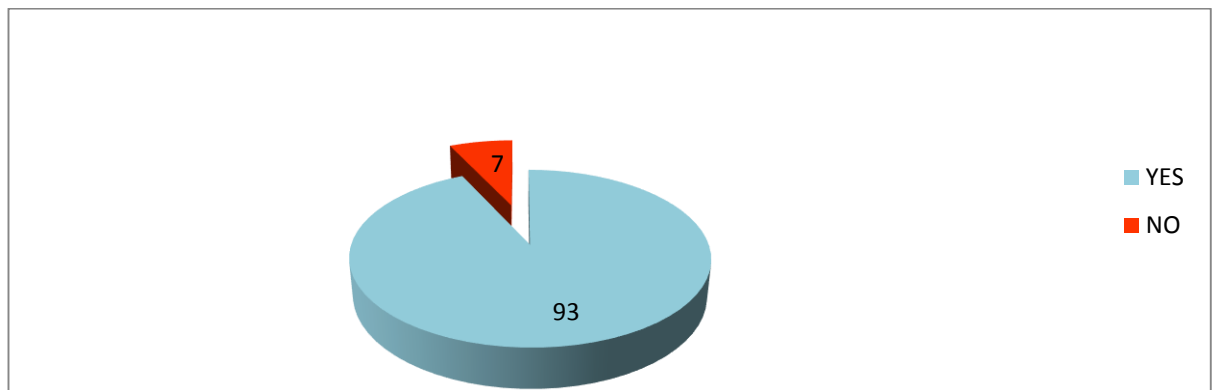


Diagram 8: Students' engagement with climate change slogans and graffiti.

The results shown in this diagram demonstrate that the majority of respondents (93%) included in this research keep eye on slogans and graffiti regarding climate change. While the minority (7%) do not.

Question 11: What catches your attention when you face slogans and graffiti related to climate change?

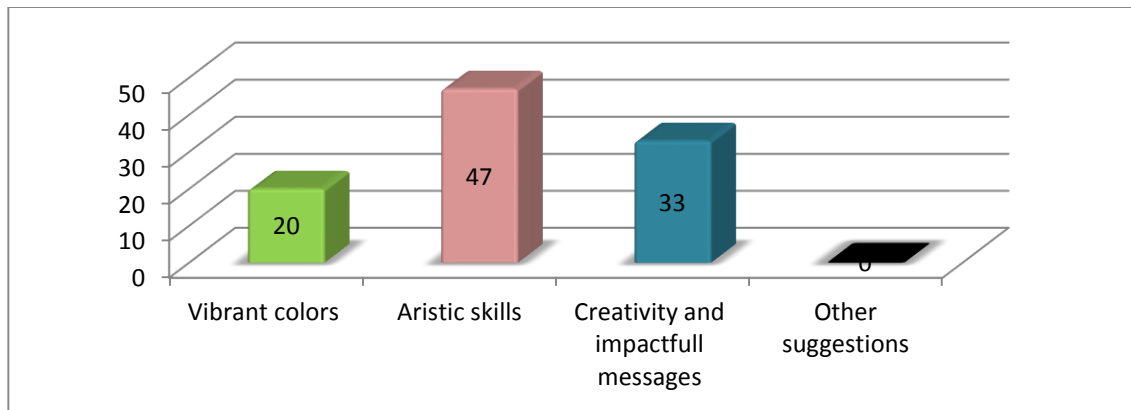


Diagram 9: Notable aspects of climate change slogans and graffiti.

As indicated in this diagram most students (47 %) are attracted by the artistic skills in climate change slogans and graffiti, and 33% of them pay attention to the creativity and impactful messages conveyed through such means. A selected handful (20%) of them are captivated by the colors found in these forms, while no one of the respondents added further suggestions.

Question 12: How motivated do you feel when interpreting messages behind these forms?

Degree	Extremely motivated	Little motivated	Not at all motivated	Total
Participants' number	15	12	3	30
Percentage	50%	40%	10%	100%

Table 10: students' motivation towards the interpretation of slogans and graffiti.

Table 10 indicates that 50% of the participants are extremely motivated when interpreting the messages conveyed through slogans and graffiti addressing climate change, 40% have a little motivation. While, a percentage of 10 % have no impulse to put into meaning such messages.

Question 13: Do you encounter difficulties when trying to interpret messages conveyed through slogans and graffiti that address climate change?

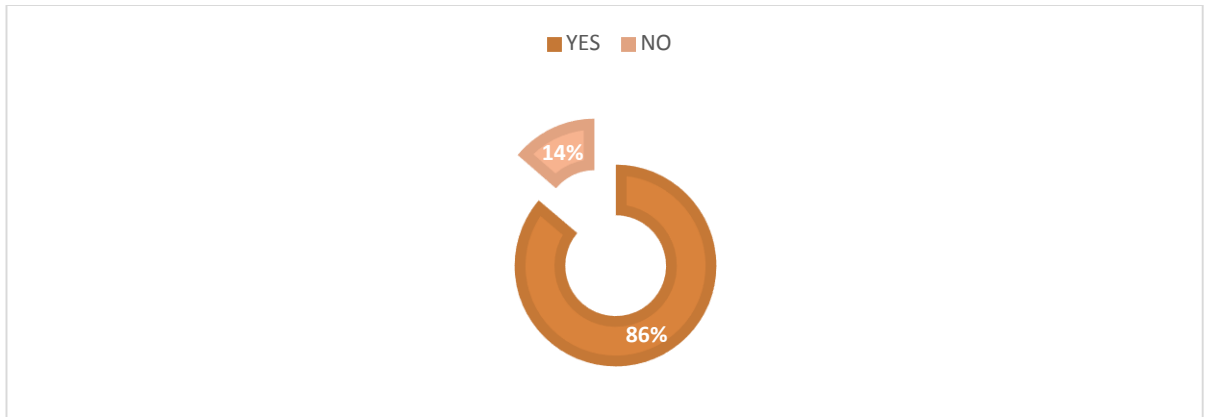


Diagram 10: Assessment of the understandability of slogans and graffiti's content on climate change.

In the thirteenth question, students were asked whether they face challenges when interpreting climate change slogans and graffiti. The majority of the respondents (86%) affirm that they do not encounter obstacles when reading and observing such form, while the remaining portion of students who answered with “Yes” (14%) mentioned that they struggle to understand the hidden meaning behind these messages, others noted that they lack knowledge of scientific jargon, making it hard for them to comprehend the transmitted information.

Question 14: According to you, what are the main factors that can affect your interpretation of slogans and graffiti regarding climate change?

Options	Language proficiency	Your prior knowledge	Personal experience	Total
Number of participants	8	14	8	30
Percentage	27%	46%	27%	100%

Table 11: Factors influencing students’ interpretation of climate change slogans and graffiti.

The table above shows the main factors that impact students’ interpretation of slogans and graffiti addressing climate change. The results indicate that most students (46%) rely on their prior knowledge to decipher the meaning behind such mediums. A percentage of 27% shows students who are influenced by their personal experiences, whereas the remaining (27%) believe that language proficiency is a requirement for the interpretation of these forms.

Section Four: Students’ Perceptions of Slogans and Graffiti

The last section is dedicated to reveal how students perceive slogans and graffiti that portray a significant global issue like climate change.

Questions15: Do you think that slogans and Graffiti about climate change have the power to raise questions or communicate strong messages?

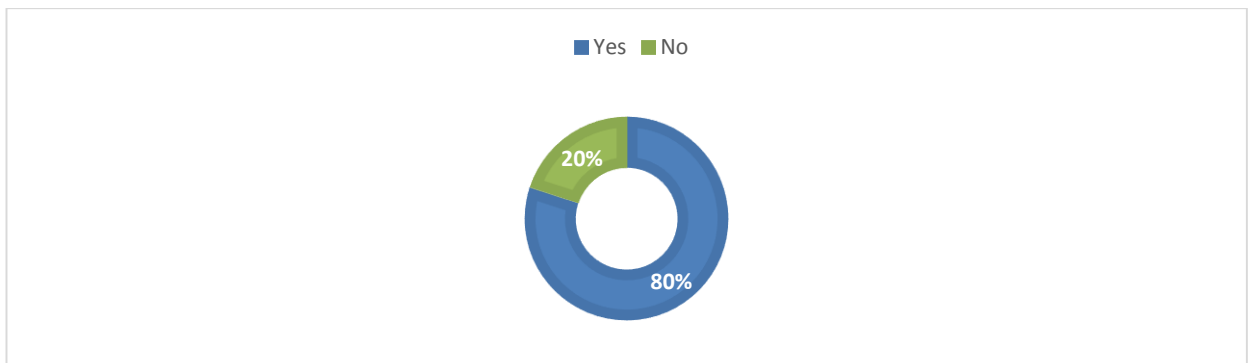


Diagram 11: Students’ opinion on the effectiveness of climate change slogans and graffiti

Presentation of the Findings

In the first half of this question, students were questioned about their opinion regarding the efficacy of climate change slogans and graffiti in delivering their content. The highest percentage which is 80% shows that such means are a powerful medium through which climate change can be addressed, while 20% of the respondents think that these multimodal forms do not have the power to raise questions, as well as communicate strong messages

***Please justify**

In the second half of this semi structured question students were asked to provide reasons for their views on the effectiveness of climate change slogans and graffiti. The findings revealed that a significant portion of students argued that these forms play an important role in disseminating information and raising awareness among the public. On the other hand, some students expressed a lack of prior knowledge on the topic depicted in slogans and graffiti, leading them to approach global issues like climate change with skepticism when transmitted through these mediums.

Question 16: Have you noticed any changes in your mood when you come across global climate slogans and graffiti?

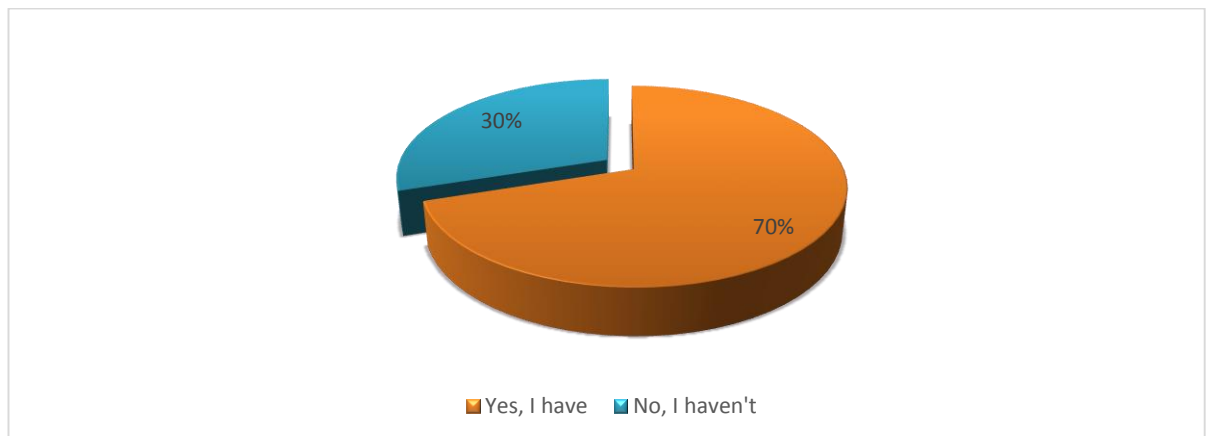


Diagram 12: Students' mood when encountering climate change slogans and graffiti

In this question, students were questioned about their emotional responses when encountering climate change slogans and graffiti. A percentage of 70% demonstrates that they

Presentation of the Findings

are strongly impacted by these forms emotionally, whereas 30% of the respondents do not feel anything.

When coming across these mediums. All participants who acknowledged a shift in their mood expressed positive emotions towards climate change portrayed through such means, and indicated that they capture their attention, evoking strong feelings and sentiments.

Question 17: How memorable do you consider the message content communicated through those forms?

Options	Extremely memorable	Slightly memorable	Forgettable	Total
Participants' number	14	13	3	30
Percentage	47%	43%	10%	100%

Table 12: students' memorability of climate change slogans and graffiti

Table 12 shows that 14 respondents (47 %) of the total number of participants find that climate change slogans and graffiti are very memorable. On the other hand, 43% of the respondents claim that such mediums are somehow memorable. Lastly, 10% indicate that the content communicated through these forms is forgettable.

Question 18: Have you ever been moved to take action as a result to exposure to slogans and graffiti addressing global climate change?

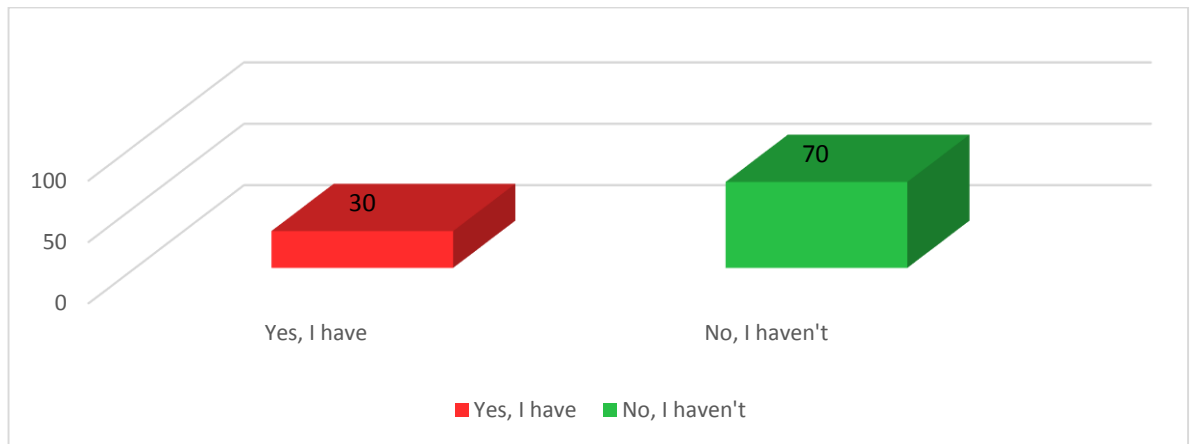


Diagram 13: Students' behavioral reactions after exposure to climate change slogans and graffiti.

In the nineteenth question, students were asked if they have been inspired to take action after seeing climate change and graffiti. Most of the respondents (70%) declare that they have never take action after being exposed to these mediums. The participants who responded affirmatively (30%) mentioned that they participate in civic activities within their region, take individual actions, or actively engage in social media discussions after facing their messages.

Question-19: Do you feel curious to know more about climate change after seeing slogans or graffiti related to environmental issues?

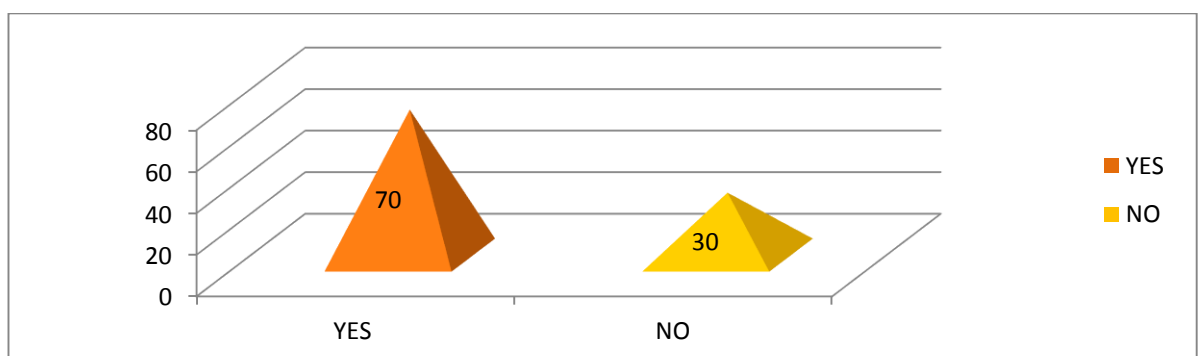


Diagram14: students' curiosity and engagement with climate change topics following their exposure to slogans and graffiti addressing environmental issues.

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Diagram fourteen depicts students' eager to gain a deeper understanding of climate change after being exposed to slogans and graffiti related to environmental issues. From their answers 70% of the respondents have affirmed that after encountering these forms they wanted to delve deeper and know more about climate change, whereas 30% of the participants claim that those slogans and graffiti did not really spark their interest to explore more the topic.

Question 20: Do you think that slogans and graffiti related to climate change added more information to your own understanding of world climate change?

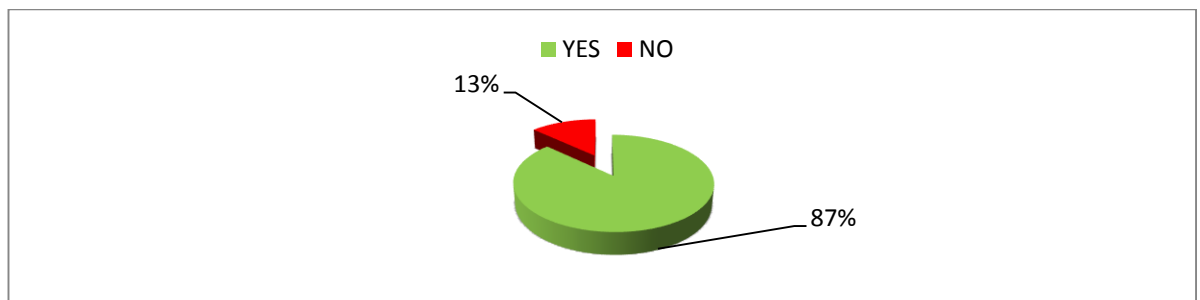


Diagram 15: students' perspectives regarding the impact of climate change slogans and graffiti on improving the understanding of the topic world climate change.

As indicated in the diagram (15), 87% of the respondents believe that slogans and graffiti related to climate change offered a comprehensive view of this critical global issue, and provided more insights about the topic. On the other hand, 13% of them feel that these forms did not contribute in enhancing their understanding about global climate change.

Conclusion

This chapter has presented the results of the multimodal discourse analysis of the corpus collected from various online websites relying on Halliday's (2004) Systemic Functional Grammar for slogans, and Grammar of the visual design suggested by Kress and Leeuwen (2006), as well as presenting the findings collected from the questionnaire administered to thirty EFL students at the Department of English. The findings of the survey, i.e. the questionnaire,

show that climate change slogans and graffiti positively influence students' perception of global climate change, mainly at the cognitive and affective levels.

Discussion of the Findings

Introduction

This chapter aims to discuss the data obtained from the two research tools used to achieve the objectives of the study, which are the multimodal discourse analysis and the questionnaire employed in the Department of English at the University of Mouloud Mammeri. It intends to address the questions cited in the general introduction, and either confirm or refute the hypotheses put forward. The results are interpreted in connection with the literature review discussed in the first chapter.

This part of the dissertation is structured into three sections: the first part deals with student' cognitive perception of climate change slogans and graffiti, the second explores the emotional responses these media evoke among students, and the last section sheds light on the behavioral impact of these multimodal forms on students' actions.

1. The Impact of Slogans and Graffiti on Students' Cognitive Perception

When students encounter climate change slogans and graffiti, it can impact their cognitive perception of environmental issues. The powerful messages conveyed through these media have the potential to shape their perspectives regarding world climate change. The cognitive perception refers to the way students process information, make decisive choices, call for actions, as well as think about the message.

The findings of the survey reveal that 80% of the students view climate change slogans and graffiti as effective tools for addressing environmental concerns, while 20% of the participants doubt their ability to provoke thought and deliver strong messages (See Diagram 11). Thus, the subsequent exploration into students' justifications for their views indicate that a significant number of the respondents believe that these forms are crucial for disseminating information and raising awareness among the public. In this sense, Van De Velde (2022: 5) claims that "The protest writings do not only carry a collective voice,

but also increasing individual voices. Therefore, it would be reductive to approach the claims as a homogeneous block”, which means that, the protest messages do not just convey a unified message but also represent a range of individual perspectives, so it is not accurate to consider them all the same, because each message content communicate a particular information, reflecting a sense of consciousness and understanding of a given issue. Conversely, some students admitted that they lacked prior knowledge about the topics depicted in slogans and graffiti. This makes them skeptical of the effectiveness of these media in transmitting messages about climate change.

Hence, the results obtained from question 14 affirm that the majority of the students depend on their existing knowledge and consciousness to understand the underlying messages behind such means (See Table 11), whereas other students rely either on their language skills or personal experiences to closely get in touch with climate change expressions found in slogans and graffiti. This suggests that students who have directly experienced the effects of climate change, can enhance their own understanding of slogans and graffiti, and raise awareness on the issue being presented. They supported their claims by pointing out some examples, such as unusual weather phenomena like, the absence of winter precipitations which involves the absence of rain and diminished snowfall, high temperatures causing water level decrease, and widespread wildfires in the country which were regarded as “Black Summer of 2021 in Algeria” where flames have ravaged numerous villages, especially in the wilaya of Tizi-Ouzou, as well as experiencing multiple seasons in one single day.

According to Druckman (As cited in Sambrook, Konstantinids, and Russel. 2021. P: 4)) “Personal experiences describe how individuals tend to interpret and process information in a biased way that confirms their prior beliefs”. That is, students tend to see things in a way that fits with what they already think about a given topic or issue, shaped by their personal encounters. In this case, Wagner and Petty (2011. p: 4) explain that “Individuals often consider

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arguments consistent with their pre-existing attitudes to be stronger than arguments opposing their pre-existing attitudes”. That is, students find arguments or information that go in hand with what they already believe to be more convincing, than arguments that contrast their beliefs. Thus, the alignment between the messages they see and what they already think reinforces their views and enhances the cognitive perception of the issue of climate change.

Concerning language proficiency, the results of the thirteenth (13) question demonstrate that the bulk of students, about 86% ,do not have any difficulty in getting the messages from climate change slogans and graffiti, while others (16%) face some challenges when interpreting the messages conveyed through such means, due to the lack of familiarity with the scientific jargon used in these forms, in addition to the misinterpretation of the intended or implied meanings behind the words and sentences used in climate change slogans and graffiti.

Therefore, when the textual messages, particularly in slogans, are correctly understood, it can influence how information is given or demanded in communication. By applying Halliday’s interpersonal metafunction (See Table2), the accurate interpretation of a given slogan can enhance the exchange of information or services in discourse. That is to say, if the slogan is stated as a statement or question, it implies that the message is providing or seeking information. On the other hand, if it is put forth as an offer or command, it indicates that the message is offering or requesting services, or actions in return.

The analysis of image “2”, which displays the slogan ‘There is No Planet B’, has a declarative mood as it is presented in the form a statement. So, this phrase states a fact and asserts a general truth that Earth is the one and only planet that exists in the world. However, beyond being declarative, there an implied meaning that is introduced implicitly. That is, encouraging people to prioritize environmental protection in their decision making process and daily activities since there is not an alternative planet where they can escape the negative consequences of environmental degradation. Hence, if the reader understands well the message

Discussion of the Findings

being delivered through that slogans, this can foster a high sense of urgency, in order to strive to address the problem of global environmental issues, among them climate change.

The data gathered from question 20 confirm that a significant percentage of students think that slogans and graffiti added, in a way or another, a comprehensive view, and provided more insights into global climate change, which is considered a critical and pressing issue that needs more attention and concern (See Diagram 15). This suggests that these multimodal media, including slogans and graffiti, enable climate change information to be successfully transmitted, and clearly understood by readers or viewers through their concise and strong messages about such a serious matter. That is to say, when students engage with such means, they can gain a richer understanding of climate change complexities like its causes, consequences, and potential solutions to tackle this problem. This can be illustrated with image “1” featuring the phrase “You are destroying our future” (See table 1, & 2), which conveys a profound message about the effects of human everyday’s actions on future generations. This slogan can push students to consider their long-term implications, including actions, and decisions and the way they are related to the upcoming destruction of the environment. This can make students more aware, by creating a kind of interconnectedness between human acts and future ecosystem.

Consequently, the factors influencing students’ interpretation of climate change, including prior beliefs, personal experiences, and language proficiency have an important role in raising awareness and consciousness among EFL students in the University of Mouloud Maameri.

These findings align with Kerras and Selhani’s study (2021) which stresses that the multimodal forms that were dominant during the movement of “*El hirak of 2019*”, including slogans, significantly impacted how Algerians understood political matters and increased their awareness of the actual state of their country. Owing to this fact, slogans helped simplifying

shared ideas among the Algerian population, and pushed for immediate political change, which was the ultimate goal of the movement and the social protest slogans.

The first hypothesis set in the present study, which suggested that slogans and graffiti related to climate change positively impact MMUTO students' perception, resulting in an increased awareness and concern for environmental issues, is validated as most of the students have comprehended the transmitted messages effectively, which is beneficial for awakening their consciousness and raising their awareness of the issue.

2. The Impact of Slogans and Graffiti on Student's Emotions

Emotional responses are those feelings and reactions that readers or viewers may experience when they engage with a piece of information. Hence, communicators need to be mindful and attentive to how their choice of words (language) and visual elements can evoke a range of emotional reactions from their audience, influencing their perceptions and responses to messages being delivered. This emotional appeal plays a major role in how individuals interpret and internalize the content they encounter. When exploring emotional responses with regard to climate change slogans and graffiti, it becomes evident that these multimodal forms have the power to evoke strong reactions from students.

The data obtained from question 16 indicate that the majority of the students, representing 70%, reported being strongly and emotionally impacted by these media, while a percentage of 30% indicated that they did not experience any emotional response (see diagram 12).

Therefore, all participants who acknowledged a mood shift, expressed positive emotions toward climate change, as portrayed through these means. The findings indicate that students have varied emotional reactions to the issue communicated through slogans and graffiti, which can be divided into two main categories: feelings of responsibility, and feelings of shame and negativity about the current environment situation.

2.1 Positive Feelings

Students who feel responsible regarding the issue, expressed a high sense of urgency and duty toward protecting the environment. They recognize that it is high time to take action to save Earth and emphasize the importance of caring for the planet. Moreover, these students feel compelled to mobilize others and raise awareness about the destructive consequences of climate change on both humans and animals. Accordingly, their sense of responsibility is viewed as a driving force that motivates them to work actively, in order to reduce the negative impacts of climate change, such as striving to minimize pollution and calling for immediate practices. This group of students then is driven to take action to address the major issues caused by global climate change.

This aligns with Kinena's (2013, p:4376) statement "human is guided by the principle itself is responsible for events in their lives". That means people have control over what is happening and have some power to bring about positive changes in the world if they developed a strong sense of responsibility.

These findings support what Selhani and Kerras (2021) found, where they indicate that slogans greatly influenced Algerians during "*El Hirak Uprising*" by enhancing their motivation, evoking emotional responses like unity and solidarity, as well as validating their sense of shared responsibility.

2.2 Negative Feelings

On the other hand, students who feel bad concerning the actual environmental situation expressed a range of negative emotions, including sorrow, worry and shame. They feel sorry for the degradation of nature, and the unchangeable loss of biodiversity, as well as the destruction of natural habitats, as shown in image 4 and 5, which are essential sources of livings for many species like aquatic turtles and polar bears, which are in danger of extinction because of human daily activities, as revealed by the participants in question "6". Consequently, these

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students develop a deep concern about the uncertain, unknown, and unpredictable future that hides negative consequences caused by climate change.

Moreover, students feel guilt on behalf of humanity, as they recognize that human actions are contributing to the destruction of the planet through unconscious activities like pollution. According to Silvia (2005), feelings like concern and interest deal with something new and hard to understand, while other feelings like shame and sadness come from judging events as important, caused by ourselves, urgent with negative effects. That is to say, students are troubled by the unusual weather changes, mainly in seasonal patterns that are related to climate change, in addition to the disappearance of fauna and flora, which increases their emotions of sadness, as they witness the dangerous impacts of environmental issues on biodiversity. This group of students is experiencing emotions of terror and helplessness, and emphasize the need to address environmental crisis whose affects are notable, especially nowadays.

Additionally, students mentioned that climate change slogans and graffiti capture their attention into how important the issue is. Hence, diagram 9 demonstrates that a percentage of 20% are captured by the creativity and impactful messages transmitted through such media, this reflects their critical thinking and their appreciation of the message content. These results support Petty and Wagner's statement (2011, p: 4) "if the arguments are strong then engaged individuals will generate predominantly favorable thoughts in response to the message and will experience attitude change in advocated direction". That means, students who reflect on their own critical thinking are more likely to engage in actions as a result of conviction through the persuasive content. Whereas, a significant portion of the participants, about 47% are captivated by the artistic skills shown in this multimodal forms, which stems from the aesthetic aspects of slogans and graffiti. Similarly, 33% of respondents are attracted by the vibrant colors used in such media, which has to do with their visual impact.

Discussion of the Findings

The visual analysis of the selected graffiti, based on Kress and Leeuwen's framework in *Visual Grammar* (2006), shows how the different placements of elements within an image, and the contrast in colors can communicate the degrees of their importance, focusing on different themes of a given topic (See table 7). In this context Kress and Leeuwen (2006, p: 203) state that "the stronger the framing of the element is the more it is presented as a separated unit of information". Accordingly, in image 5 (See Appendix), the shark trying to escape from dried water has a central positioning, which means that, it is the main theme and issue being represented in the picture. This emphasizes its significance as a symbol of destruction of marine ecosystems and its effects on aquatic animals' habitat. However, placing other elements on margins, like the green landscape, dead flowers, devastating fires, and desert suggests that they are secondary information by creating a visual contrast between the present situation of the globe and the potential influence of environmental destruction on biodiversity in general. In addition to that, the absence of clear boundaries between the different elements within the image signifies that transformation and destruction of one part in the world can impact a whole planet, with all its existing species. As regards image 1 (See Appendix), by placing both of the woman and melted globe at the center, the viewer can understand that these elements are more prominent. This conveys their level of importance within the picture, and highlights their significance when transmitting the message, suggesting one serious environmental problem, which is global warming. Add to that, the choice of colour in this image play an important role in depicting the woman's emotions and actions, as well as showing the actual situation of the Earth that appear in a process of melting. This can be considered as a powerful metaphor for global warming. The visual metaphor of melting is often associated with something sweet like ice cream exposed to sun in a warm day, which transforms into a liquid. However, when it is used in the context of environmental issues, it can represent a negative consequence of how the globe is diminishing. As a result, when students come across such kind of images, they can feel

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a range of feelings, among them empathy, sadness, and even the feeling of helplessness. That is to say, the placement of the globe and woman, the contrast in colour, as well as the lack of clear boundaries between these elements create a strong visual narrative of environmental decline, which can have a direct influence on student's emotions and sentiments. Thus, the visual impact of these images create different feelings among viewers, such as sadness, responsibility, or even fear about near future and what it can hide for organism. These reactions are then resulted when viewers interact emotionally with various elements and engage with a given picture at the affective level.

At its core, Petty and Rucker (2006, p :6) argue that “Under low elaboration conditions, persuasion variables are likely to function as simple cues rather than strong arguments, as people are unlikely to scrutinize the message relevant information for its merits related to the advocated position or behavior”. This means that, when students are not paying much attention to the message transmitted through slogans and graffiti addressing climate change, they only focus on simple cues like the visual appeal rather than on analyzing the information for its values and merits. They further supported their claim by adding that “Any evaluation that is formed through simple cues result from simple associations or inferences that do not require much thoughtful effort”. That is, when students react emotionally to these messages, their responses are based more on immediate feelings rather than deep analysis or critical thinking.

The results of eleventh (11), and seventeenth (16) question of the survey, and social semiotic analysis of the graffiti are consistent with Buckley's study (2022), which shows that graffiti can elicit various emotions that can influence the public political views like anger, shame, and call for actions against authoritarian and oppressive decisions during times of political change, particularly “*Argentina's Dirty War*”.

The second hypothesis mentioned earlier in the general introduction, which states that slogans and graffiti that portray climate change evoke feelings of responsibility among EFL

students, is confirmed to a certain degree since half of the students have varied emotions. Consequently, each student reacts uniquely to the issue being presented by these media.

3. The Impact of Slogans and Graffiti on Students' Behavior

Skinner (1938, p: 6) defined behavior as “the movement of an organism or of its parts in a frame or references provided by the organism itself or by various external objects or field of force”. In other words, behavior represents the way in which an organism interacts with its environment. It is a set of complex actions, reactions and movements that cover everything from simple physical gestures to complex cognitive processes.

According to Mafulah and Bashtomi (2023, p: 649) “the students” engagement falls into three categories: cognitive, affective and behavioral”. Therefore, in the context of addressing environmental issues, the behavioral impact of slogans and graffiti on EFL students can serve as the most effective tool that can inspire students’ decision making to act positively in order to eliminate, at least, some of the effects caused by climate change.

The findings collected from question 18 unveil the behavioral reactions of students concerning the issue of global climate change after exposure to slogans and graffiti. The results show that only a percentage of 30% from the total number of participants really feel compelled to take action after encountering these messages (See diagram 13). The examples cited by students are organized into three main categories.

3.1 Civic Activities

Some participants mentioned that they actively participate in civic activities that take place in their region, such as participating in volunteering practices. This includes organizing tree planting events in different areas, especially after experiencing the consequences of devastating wildfires during the summer of 2021 and 2023 which resulted in the destruction

and loss of biodiversity, and the complete burning of forests, as revealed by students in question “6”. These actions indicate that students are positively dealing with environmental issues.

3.2 Individual Actions

Other students concentrate more on their individual actions in order to address the effects of climate change. Their examples included keeping their neighborhoods clean, as well as throwing garbage in their appropriate places. Hence, through doing such simple actions, they contribute to a cleaner environment, and at the same time, they can be considered as a positive model for other members within their community. This type of behavior reflects a high sense of both responsibility and awareness from the part of students towards a global environmental matter, which is primarily caused by pollution and human unconscious activities.

3.3 Social Media Engagement

A small group of students mentioned that they are involved in social media platforms like Facebook and Instagram after facing the messages transmitted through slogans and graffiti as regard to global climate change by sharing their posts, as well as inviting their friends to follow and stay informed about messages communicated through such means regarding environmental problems. This type of engagement according to Ozkula (2021, p:61) is called ‘digital activism’, which is defined as “the use of internet-enable digital technologies in support or preparation of offline activism” (Ozkula, 2021, p: 61). That is, digital activism is a new tool that is brought into existence thanks to the evolution of technology, and the emergence of various social media platforms. Hence, it aims to get in touch and participate in addressing real world issues, among them global climate change.

On the other hand, the majority of the participants, representing 70% of the total number, declare that they have never taken action after encountering climate change slogans and graffiti

(Question 18). This might be the result of certain factors that can result in the absence of behavioral influence of such multimodal forms on students' actions and decision making.

The data gathered from question 5 indicate that the majority of students, with a percentage of 63% of the total number of respondents, are somehow worried about the impact of climate change. This suggests that eventhough they acknowledge the issue as being a hard situation for organisms, they do not perceive it as a serious and urgent problem that needs to be addressed as soon as possible. Whereas, the remaining 37% of the respondents expressed a high level of concern towards the issue. This signifies that they perceive climate change as an important and serious matter with its dangerous consequences on humans and the whole planet (diagram 4).

Additionally, table twelve (12) demonstrates that a significant number of the participants find climate change slogans and graffiti either slightly or not at all memorable. This means that, this intermediate degree of memorability reveals that eventhough these forms give some impression and evoke emotions among students, this group does not find them more effective to stick in their minds for a long period of time since they do not pay more attention to the information value as much as they are attracted by the visual appeal. In this essence, Petty and Wagner (2011, p: 4) assert that “while peripheral approaches can be quite powerful in the short term...the problem is that over time emotions dissipate, people's feelings about sources can change, and cues can become disassociated from the messages”. That is to say, although slogans and graffiti succeeded to capture the attention of students by evoking feelings and sentiments, over time these feelings can change or even disappear because they stress on visual cues, rather than the information merits and significance. Conversely, nearly half (47%) of students consider the messages delivered by these media as being ‘very memorable’, which reflects their high attention, carefulness, and critical evaluation of the information regarding climate change depicted in slogans and graffiti. According to Petty and Wagner (2022, p: 7-10)

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people who are carefully evaluating messages for its importance, are more likely to process information for a long period of time. That is, students who remember well the information content in relation to climate change portrayed through slogans and graffiti have more tendency towards engaging in behavioral actions.

Moreover, motivation is another factor that influenced students' engagement at the behavioral level. According to Petty and Wagner (1986), motivation reflects the amount of interest and engagement that an individual shows toward a given topic. Accordingly, the data shown in table ten (10) demonstrates students' levels of motivation regarding their interpretation when coming across climate change slogans and graffiti. The findings revealed that half of the participants (50%) are very motivated to interpret messages conveyed through such multimodal forms. This implies that they are very interested in the topic portrayed through these media, and there is a kind of interconnectedness between environmental concerns and their willingness to take actions. On the other hand, the respondents who have little or no motivation suggest that they do not have enough interest in interpreting and engaging in a full behavioral action. Thus, Petty and Wagner (2011, p: 2) clarify that motivation depends on three main criteria, such as perceived personal relevance, general enjoyment of thinking, and personal responsibility for processing the message. Under these circumstances, only students who see themselves affected by climate change are more motivated, especially at the behavioral level, to engage with slogans and graffiti. Also, students who do not perceive understanding the messages delivered through such means as being part of their personal responsibility will not be motivated and act upon that information.

In brief, according to Elaboration Likelihood Model (1989-2011), students who are not influenced by climate change slogans and graffiti at the behavioral level, are likely to process information through 'peripheral route' as they are influenced by the information from the surface level, and they are not motivated enough to take a decisive act. Hence, the superficial

processing of the message does not have any impact on their attitude and behavior. However, students who are engaged in action, are likely to process the information through ‘central route’, where they engage in deep, thoughtful, and systematic analysis of the content. Subsequently, they critically evaluate the arguments being presented, and consider the evidence of the topic.

All these findings align with E.M. Akporuere’s (2023) results, which indicated that ‘*Emilokan slogan*’, which is a political tagline, had both positive and negative impacts on voters’ behavioral decision during election campaigns of 2023 in Benin City, Nigeria. So, those who were influenced by the slogan, took part in the voting process, whereas those who were unaffected by the slogan itself did not vote.

The third hypothesis proposed in the present study, which states that climate change depicted in slogans and graffiti strongly influences MMUTO students’ reaction, and encourages them to take action, is rejected as most of the students were not involved at the behavioral level. As a result, this multimodal force did not motivate them to take environmental actions.

Conclusion

To conclude, drawing on the findings obtained from this research and their interpretation based on Petty and Wagner’s Elaboration Likelihood Model (1986), developed and revised by Petty and Wagner (2011) results have highlighted how slogans and graffiti addressing climate change shape the perception of EFL students. This discussion chapter has addressed the research questions introduced in the general introduction and verified the validity of the hypothesis suggested. Firstly, it has been demonstrated that these multimodal forms, addressing climate change have a positive impact on students’ perception leading to increased concern and awareness, thus confirming the first hypothesis. Additionally, from, findings it has been shown that at the emotional level, slogans and graffiti depicting climate change evoke feelings of responsibility and urgency among students, confirming the second hypothesis but only to a

certain degree. However, the last hypothesis suggesting that these slogans and graffiti influence students' behavior toward the issue, is refuted.

General Conclusion

This dissertation explores the power of slogans and graffiti as multimodal forms of presenting environmental issues and their impact on EFL students' perception of global climate change. It has investigated the way third-year, master one, and master two students of the Department of English at MMUTO perceive those forms, and whether they are not influenced by them.

The present study aimed to reach three main objectives. The first objective aimed at understanding the impact of climate change slogans and graffiti on EFL students' cognitive perception of the issue. The second objective involved determining the emotional responses among EFL students when they encounter these multimodal forms. The last objective was to investigate the behavioral actions that students take after being exposed to such media of communication.

To provide answers to the research questions asked at the beginning of the dissertation, a mixed method research(MMR) which combined both qualitative and quantitative methods was employed. The qualitative method used a corpus-based analysis of 10 selected images from online sources following Halliday's (2004) framework in Systematic Grammar to analyze the five slogan images, whereas the five images which included graffiti are analyzed taking into consideration Kress and Leeuwen (2006) framework of Visual Grammar.

The quantitative method included a questionnaire administered to 30 EFL students. Microsoft Office Word was utilized to create tables and diagrams which displayed the quantitative data, whereas the qualitative data were analyzed using Multimodal Discourse Analyses stressing the two above mentioned frameworks for the corpus, and qualitative content analysis (QCA) for the survey which included the questionnaire.

The discussion of the findings was based on Petty and Wagner's Elaboration Likelihood Model (1986), developed and revised by Petty and Wagner (2011), which formed the theoretical framework of the study. The discussion of both questionnaire results and the corpus data have

addressed the research questions posed in the study. Our research revealed that EFL students at MMUTO believe that slogans and graffiti raise their awareness regarding the issue of climate change, this confirms the first hypothesis.

The multimodal analysis of the selected images, and the questionnaire, showed that students' emotions are varied, and they are not only limited to the feeling of responsibility, but it goes beyond that to include other emotions like sadness and shame, this supports a part of the second hypothesis.

The data collected from the survey indicated that slogans and graffiti, which portray environmental problems like climate change, do not have a strong impact on students to stimulate behavioral actions, this refutes the third hypothesis.

This study has encountered some limitations. The limitation of the present study lies in the fact that EFL students involved in our research, mainly third year and master one students were overwhelmed by second semester exams. Therefore, it was challenging to find the available participants to take part in our study.

Finally, this study is not ideal, but it helped to gain more insights into how slogans and graffiti can influence public opinion in relation to a pressing environmental matter, which is climate change. These multimodal forms have the power to raise questions and impact the three levels of engagement such as, cognitive, affective, and behavioral. As a result, it would be better for students to prioritize urgent issues related to their environment, and striving to tackle such matters. Therefore, by making efforts to address real world concerns, students will contribute to positive changes, at the same time, they will develop a sense of responsibility towards their planet. Additionally, students can concentrate more on the relevance and value of the information being communicated rather than how it is presented or shown. We hope that conclusions drawn from our empirical investigation will open the door for further research in this field like how these multimodal communication tools can have an impact on public policy

making, and how they can contribute to legislative measures in order to deal with climate change problem.

Reference List

Adrbr. (2016, September 15). Mural by Eduardo Kobra. [Image].

<https://virtualglobetrotting.com/map/mural-by-eduardo-kobra-4/view/google/>

Albaik, M. (2023). Influence of Graffiti on People's Perceptions of Urban Spaces in Hashemi Shamali, Amman, Jordan. *Journal of the International Society for the study of Vernacular Settlements*, 10(7), pp. 66-90. Retrieved from:

<https://www.researchgate.net/publication:373076544>

[Algerian Red Crescent Society. \(2023\). Algerian Fires 2023. Retrieved from :](https://www.researchgate.net/publication:373076544)

<https://adore.ifrc.org/Download.aspx?FileId=714405>

Almurashi, W.A. (2016). *An introduction to Halliday's Systemic Functional Linguistics*. *Journal for the Study of English Linguistics*, 4(1), pp. 1-15. Retrieved from:

<https://doi.org/10.5296/jsel.v4i1.9423>.

Anderson, B., Böhmelt, T., and Ward, H., 2017. Public opinion and environmental policy output: a cross-national analysis of energy policies in Europe. *Environmental Research Letters*, 12 (11),

[https://iopscience.iop.org/article/10.1088/1748-](https://iopscience.iop.org/article/10.1088/1748-9326/aa8f80/meta#:~:text=DOI%2010.1088/1748%2D9326/aa8f80)

[9326/aa8f80/meta#:~:text=DOI%2010.1088/1748%2D9326/aa8f80](https://iopscience.iop.org/article/10.1088/1748-9326/aa8f80/meta#:~:text=DOI%2010.1088/1748%2D9326/aa8f80)

Barkan, S. E. (2004). Explaining public support for the environmental movement: A civic voluntarism model. *Social Science Quarterly*, 85(4), 916.

Buckley, A. (2014). Self-Expression in Spray Paint: Graffiti as a Popular tool for Democratization in Argentina (Undergraduate thesis). University of Colorado at Boulder, Department of International Affairs.

Chandler, D. (2002). *Semiotics: The Basics* (2nd ed.). Routledge.

Curry, G. D., & Decker, H. S. (2024). Graffiti Art. In J. Abella (Ed.), *Encyclopedia*

Britannica. Retrieved from : [https://www.britannica.com/art/graffiti-](https://www.britannica.com/art/graffiti-art/additional-info#history)

[art/additional-info#history](https://www.britannica.com/art/graffiti-art/additional-info#history)

- Dan Kitwood (2021, February 25). Young people are not convinced older generations are doing enough to leave them with an inhabitable planet or viable livelihoods [Image]. <https://www.theguardian.com/commentisfree/2021/feb/covid-climate-crisis-new-social-contract-old-young>
- Davison, W.P. (2017), Public Opinion. In J. Abella (Ed.), *Encyclopedia Britannica*. Retrieved from: <https://www.britannica.com/topic/public-opinion>
- Dawadi, S., Shrestha, S., & Giri, R. A. (2021). Mixed Methods Research: A discussion on its Types, Challenges, and Criticisms. *Journal of Practical Studies in Education*, 2(2), 25-36. DOI: <https://doi.org/10.46809/jpse.v2i2.20>
- Dong, Y. (2023). Descriptive Statistics and Its Applications. *Journal of Mathematics*, p. 47. DOI: <https://doi.org/10.54097/hset.v47i.8159>
- Donsbach., & Traugott, M (2008). *The Sage Handbook of Public Opinion Research*. SAGE Publications.
https://www.google.dz/books/edition/The_SAGE_Handbook_of_Public_Opinion_Rese/ht5bvEM8FckC?hl=fr&gbpv=1&dq=Public%20Opinion%20in%20the%20Perspective%20of%20Political%20Theory&pg=PA3&printsec=frontcover
- Earth Day organization. (2024). The Origins of Earth Day. Retrieved from:
<https://www.earthday.org/>
- Ejeweke, A. M. (2023). Influence of Political Slogan on Voters in Benin City (Undergraduate dissertation). University of Benin, Department of Mass Communication, Benin City, Nigeria. Accessed from:
<https://www.researchgate.net/publication/373489796>.
- Etikan, I., & Bala, K. (2017). Developing Questionnaire Based on selection and Designing. *Biometrics and Biostatistics International Journal*, 5(6), pp. 219-221

DOI: <https://doi.org/10.15406/bbij.2017.05.00150>

- Fontaine, L. (2017). Lexis as Most Local Context: Towards an SFL Approach to Lexicology. *Fontaine Functional Linguistics*, 4(17), pp. 1-17. Doi: <https://doi.org/10.1186/s4055-017-0051-7>.
- Freeman, A.M. (2002). Environmental Policy Since Earth Day I: What Have We Gained? *Journal of Economic Perspective*, 16(1), 125. Retrieved from : [file:///C:/Users/acer%20acer/Downloads/freeman-2006-environmental-policy-since-earth-day-i-what-have-we-gained%20\(1\).pdf](file:///C:/Users/acer%20acer/Downloads/freeman-2006-environmental-policy-since-earth-day-i-what-have-we-gained%20(1).pdf)
- Friesen, D. (2019, March 16). Abby Phillips, one of the young protesters outside Queen's Park. [Image]. <https://www.cbc.ca/news/canada/toronto/student-climate-change-rally-1.5058834>
- Sanda, I. (2020, April 23). Street Art Campaign Global-Halt Launches on Earth Day. [Painting]. <https://www.earthday.org/street-art-cmpaign-global-halt-launches-on-earth-day/>
- Globel, C. & Throb, C. (2021, October 28). 'Our Climate is changing'. [Painting]. <https://www.imperial.ac.uk/news/231560/powerful-street-unveiled-highlighting-species-loss/>
- Halliday, M. A. K., & Mathiessen, C. (2004). *An Introduction to Functional Grammar* (3rd ed.). Hodder Arnold.
- Handford, M., & Gee, J. P. (2023). *Multimodal discourse analysis*. In G. Kress, & J. Bezemer (Eds.), *The Routledge handbook of Discourse Analysis* (2nd ed.), pp.139-155. Routledge. Retrieved from: <https://www.routledgehandbooks.com/doi/10.4324/9781003035244-12>.

- International Strategy for Disaster Reduction. (2008). *Climate Change and Disaster Risk Reduction: Weather, Climate and Climate Change*. Geneva: United Nations.
- Islam, N. (1999). A few Aspects of Motivation: An Overview of Concepts, Theories and techniques. *Khulna University Studies*, 1(1), 91-96.
DOI: <https://doi.org/10.53808/KUS.1999.1.1.103-108-mb>
- Jacobs, L. R., & Shapiro, R. Y. (2011). *The Oxford handbooks of American public opinion and the Media*. Oxford University of Press.
- Khasanova, S., Alieva, E., & Shemilkhanova, A. (2011). Environmental Pollution: Types, Causes and Consequences. Kadyrov Chechen State University. Retrieved from :
<https://doi.org/10.1051/bioconf/2023637014>.
- Kinena, K., & Tise, E. (2014). Responsibility as a Condition for Meaningful Action. *In the 5th World Conference on Educational Sciences*, pp 4375-
- Kollman, k. (1998). *Outside Lobbying: Public opinion and interest group strategies*. Princeton University Press.
- Kress, G., & Van Leeuwen, T. (2006). *Reading Images: The Grammar of Visual Design* (2nd ed.). Routledge.
- Lawson, C., Dwyer, K., & Fischer, L. M. (2023). An Exploratory Study of Risk Experience and Personal Values on Support for Climate Change Policies. *Journal of Applied Communications*, 107 (4), 3.
- Lawson, C., Dwyer, K., & Fischer, L. M. (2023). An Exploratory Study of Risk Experience and Personal Values on Support for Climate Change Policies. *Journal of Applied Communications*, 107 (4), 3. Retrieved from :
<https://doi.org/10.4148/1051-0834.2491>
- Lester, M. (2021, November 5). Is eco anxiety affecting you on World Mental Health Day? How to turn despair into action. [Image]

- <https://www.euronews.com/green/2021/11/05/turning-eco-into-action-meet-the-activist-helping-young-people-with-their-climate->
- Luther, L. (2011). *The National Environmental Policy Act (NEPA): Background and Implementation* (Report No RL33152, p.1). Congressional Research Service.
- Mafulah, S., & Bashtomi, Y. (2023). "I AM Scared of My Teacher": Students' Emotional Responses Towards Teacher's Feedback. In U. Widiatiet al. (Eds.), pp. 648-657.
- Marlon, J. R., van der Linden, S., Howe, P. D., Leiserowitz, A., Woo, S. L., & Broad, K. (2019). Detecting Local Environmental Change: The Role of Experience in Shaping Risk Judgments about Global Warming. *Journal of Risk Research*, 22(7), 1
- [Morey, R. S. \(1972\). The General Study of the Occupational Safety and Health Act of 1970. Harvard Law Review, 86, 988.](#)
- Neumann, N. (1974). The spiral of silence a theory of public opinion. *Journal of Communication*, 24(2), 63. Retrieved from: https://www.google.dz/books/edition/The_Spiral_of_Silence/ECXwC4ldmRIC?hl=fr&gbpv=1&dq=the%20opinions%20on%20controversial%20issues%20that%20can%20one%20express%20in%20public%20without%20isolating%20oneself&pg=PA63&printsec=frontcover
- Page, B. I., & Shapiro, R. Y. (1983). Effects of Public Opinion on Policy. *The American Political Science Review*, 77(1), 175. Retrieved from : <https://www.jstor.org/stable/1956018>
- Patton, M. (2002). *Qualitative Research and Evaluation Methods* (3rd ed.). CA: Sage.
- Available from: https://www.google.dz/books/edition/Qualitative_Research_Evaluation_Metho

[ds/FjBw2oi8E14C?hl=fr&gbpv=1&dq=patton%202002&pg=PR1&printsec=fr
ontcover](https://www.google.com/books/edition/Attitudes/8E14C?hl=fr&gbpv=1&dq=patton%202002&pg=PR1&printsec=frontcover)

Petty, R. E., & Brinol, P. (2014). The Elaboration Likelihood and Metacognitive Models of Attitudes: Implications for Prejudice, the Self and Beyond. In J. W. Sherman, B. Gawronski, & Y. Trope (Eds.), *Dual-Process Theories of the Social Mind*, pp. 172-187. New York: Guilford Press.

Petty, R. E., & Cacioppo, C. T. (1986). The Elaboration Likelihood Model of Persuasion. In L. Berkowitz (Ed.), *Advances in experimental Social Psychology*, Vol. 19, 124-181.

Price, V. (1992). Communication Concepts 4: Public Opinion (Vol.4, p.13). A. Viriding(Ed). Newbury Park, CA: Sage. Available from:
[https://www.google.com/books/edition/Public_Opinion/hG45DQAAQBAJ?hl=fr
&gbpv=1&dq=Public%20Opinion%2C%20Volume%204&pg=PP1&printsec=
frontcover](https://www.google.com/books/edition/Public_Opinion/hG45DQAAQBAJ?hl=fr&gbpv=1&dq=Public%20Opinion%2C%20Volume%204&pg=PP1&printsec=frontcover)

ROME, A. (2010). The Genius of Earth Day. *Environmental History*, 15(2), 196. [Available from: http://markstoll.net/HIST4323/2011/Rome--Genius_of_Earth_Day.pdf](http://markstoll.net/HIST4323/2011/Rome--Genius_of_Earth_Day.pdf)

Sambrook, K., Konstantinidis E., Russel, S., & Okan, Y (2021). The Role of Personal Experience and Prior Beliefs in Shaping Climate Change Perceptions: A Narrative Review. *Front. Psychol.*12. Retrieved from :
[https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2021.6
69911/full](https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2021.669911/full)

Scannell, L., & Gifford, R. (2011). Personally Relevant Climate Change: The Role of place Attachment and Local versus Global Message Framing in Engagement.

- Environment and Behavior*, pp. 1-26. Doi:
<https://doi.org/10.1177/0013916511421196>.
- SeiLeise. (2018). Global Warming. [Image].
<https://www.facebook.com/share/p/1yHDssSJ6QfP7TtC/?mibextid=oFDknk>
- Sengupta, S. (2019, September 20). Protesting Climate Change, Young People Take to Streets in a Global Strike. [Image].
<https://www.nytimes.com/2019/09/20/climate/global-climate-strike.html>
- SOPA. (2019, May 24). Climate change slogans Stock Photos and Images. [Image].
<https://www.alamy.com/stock-photo/climate-change-slogans.html?=&relaevant>
- Spence, A., Poortinga, W., & Pidgeon, N. F. (2011). Perceptions of Climate Change and Willingness to Save Energy Related to Flood Experience. *NATURE CLIMATE CHANGE*, 1(1), 46.
- Tannem, D., Hamilton, H. E., & Schiffrin, D. (Eds.). (2015). *The Handbook of Discourse Analysis* (2nd ed.), Vol. 1. Blackwell Publishers Ltd.
- Tsoumas, J. (2011). The Aesthetic Impact of Graffiti Art on Modern Greek Urban Landscape. *Angulo RecTo. Revista De Estudios Sobre La Ciudad Como Espacio Plural*, 3(2), pp. 17-35. Retrieved from:
<http://www.ucm.es/info/angulo/volumen/Volumen032/articulos02.HTM>.
- United State Congress. (1970). Public Law 91-516. Accessed from:
<https://www.congress.gov/91/statute/STATUTE-84/STATUTE-84-Pg1312.pdf>
- Van De Velde, C. (2023). The Power of Slogans: Using protest writings in Social Movement Research. *Social Movement Studies*. Accessed from:
<https://doi.org/10.1080/14742837.2022.2084065>.

- Van Leeuwen, T. (2005). *Introducing Social Semiotics*. Routledge.
- VIDAR. (2021, August 30). Conditional Love-by SaRX on Climate Change. [Image].
<https://streetartutopia.com/2021/08/30/conditional-love-by-sarx-204/>
- Wagner, B. C., & Petty, R. E. (2011). The Elaboration Likelihood Model of Persuasion: Thoughtful and Non-Thoughtful Social Influence. In D. Chadee (Ed.), *Theories in Social Psychology*, pp. 91-116. Oxford: Blackwell.
- Wagner, B. C., & Petty, R. E. (2022). The Elaboration Likelihood Model of Persuasion: Thoughtful and Non-Thoughtful Social Influence. In D. Chadee (Ed.), *Theories in Social Psychology* (2nd ed.). John Wiley & Sons Ltd.

Appendices

Appendix 1

Tables

type of element	typically realized by
(i) process	verbal group
(ii) participant	nominal group
(iii) circumstance	adverbial group or prepositional phrase

Table representing ‘Typical Experiential Functions of Group and phrase classes’

role in exchange	Commodity exchanged	
	(a) goods-&-services	(b) information
(i) giving	‘offer’ would you like this teapot?	‘statement’ he’s giving her the teapot
(ii) demanding	‘command’ give me that teapot!	‘question’ what is he giving her?

Table showing ‘Giving or Demanding, Goods-&-Services or Information’

MOOD of clause	Typical (‘unmarked’) Theme
declarative	nominal group functioning as Subject
interrogative: yes/no	first word (finite operator) of verbal group plus nominal group functioning as Subject
interrogative: wh-	nominal group, adverbial group or prepositional phrase functioning as interrogative (Wh-) element
imperative: ‘you’	verbal group functioning as Predicator, plus preceding <i>don’t</i> if negative
imperative: ‘you and me’	<i>let’s</i> plus preceding <i>don’t</i> if negative
exclamative	nominal group or adverbial group functioning as exclamative (Wh-) element

Table displaying ‘MOOD TYPE and unmarked theme selection

textual:	continuative
	conjunction ('structural Theme')
	conjunctive Adjunct
interpersonal:	modal or comment Adjunct ('modal Theme')
	vocative
	finite verbal operator (in yes/no interrogative)

Table showing 'Textual and Interpersonal Themes'

Appendix 2

Image 1



Image 2



Image 3



Image 4



Image 5



Appendix 3

Image 1



Image 2



Image 3



Image 4



Image 5



Questionnaire

Dear students,

The present study is part of an academic research. It intends to reveal the role of slogans and graffiti in shaping the perceptions of global climate change at the department of English at MMUTO. Your contributions and experiences as English Language Learners will greatly contribute to the completion of our research. We cordially request you to answer the following questions by either ticking the appropriate box, or by providing a full response when required. Please rest assured that all your responses will be treated with all confidentiality and used solely for academic purposes. We thank you in advance for your collaboration.

Background:

Slogans: they are short and concise sentences used to convey messages, information or purposes.

Graffiti: It is one way to create visual expressions and messages on public surfaces like walls and street.

Section One: Participant's Profile

Q-1: Specify your gender: Male Female

Q-2: Specify your level of study: Licence Master 1 Master2

Section Two: Awareness of climate change

Q3: How frequently do you seek information about climate change?

Always Often Sometimes Never

Q-4: Have you noticed any changes in weather patterns that you believe it might be caused by global climate change?

Yes No

Q5: To what extent do you worry about potential consequences caused by global climate change?

Not worried Slightly worried Profoundly worried

Q-6: Have you personally found yourself in a situation where you directly experienced the effect of climate change?

Yes No

*If yes, please provide an example

.....
.....

Section Three: Student's familiarity and engagement with slogans and Graffiti

Q-7: How many times do you see slogans and graffiti in your environment?

Very frequently Occasionally Never

Q-8: What type do you see?

Political Artistic Both

Q-9: Have you ever come across any slogans or graffiti related to climate change?

Yes No

*If yes, can you describe their main messages

.....
.....
.....

Q-10: When you see slogans and graffiti, do you usually take the time to read or observe them?

Yes No

Q-11: what catches your attention when you face Slogans and Graffiti related to climate change?

- Vibrant colors
- Artistic skills
- Creativity and impactful messages
- Other suggestions

.....

Q-12: How motivated you feel when interpreting the messages behind these forms?

- Extremely motivated
- Little motivated
- Not all motivated

Q-13: Do you encounter difficulties when trying to interpret messages conveyed through slogans and graffiti that address climate change?

Yes, I do No, I don't

*If yes, please justify

.....
.....
.....

Q-14: According to you, what are the main factors that can affect your interpretation of slogans and graffiti regarding climate change?

- 1. Language proficiency
- 2. your consciousness and prior knowledge
- 3. Personal experiences

Section Four: Student’s Perception of Slogans and Graffiti

Q-15: Do you think that slogans and Graffiti about climate change have the power to raise questions or communicate strong messages?

Yes, I do

No, I don’t

*Please justify

.....
.....

Q-16: Have you noticed any changes in your mood when you come across global climate slogans and graffiti?

Yes, I have

No, I haven’t

*If yes, can you describe what you feel

.....
.....

Q-17: How memorable do you consider the message content communicated through those forms?

- Extremely memorable
- Slightly memorable
- Forgettable

Q-18: Have you ever been moved to take action as a result to exposure to slogans and graffiti addressing global climate change?

Yes, I have No, I haven't

*If yes, please provide an example

.....
.....

Q-19: Do you feel curious to know more about climate change slogans or graffiti related to environmental issues after seeing slogans or graffiti?

Yes No

Q-20: Do you think that slogans and graffiti related to climate change added more information to your own understanding of world climate change?

Yes No

Thank you for your cooperation

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