

## CHAPTER II

### LITERATURE REVIEW

This chapter contains a discussion of related theories which are used in data analysis and divided into several parts.

#### A. Meme

The idea of a meme has gained popularity recently, particularly with the emergence of the internet and social media. A meme is essentially any piece of popular culture that circulates among individuals, sometimes with minor alterations or changes. Nowadays, the phrase has a considerably broader definition that includes anything from online memes to political messages and viral videos.

Richard Dawkins, a scientist, originally used the term "meme" in his 1976 book *The Selfish Gene*. According to Dawkins (1976), memes are imitations of ideas that spread from one person to another. The term "meme" is a word borrowed from the Greek (*mīmēma*), which meaning something that may be mimicked, according to Dawkins (1976). The term "meme" then has a connection to the French word "même," which has the same or a similar meaning, and the English word "memory," which denotes mental consciousness. In a manner similar to how genes function in biological creatures, Dawkins coined the phrase to characterize any cultural item capable of self-replication. Since then, the concept of memes has been expanded to cover a wide range of cultural items, including ideas, images, slogans and even fashion trends.

One of the distinctive features of memes is their ability to mutate and evolve over time. As Susan Blackmore (1999) writes, "Memes can be said to compete with each other for space in our brains, and they can evolve and change just like genes" (p. 8). This means that memes are not static entities, but are constantly changing and adapting to their environment. As such, memes can be seen as a reflection of the wider cultural and social landscape in which they exist.

Another important aspect of memes is their ability to convey humor and irony. According to Limor Shifman (2014), "Memes often function as a method of comedy and satire, allowing individuals to engage in political criticism, cultural critique, and social commentary in a way that is approachable, enjoyable, and frequently subversive" (p. 9). The ability to use humor and irony to comment on social and political issues has made memes a powerful tool for political and cultural expression, especially among younger generations who consume and create memes more frequently.

Memes can be used to shape cultural and community identities. As Shifman (2013) puts it, "Memes are a way to express who we are, what we believe, and what we find funny or entertaining" (p. 4). By participating in the creation and dissemination of memes, individuals can make connections and share experiences with others who share similar cultural references and values.

Despite their widespread popularity, memes have also been subject to criticism and controversy. Some researchers argue that memes can perpetuate harmful stereotypes and reinforce existing power dynamics. As Whitney Phillips (2015) writes, "Memes can be used to perpetuate racism, sexism, and other forms

of oppression, often in ways that are subtle and difficult to detect" (p. 4). Therefore, it is important to approach memes critically and consider the ways in which they can perpetuate harmful narratives or reinforce dominant ideologies.

Memes are a powerful and dynamic representation of cultural expression that has become an integral part of contemporary digital culture. As they evolve and mutate, memes will remain an important tool for cultural commentary and critique. However, it is also important to approach memes with a critical eye and consider the ways in which they can perpetuate harmful narratives or reinforce dominant ideologies.

### **B. Text or Caption in Meme**

In the realm of online communication, Grundlingh (2017) posits that memes, particularly in the form of image macros, are not merely amusing visual artifacts but sophisticated tools of expression. According to Grundlingh, internet users attribute a communicative quality to memes, considering them as speech acts that foster a unique form of interaction between meme creators and the expansive internet community.

Moreover, our understanding of memes is further enriched when considering the advancements in sentiment analysis technology. As demonstrated by Gundapu and Mamidi (2020), our multi-modal sentiment analysis system, employing deep neural networks, excels in classifying Internet memes into categories of positivity, negativity, or neutrality. This system goes beyond mere categorization, extending its capabilities to identify different humor types within

memes and quantifying the emotional impact they carry. This technological innovation sheds light on the intricate layers of communication embedded in memes, showcasing how verbal elements not only serve as a communicative bridge but also contribute significantly to the nuanced emotional landscape of meme interactions.

In the context of this research which depict a collection of 10 memes about COVID-19 memes, it becomes apparent that text serves as a powerful intermediary tool. This verbal element acts as a bridge facilitating communication between the meme creator and the audience, or reader. Within each meme, the carefully chosen combination of words and images works in tandem to craft a message that transcends traditional linguistic boundaries. The audience engages not only with the visual aesthetics but also with the nuanced meanings embedded in the verbal components. Thus, the interplay of text within memes emerges as a dynamic and integral aspect of the communicative process, enriching the overall experience and depth of the messages conveyed within this fascinating representation of online expression.

### **C. COVID-19 Memes**

The phenomenon of memes' rapid dissemination on social media not only characterizes a pivotal aspect of digital culture but also underscores their potential to wield substantial influence over individual lives and broader societal trends. In alignment with Denysiyuk's assertion in 2022, the unique fusion of verbal and graphic-visual texts within internet memes is a distinctive feature of mass culture and internet creativity. Memes, as integral components of contemporary

intercultural communication, play a crucial role in shaping and influencing their popularity and dissemination across diverse communication channels.

Expanding on this perspective, the inadvertent encounter with memes takes on a particular significance, revealing the unforeseen impact that seemingly innocuous digital content can have on individuals and society at large. As previously discussed, memes act as dynamic tools that encapsulate both verbal and graphic-visual elements, providing a multifaceted means of expressing thoughts and observations. In the context of social media's rapid information dissemination, the unintentional consumption of memes becomes a potent vehicle for the transmission of ideas, fostering a collective digital dialogue.

This influence becomes especially pronounced when memes address pressing and polarizing issues, as exemplified by the emergence of anti-vaxxers and anti-maskers during the COVID-19 pandemic. The interconnected relationship between memes and societal phenomena becomes evident when considering their role in shaping the discourse around vaccination and mask-wearing. Memes, characterized by their conciseness and often humorous nature, serve as accessible vehicles for articulating and reinforcing diverse viewpoints on these critical health measures.

As individuals casually encounter such content while navigating their social media feeds, the influence of these meme-driven encounters extends beyond mere amusement. Memes have the potential to subtly shape perceptions and attitudes over time, contributing to the broader societal dialogue on crucial issues. The example of anti-vaxxers and anti-maskers underscores the tangible impact of

memes on societal behavior, contributing to the polarization of public opinion on health-related matters.

In essence, the unintentional exposure to memes on social media emerges as a potent force in shaping individuals' perspectives and contributing to broader societal shifts. This realization emphasizes the need for critical awareness when engaging with digital content, particularly in addressing topics with real-world consequences. The intersection of memes and societal discourse illustrates the dynamic and influential nature of online communication, showcasing its capacity to shape not only individual attitudes but also collective responses to pressing issues in contemporary society.

### **C.1 Anti-Vaxxers**

Anti-vaxxers, also known as vaccine skeptics or vaccine hesitant individuals, are individuals or groups who express strong reservations or opposition to vaccination. They may believe that vaccines are not effective, have harmful side effects, or are part of a larger conspiracy. Anti-vaxxers often rely on misinformation, pseudoscience, or anecdotal evidence to support their views.

According to Hornsey et al. (2018), high levels of conspiratorial thinking, reactance, disgust toward blood and needles, and strong individualistic/hierarchical worldviews are significant predictors of anti-vaccination attitudes. This implies that individuals who exhibit a tendency to endorse conspiracy theories, resist perceived constraints on their freedom (reactance), harbor aversions to elements associated with vaccination

procedures (disgust toward blood and needles), and align with individualistic or hierarchical worldviews are more likely to express skepticism or opposition toward vaccines.

The identification of these psychological and ideological factors provides a nuanced understanding of the motivations behind anti-vaccination sentiments. Rather than being solely rooted in demographic characteristics, such as age or education level, anti-vaxxers are characterized by specific cognitive patterns and worldviews that contribute to their skepticism or opposition to vaccination.

It is noteworthy that the term "anti-vaxxers" is commonly used to refer to individuals or groups who express strong reservations or opposition to vaccination. These individuals may hold beliefs that vaccines are ineffective, harmful, or part of a larger conspiracy. The reliance on misinformation, pseudoscience, or anecdotal evidence is a common trend among anti-vaxxers, highlighting the need for targeted communication strategies that address both the psychological factors identified by Hornsey et al. (2018) and the misinformation that often underpins anti-vaccination attitudes.

In summary, the study underscores the importance of understanding the psychological and ideological factors contributing to anti-vaccination attitudes. This knowledge is instrumental in developing effective interventions and communication strategies aimed at addressing the concerns and motivations of individuals identified as anti-vaxxers.

## C.2 Anti-Maskers

Anti-maskers are individuals or groups who resist or refuse to wear masks as a preventive measure against COVID-19. They may believe that masks are ineffective, uncomfortable, or infringe upon their personal freedoms. Some anti-maskers view mask mandates as a form of government overreach or question the validity of public health recommendations.

In a study conducted by Pascual-Ferrá et al. (2021) underscore a concerning trend in social media discourse related to the wearing of face masks during the COVID-19 pandemic. The research highlights that toxicity in online discussions, particularly in the context of hashtags associated with anti-mask sentiments, is significantly higher. This heightened toxicity poses a challenge for health communicators striving to effectively convey public health recommendations and encourage mask-wearing practices.

Anti-maskers, as identified in your additional information, represent individuals or groups resistant to the idea of wearing masks as a preventive measure against COVID-19. Their objections may be rooted in beliefs about the ineffectiveness of masks, discomfort associated with wearing them, or concerns about perceived infringements on personal freedoms. Some anti-maskers go further, viewing mask mandates as examples of government overreach or questioning the validity of public health recommendations.

The increased toxicity in social media discourse around anti-mask sentiments suggests a challenging landscape for health communicators. The digital sphere becomes a breeding ground for divisive and polarized discussions,

making it difficult to convey evidence-based information and encourage adherence to public health guidelines.

The challenges health communicators face in this context include the need to navigate through hostile online environments, where misinformation and emotionally charged rhetoric are prevalent. Effectively countering anti-mask narratives requires not only a clear presentation of scientific evidence supporting mask-wearing but also a nuanced understanding of the concerns and motivations of those who resist this preventive measure.

To address the heightened toxicity in anti-mask discourse, health communicators may need to employ strategies that foster empathy, dispel misinformation, and appeal to shared values. Recognizing the diversity of perspectives within the anti-mask community and tailoring communication approaches accordingly can contribute to more effective public health messaging.

In essence, Pascual-Ferrá et al.'s (2021) findings emphasize the urgency for health communicators to develop targeted strategies that acknowledge and navigate the toxic landscape surrounding anti-mask sentiments on social media. It requires not only the communication of facts but also a nuanced approach that considers the emotional and ideological dimensions underlying resistance to mask-wearing recommendations.

#### **D. Critical Multimodal Discourse Analysis**

Critical multimodal discourse analysis is an interdisciplinary approach that amalgamates elements from discourse analysis, linguistics, semiotics, and multimodality to scrutinize how meaning is constructed and conveyed across a spectrum of representations and modalities. Jewitt (2013) emphasizes the growing significance of employing multiple representations, such as language, gesture, image, sound, and spatial design, in contemporary society for the construction and communication of meaning (p. 8). The core objective of critical multimodal discourse analysis is to unravel how these diverse representations interact and intersect, giving rise to specific meanings, values, and ideologies.

An essential concept within this analytical framework is the recognition of power dynamics. According to Kress and van Leeuwen (2006), representations are inherently non-neutral, perpetually carrying social values, power relations, and ideologies (p. 4). For instance, the deliberate use of certain images or visual representations can either reinforce stereotypes or marginalize particular groups. Through an examination of the interplay between different representations in a given text or discourse, critical multimodal discourse analysis unveils the underlying power dynamics, elucidating how meaning is both constructed and conveyed.

Converbal consideration is another vital aspect of critical multimodal discourse analysis. Jewitt (2013) underscores that multimodal texts cannot be comprehended in isolation; rather, they must be verbalized within the

broader social, cultural, and historical milieu in which they are produced and consumed (p. 9). This necessitates an examination not only of the representations and modalities employed but also a deeper understanding of the encompassing cultural and social context.

Illustrating this analytical approach is the work of van Leeuwen (2008) on political discourse. van Leeuwen contends that political discourse frequently relies on images and visual representations to convey meaning and ideology. By dissecting the ways in which diverse representations are utilized in political discourse, van Leeuwen discerns and reveals the power relations and ideological stances being communicated. For instance, he observes that political leaders strategically use images of themselves with their families to project a sense of family values and personal morality, even if these values are not necessarily reflected in their policies or actions.

#### **E. Transitivity**

Transitivity extends beyond being merely a component within verbal groups; it constitutes an entire clause. The concept aligns more with the idea of being 'one of those to which the process is extended.' This understanding of 'transitivity' draws from the traditional terms 'transitive' and 'intransitive,' as articulated by Halliday in 1994. Additionally, a clause exerts influence over the verb by encompassing elements such as process, participants, and circumstances, as elucidated by Halliday and Matthiessen in 2014. The categorization of processes comprises six types: (1) Material process, (2)

Mental process, (3) Relational process, (4) Behavioral process, (5) Verbal process, and (6) Existential process, as outlined by Halliday in 1994.

1. Material process is a process that involve actions or occurrences and encompass two participants: Actor (the primary participant taking action) and the Goal (the entity affected by the action).
2. Mental process is a process that revolve around emotion, cognition, and perception, typically expressed in simple or past tense and not commonly in the progressive aspect. This type of process features two participants: Senser (the individual experiencing emotions and thoughts) and the Phenomenon (the subject of the emotional experience or thought).
3. Relational processes always necessitate two participants. Within a finite clause, the Relational process is centered around concepts of being, possessing, or becoming. Two distinct types of Relational processes exist: Identifying, where "a" signifies the identity of "X," and Attributive, where "a" functions as an attribute of "X." In instances of Identifying processes, the participants are Token and Value. Conversely, in Attributive processes, the participants are Carrier and Attribute.
4. The Behavioral process represents a hybrid form bridging Material and Mental processes. The primary participant in the Behavioral process is the Behaver, although it occasionally involves a Behavior, typically intransitive, the Behavioral process involves only the Behaver as a participant. In cases where there are two participants, the second participant is the Behavior.

5. Verbal processes encompass all representations of expression and indication. The content of the conveyed message can manifest as an entire projected clause, a participant (verbiage), or a circumstance (matter). Two participants are involved: the Sayer (the addresser) and the Receiver (the addressee or the entity targeted by the statement). Additionally, the process itself is referred to as Verbiage, signifying the content of the expressed or indicated message.
6. The Existential process essentially pertains to what is construed existentially, commonly utilizing the "be" verb. In an existential process, there is only one participant referred to as the Existent.

#### **F. Visual Grammar**

Visual Grammar, which is also called the metafunctional framework, is a framework that was developed by Gunter Kress and Theo van Leeuwen and the framework is based upon Halliday's Systemic Functional Grammar (2004) and later adapted for analysis of visual representation in communication. Gunter Kress and Theo van Leeuwen (2006) discussed the three metafunctional framework structures that can be applied to analyze visual representation in communication. The three metafunctional framework structures are:

1. Representational/Ideational Metafunction: The representational structure refers to how visual elements are organized and structured within an image to represent aspects of the world. It involves the arrangement of visual elements, the use of symbols, colors, and other visual resources to convey

meaning. The representational structure serves the ideational function by visually representing actions, processes, participants, and circumstances. It is concerned with how visual elements combine to create a representation of the world.

2. **Interpersonal Metafunction:** The interpersonal metafunction is related to the social and interpersonal aspects of communication. It involves the representation of social relationships, roles, and the expression of attitudes, judgments, and identities. The interpersonal metafunction is concerned with how language and images position individuals and groups in relation to one another. It conveys the social dynamics and interpersonal meaning within the communication.
3. **Textual Metafunction:** The textual metafunction focuses on the organization and coherence of the text. It involves the structuring of information, the flow of the discourse, and the ways in which elements are connected to create meaning. The textual metafunction serves to organize language and images into a cohesive and meaningful whole. It guides the reader or viewer through the text and influences how they perceive the information.

### **F.1 Component of Representational/Ideational Structure**

According to Kress and van Leeuwen (2006) the representation/ideational components in the visual grammar consist of; process, participants and circumstantial.

1. Process: process is divided into two representational process, narratives process and conceptual process. Narrative representation is a type of representational process that presents unfolding actions and events, processes of change, and transitory spatial arrangements. Meanwhile, conceptual process is a process that represents participants in terms of their class, structure or meaning, in other words, in terms of their generalized and more or less stable and timeless essence. In narrative representation, divided into four processes, namely: (a) Action Processes: Actions are divided into two types – transactional (verbs that need objects like actors and goals) and non-transactional (verbs that don't need an object). (b) Reactional Process: This happens when there's a reaction shown by the eyes or direction of gaze. (c) Mental Processes: These are shown as thought bubbles connecting the thinker and what they're thinking about. (d) Verbal Process: This is shown as a speech bubble connecting what's being said and who's saying it. In conceptual process, divided into three process, namely: (a) Analytical: Similar to ownership relationships in language. (b) Symbolic Attribute: Similar to identification relationships in language. (c) Classifical (Grouping): Similar to attribute relational processes in language (Kress and Van Leeuwen, 2006:63).
2. Participant: in terms of participants, they can be people, things, or places. In the analysis, the participant that stands out the most is highlighted by size, position, contrast, color, and focus. (a) Actions have actors and goals. (b) Reactions have reactors and phenomena. Reactors carry out processes,

while phenomena can be created by other participants. (c) Thoughts have a thinker and an idea. (d) Speech involves a speaker and words. (e) Changes involve only the goal. (f) Breaking down has an owner and something owned. (g) Symbols involve a symbol and what it represents. (h) Grouping is similar to grouping things together (Kress and Van Leeuwen, 2006:47).

3. Circumstance: circumstances in visuals include (a) location, where the action happens, (b) tools, involving the tools used, often shown as vectors. (c) Companionship, showing two objects coming together. (Kress and Van Leeuwen, 2006:72).

### **G. Logical Intersemiotic Relationship between Verbal Text and Visual Text**

Multimodal communication, incorporating both verbal and visual elements, relies on logical relationships to convey meaning. The connection between the metafunctional components in verbal and visual texts is elucidated by Liu Y and O'Halloran (2009: 32) through Intersemiotic Logical Relations. There are 4 different relationships within intersemiotic logical relation, those relationships are:

1. Comparative Relationship: This relationship organizes logical meaning by highlighting similarities between verbal and visual texts in a multimodal context. The degree of generality and abstraction in each metafunction component denotes the similarity (Liu Y and O'Halloran, 2009: 24-25).
2. Additive Relationship: Verbal and visual texts complement each other in an additive relationship. Information can flow from verbal to visual or vice versa,

allowing the combination of meanings from two different text representations in a multimodal context (Liu Y and O'Halloran, 2009: 25).

3. **Consequential Relationships:** In multimodal texts, consequential relationships involve Consequence and Contingency. Consequence signifies a causal relationship with ascertainable effects, while Contingency pertains to relationships with uncertain effects (Liu Y and O'Halloran, 2009: 27-30).
4. **Temporal/Time Relationships:** Procedural and repetitive genres characterize temporal relationships in multimodal texts. In procedural genre texts, verbal and visual messages complement each other, with procedural texts providing instructions. Repetition in temporal relationships signifies the text's production occurring repeatedly or numerous times (Liu Y and O'Halloran, 2009: 30-31)

## **H. Previous Related Research**

Before carrying out research, researcher needs to examine previous studies that are relevant to the research topic, namely research on memes and COVID-19 memes. The first previous research conducted by Richard and Karoh (2022) in their article titled "Visuality, Language and Communication in COVID-19 Nigerian Social Media Images." In a study focusing on the language and communication of Nigerian social media during the global COVID-19 pandemic, this study adopted a descriptive analytical research method with the theoretical framework of Guther Kress and Theo van Leeuwen's (2006) social semiotic framework of visual grammar, and the data they used in this study were 10 memes spread through

WhatsApp social media that reflected topical issues of the pandemic in Nigeria that had been purposively selected. The study found that visual images are highly effective in conveying messages and can be understood more easily than written language, especially when clear text is added to the images to facilitate interpretation and avoid ambiguity. This is important in online Covid-19 discourse in Nigeria, where people are more likely to engage with images as they do not have time to read long written texts. Meme visual images can also be used to satirize the government and show the reality on the ground in a way that is easy to understand.

Then, in the second previous related research conducted by Aslan, E. (2022) in article titled "Days of our 'quarantined' lives: multimodal humour in COVID-19 internet memes". In this research discusses how Internet users used memes to laugh at life in quarantine during the COVID-19 pandemic. This research focuses on quarantine memes found on the Know Your Meme (KYM) website. Data was collected by searching for COVID-19-related entries using the keywords 'coronavirus', 'quarantine', and 'COVID-19'. A total of 303 images macro meme were analyzed from a multimodality perspective, meaning this study looked at how text and images in memes work together to create meaning. The analysis draws on the taxonomy of text-image combinations proposed by McCloud (1994) and applied to internet memes by Yus (2019, 2020). This article explores the denotative and connotative qualities of images and how they contribute to the meaning of memes. It finds that visual humor is heavily relied upon, with interverbality evident at different levels. The interpretation of most memes requires one to know cultural, social, political, and/or internet-specific references. Meme humor is a dynamic

process in which users demonstrate cultural literacy and connect different jokes, ideas, popular culture references, and social realities and circumstances. In addition, this study found that incongruity resolution relies heavily on the combined meaning of the verbal and visual components of the meme, rather than on the individual meaning of each component. The use of multiple images seems to reinforce the meaning of the verbal components while complementing the visual meaning of the accompanying images.

Finally, in previous related research conducted by Mahmudah, H in her article titled "MULTIMODALITY IN STRIP COMICS "LIBURAN TETAP DI RUMAH" ON INSTAGRAM @KEMENKES\_RI". This research raises the same theme of the two studies referred to above, but what distinguishes it is that this study discusses the Comic Strip entitled "Vacation Stay at Home" uploaded on the @KEMENKES\_RI Instagram account. This research aims to discuss the meaning of the message in the Comic Strip "Vacation Stay at Home". To examine the message in the comic strip, the research uses multimodality discourse analysis, in which the researcher will discuss the comic strip through visual representation analysis, which refers to visual grammar (Kress & van Leeuwen, 2006) and verbal representation which refers to Halliday's transitivity (2014). The result of this study is to show that the verbal text in the form of dialog between participants in the comic strip as well as captions in the comic expand the meaning conveyed by the image. The verbal representation contained in the comic strip plays an important role in clarifying events, activities, or story sequences in the visual representation.

This paragraph explains the comparison between this research and previous related research that has been presented by researchers. In the first previous related research conducted by Richard and Karoh with an article entitled "Visuality, Language and Communication in COVID-19 Nigerian Social Media Images". There are similarities in the research theme, namely the COVID-19 meme, but what distinguishes it is the source of data and the topic presented in the article, where in the article the source is obtained from WhatsApp social media with a topic that focuses on the COVID-19 pandemic that occurred in Nigeria, while in this study the source of data is obtained from meme sites (9GAG and Memedroid) with a topic entitled COVID-19 pandemic that occurred in the United States, specifically memes about anti-vaxxers and anti-masks. Then the theoretical framework used in the article written by Richard and Karoh is the visual grammar developed by Kress and Theo van Leeuwen (2006), the same theoretical framework in this study, but in this study there is an additional theoretical framework, namely transience, developed by Halliday and Matthiesen (2014) and intersemiotic logical relations developed by Liu. Y and O'Halloran (2009).

Then in the second previous related research conducted by Aslan, E. (2022) with an article entitled "Days of our 'quarantined' lives: multimodal humour in COVID-19 internet memes". Just like the first previous related, the theme presented is COVID-19, but what makes it different is that the topic presented in the article is entitled quarantine life during the COVID-19 pandemic, and the source of the data used in the research article comes from the knowyourmeme.com site, where in this study it comes from meme sites, namely 9GAG and Memedroid. Then in the

theoretical framework, this article uses the theoretical framework for the analysis of the taxonomy of text-image combinations developed by McCloud (1994) which was then adapted in the analysis of internet memes by Yus (2019, 2020), which is not the same theoretical framework as the article written by Aslan, E. (2022), however, the article has the aim of finding the meaning of the correlation between the visual and verbal components in memes.

Lastly, in previous related research conducted by Mahmudah, H. in an article entitled "MULTIMODALITY IN STRIP COMICS "LIBURAN TETAP DI RUMAH" ON INSTAGRAM @KEMENKES\_RI", there is a similarity in theme between this research and the article written by Mahmudah, H, which is the same as the first and second previous related research, but the difference between the article written by Mahmudah, H with this research is the form of research data studied, which in the article uses comic strips as research data while in this study uses memes as research data and different data sources, in the article using social Instagram data sources, while in this study using meme sites. Then in the theoretical framework between the article written by Mahmudah, H and this research uses the same two theoretical frameworks, namely visual grammar developed by Guther Kress and Theo van Leeuwen (2006) and transitivity, a theoretical framework developed by Halliday (2004), it's just that this research uses the intersemiotic relational-logic theoretical framework (Liu. Y and O'Halloran) in finding the correlation of visual and verbal representations, while in the article written by Mahmudah, H examines the correlation of visual and verbal representations informally.