SEMIOTIC ANALYSIS ON VERBAL AND VISUAL SIGNS IN CYBER SAFETY POSTER

Ni Komang Widianti
English Department, Udayana University
widiantikomang45@gmail.com

I Wayan Mulyawan
English Department, Udayana University

Ni Ketut Alit Ida Setianingsih
English Department, Udayana University

ABSTRACT

The title of this research is Semiotic Analysis on Verbal and Visual Signs in Cyber Safety Posters. There are two aims of this study. They were to find out the types of verbal and visual signs and describe the meaning and function of verbal and visual signs in cyber safety posters. In this study, a cyber safety poster was discussed. The poster won the golden prize in the 2013 Information Security Awareness Video & Poster Contest. The data were collected from the posters using documentative and note-taking techniques. After the data were collected, they were descriptively analysed based on the Semiotic theory proposed by Pierce (in Chandler, 2007) and the theory types of meaning and function proposed by Leech (1981). The data analysis was presented through formal and informal methods. The result of the analysis showed that verbal signs dominated the poster. Then, based on the Semiotic theory proposed by Pierce, three sign classifications were found in the data. They were 4 signs classified as *Rhematic Indexical* Sinsign, 2 signs were (Rhematic) *Iconic* Sinsign, and a sign categorised as *Rhematic Symbol* (ic Legisign). The result indicated that the cyber safety posters dominantly used *Rhematic Indexical* Sinsign, a sign based on real experience. Meanwhile, based on the theory types of meaning and function proposed by Leech (1981), the analysis showed that there were 4 conceptual and 3 connotative meanings, 4 informative and 3 directive functions. It meant that conceptual meaning and informative function were the dominant types used in the Cyber Safety poster.

Keywords: Semiotics, Verbal, Visual, Sign, Poster

INTRODUCTION

The world where humans live is filled with so many signs. Humans use language to obtain information conveyed by verbal and visual signs. Both are employed because they can work together to convey certain implicit meanings. As stated by Cherry (1966), when humans physically send messages to one another, they transmit signals or signs that are audible, visual, and tactual. According to Peirce (in Noth, 1995: 42), signs can be categorised into qualisign, sinsign, and legisign. These signs may have connotative interpretations that convey deeper messages. However, it is not easy to comprehend the messages because each individual interprets the signs differently. It influences how

readers understand the purpose of the language the speaker uses. Through the semiotic analysis, the problem could be solved. It was implied in Chandler's statement (2007:2) that said semiotics studied how meanings are made and how reality is represented. Semiotics could be a tool to ensure clarity of meaning by looking at how the meaning of a sign was created. Therefore, this research is expected to provide an understanding to the public about messages conveyed through verbal and visual signs contained in everyday life, such as on public service advertisement posters.

Previous research has conducted verbal and visual signs analysis. Sucianto (2016), on the one hand, found that icons and symbols were used to deliver messages in the campaign posters. On the other hand, in a music video, Qurratuain (2019) revealed that numerous symbols, indexes, and icons were used. Meanwhile, in commercial advertisements, Prasetya (2018) found that three types of meanings and functions of signs were applied to deliver their messages. The meanings were conceptual, connotative, and affective, including informative, directive, and expressive functions. From those three studies, different types of data sources applied distinctive categories of signs. It motivated this research to find out the type, meaning, and function of signs used in other campaign posters to see whether the same type of data source always used similar categories of signs and whether the similar type of meaning and function of the sign was found in commercial advertisement could be found in public services advertisement posters.

According to the Advertising Research Foundation’s study (1989-1990), public services advertisement (PSA) has the power to change people’s behaviour. The statement was supported by the ARF study's result that showed "the number of men in four test markets who asked their doctors about colon cancer more than doubled after they were exposed to a yearlong public-service ad campaign urging them to do so" (in New York Times, 1991). It means that public services advertisements indirectly could inspire potentially life-saving action because "with early detection, the survival rate of colon cancer can be raised to 90 per cent", stated a doctor (in New York Times, 1991). In other words, PSA could have a huge effect on people who understand the message inside the advertisement. That was the reason why this study was conducted. It is expected to help people understand the message inside the ads and contribute to changing people’s behaviour.

If, in the previous research, the colon-cancer campaign was chosen for the research, in this study, cyber safety posters would be discussed. Many cyber safety posters can be found on the Internet, shared by instances who reacted to the issue of cybercrimes, identity fraud, cyberbullying, cyberattacks, and business data theft. According to the report by Cybersecurity Ventures (2022), "the global cybercrime damage costs predicted will grow by 15 per cent per year over the next five years, reaching $10.5 trillion annually by 2025, up from $3 trillion in 2015". Their estimations are based on historical cybercrime figures, including recent year-over-year growth, a dramatic increase in hostile nation-state sponsored and organised crime gang hacking activities, and a cyberattack surface which they expect to be an order of magnitude greater in 2025 than last year. The prediction could be seen as a nightmare for the world economy. Thankfully, that prediction come two years later, so some action can be taken today to refute it. Therefore, this research was conducted with the hope of helping the public understand the messages shared in cyber security posters so that cybercrimes can be avoided and these predictions can be prevented from being true.

DATA SOURCE

The primary data of this study consisted of three cyber safety posters published by Higher Education Information Security Council (HEISC) on https://id.pinterest.com/. Those three posters were selected as the data source because they were the Top 3 Posters of the 2013 Information Security Awareness Video & Poster Contest. The posters comprised the "Question the Cloud" poster, which won the Golden Prize. David Behar, a University of North Florida student college, created it. The next poster was "It's a Jungle in There" by Felipe Collazo, Montgomery College. It was the winner of the Silver Prize in the contest. Lastly, the poster "Lock Your Devices" by Emily Mauro from the University of North Carolina at Wilmington won the Bronze Prize.

METHODS

Kabir (2016) stated, "Data collection is one of the most important stages in conducting research". That is why certain methods and techniques were needed to collect the data from the selected sample. The method and techniques used to collect data on this study were documentation and note-taking. According to Ary et al. (2010), the documentation method was the use of written or text-based artefacts (textbooks, novels, journals) or nonwritten records (photographs, audiotapes, computer images, musical performances, YouTube videos) in the research. Two steps were followed in this section. Firstly, the researcher downloaded and read the posters one by one. Then, note-taking was the final step in the data collection process, and it was used to collect the verbal and visual signs found in the posters. The data were collected through images, colours, sentences, clauses, and phrases.

The data were descriptively examined, presented, and discussed in light of the theories utilised in this study. Two steps were taken while examining the data. First, all data divided into verbal and visual signs were analysed based on the model of signs proposed by Peirce (Chandler, 2007). This step described the relationship of representamen, object, and interpretant of each data. Second, the meaning and function of the signs were further analysed using Leech's theory of meaning and function (1981).

Sudaryanto (1993:145) distinguished between formal and informal methods for data presentation. The formal method was the method taken by the researcher when they used symbols, diagrams, figures, statistics, and tables to illustrate the findings of a study. The informal method was adopted when the researcher used words and sentences to present the analysis findings. This study used formal and informal methods to present the data analysis. At first, the data analysis was presented through tables. Then, descriptive explanations were added below the tables to strengthen the analysis.

THEORETICAL REVIEW

This semiotic analysis research applies a theory of semiotic and sign model proposed by Pierce (in Chandler, 2007) and Leech's theory of meanings and language functions (1981). Semiotic analysis in this study covers verbal and visual signs used to deliver messages in cyber safety posters. Therefore, the identifications of signs must be described to find the real messages of the posters.

1. Semiotics

According to Eco, semiotics focus on everything that can be interpreted as a sign (Chandler, 2007). Semiotics is concerned with analysing what people commonly call "signs" and investigating everything that can be understood to stand in place of something else. Signs can be gestures, phrases, pictures, sounds, and objects in a semiotic sense. Contemporary semioticians study signs in semiotic "sign systems," not in isolation (such as a medium or genre). They study how meanings are created and how reality is portrayed.

Charles Sanders Peirce Triadic Theory

Peirce stated that "signs can be studied using the triadic paradigm" (Chandler, 2007: 29–42). According to Peirce's description of his sign model (in Nöth, 1995: 42), the triadic model consists of a triple link of sign, the thing signified, and cognition created in mind. The triple link of a sign is called representamen [R], the thing signified is object [O], and representamen [R] stands for cognition created in mind. Below are further explanations of the representamen, object, and interpretant.

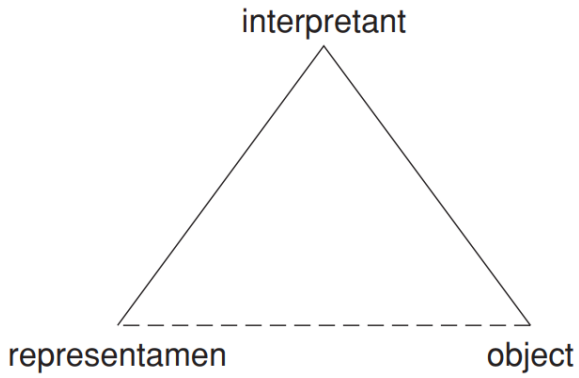

Figure 2.1 Peirce's semiotic triangle (in Chandler, 2007: 30)

1) A representamen is a sign that stands for or represents another item in some capacity or respect that may or may not be substantial.
2) An object is distinct from a sign but resembles it in some way. The object demonstrates what the representation refers to. The object was categorised by Pierce (in Chandler, 2007:36–37) into three modes. They are icons, indexes, and symbols.
3) An interpretant is a sense generated in the mind by interpreting the representamen. In the interpreter's imagination, it can also be referred to as a sign, producing an equal or more complex sign.

Then, Peirce constructed a complex typology of signs that begins with a triadic categorisation of sign correlates object, representamen, and interpretant into three trichotomies (in Nöth, 1995:44).

First Trichotomy

Peirce (in Nöth, 1995:42) separated signs into qualisigns (firstness), sinsigns (secondness), and legisigns (thirdness) from the perspective of the representamen. A qualisign is a quality that functions like a sign. Before anything can operate as a sign, it must be embodied, like the concept of

colour that must obtain a form to function as a sign truly. Then, sinsign is an actual existent thing or event. Meanwhile, legisign is a conventional sign. It is not a single object but a general type which, it has been agreed, shall be significant. Thus, every word of a language is a legisign. However, in an individual utterance, the word is also a sinsign.

An example of qualisign is the use of red as a sign. Red is a qualisign because of a sign in a particular field. For example, red is a sign of "love when giving someone special a red rose" (Cerrato, 2012:4). Generally, people know the red rose symbolises love and desire. It means the red rose was an example of a conventional sign or legisign. However, the red rose could also be a sinsign when pictured with its sharp thorn. In this situation, the red rose could be meant as a beauty that can hurt you because it looks beautiful. However, its sharp thorn could hurt the one who holds it.

Second Trichotomy: Icon, Index, Symbol

This trichotomy divides signs into three categories according to their relationship to the representamen and the object. Peirce referred to this trichotomy as the most fundamental division of signs (in Nöth, 1995:42). It consisted of the icon (firstness), the index (secondness), and the symbol (thirdness). Peirce defined an icon as a sign that depicts and bears the features of an object, whether genuine or not, and shares some similarity with that object's reality, like a picture or drawing. Then, an index is defined as a marker corresponding to the causality effect. The last member is a symbol. A symbol is the category of arbitrary and conventional signs. It refers to the object under a law, usually an association of general ideas.

An example of an icon could be the picture of a rat. For instance, a picture of a rat is in an advertisement poster with the tagline "The Most Powerful Rat Trap." The rat pictured in this poster is the icon of a rat. Then, if the poster has a headline that says, "If you heard the sound of a rat in your house, buy this powerful rat trap", "heard the sound of rat in your house" is the index of the reality that there is a rat in your house. Meanwhile, if the rat sign was found in the poster about stopping corruption, the rat was used as the corruptor symbol. According to Asa (2021:509), a rat is often used to symbolise a corruptor because it has the same behaviour as the corruptor. Both of them like secretly take something that is not rightfully theirs.

The Third Trichotomy

Depending on the nature of the interpretant, a sign can be classified into a rheme, a dicent, and an argument (Nöth, 1995:42). This trichotomy connects to the conventional division of Logic. A rheme is defined as "any sign that is neither true nor false, such as almost any single word other than 'yes' and 'no.'" It serves as a "Sign of qualitative Possibility, representing such and such a kind of conceivable Object. A dicisign, also known as a dicent, "is a sign of actual existence." It is an "informational sign," similar to a proposition, but it "does not assert." The easiest way to determine if a sign is a decisign is to look at its ability to be either true or untrue without immediately explaining. An argument is a legal indication or an interpreter's logical reasoning. All of these presumptions and

inferences are true under the law. Unlike a dicent confirming an object's existence, an argument establishes an object's truth according to social consensus or convention.

An example of rheme is a picture of hands posted on social media with no caption, representing a whole class of possible objects: it could be the account owner's hand or others. However, if the picture is considered in a context where it is accompanied by something indicating the person who owns the hand, then the level of interpretation changes into dicent. Moreover, if the picture caption was "This is the hands that always help me. The hand of my right hand in the company. Thanks for your great work Andre", an example of argument could be found. It is in the "right-hand" sign. From the first sentence, it could be known that one who has the hands always help the writer. Then in the third sentence, it is found that the writer loves his work. From this analysis, the right hand in the caption could be interpreted as a reliable person you can trust to do what you expect them to do (Macmillan Dictionary, 2009).

2. Theory of Meaning and Function of Language

The theory of meaning and function of language proposed by Leech (1981) was used to answer the second research question. Leech divided meaning into seven types of meaning. This theory of meaning is vital in being used as a tool to analyse words, phrases, sentences, and pictures. Meanwhile, the theory of functions of language was used to find what language function is mainly used in public advertisement posters, especially in cyber safety posters. The theories are further explained below.

Theory of Meaning

Leech (1981) states that there are seven types of meaning. Those are explained below.

a) Conceptual meaning

It is commonly assumed that conceptual meaning, referred to as "denotative" or "cognitive" meaning, is the most important aspect of linguistic communication. It refers to the meaning found in a dictionary, which provides the concepts. Leech (1981:9) prioritised conceptual meaning among the seven categories of meaning because it has a complex and sophisticated structure equivalent to it and is cross-related to a similar organisation on language's phonological and syntactical levels. Conceptual meaning is the literal meaning of a word concerning the concept or idea to which it refers. For instance, the term "flower" refers to the component of a plant that is frequently beautifully coloured and has a lovely fragrance.

b) Connotative Meaning

According to Leech (1981:12–13), Connotative meaning is the communication importance of a term beyond its intellectual substance. It all depends on how a particular person understands the word's meaning, which can make it subjective or unstable. Similar to our understanding and beliefs about the unbounded nature of the cosmos, connotative meanings are ambiguous and open-ended. For instance, "sea" signifies a sizable body of water, yet its connotative meaning could also indicate peril.

c) Social or Stylistic Meaning

Social meaning is the information that a piece of language reveals about the social context in which it is employed (Leech, 1981:14). Our understanding of stylistics and other linguistic variations is necessary for decoding a text. It acknowledges that some words or pronunciations are dialectical, for example, informing us of the speaker's social or geographic background. Other linguistic features, such as the evolution from formal and literary English to colloquial and eventually slang English, reveal the social relationship between the speaker and hearer.

d) Affective meaning

Affective meaning discusses how languages can convey speakers' innermost thoughts and feelings, such as their attitudes toward their listeners or the topic they are talking about (Leech, 1981:15). Affective meaning is frequently immediately transmitted by the conceptual or connotative content of the phrase used, for example, someone who is addressed "I'm sincerely sorry to interrupt, but could you help a moment please?" displays the impression of politeness in such lines can be flipped by a tone of cutting sarcasm (Leech, 1981:15).

e) Reflected meaning

According to Leech (1981:16), reflected meaning is the meaning that emerges when a word has several conceptual meanings and one meaning of the term contributes to our reaction to another meaning. In other words, reflected meaning is the meaning that arises when a word has multiple conceptual meanings. One meaning of a word seems to "rub off" on another meaning in this way only when a term has strong suggestive power, either because it is used often and is known well or because its associations are strong. Additionally, there are instances where the terms "Comforter" and "Holy Ghost," which both refer to the Third Person of the Trinity, are used interchangeably during a church service. The ordinary, nonreligious connotations of comfort and ghost influence these phrases' responses. The Holy Ghost sounds amazing, but The Comforter seems warm and cosy.

f) Collocative meaning

As defined by Leech (1981:17), collocative meaning is the set of associations that a word picks up due to the meanings of other words regularly used in the same context. For instance, the terms "good looking" is shared by the words "beautiful" and "handsome." Other instances include the nearly identical verbs tremble and quiver, which cows can do but not saunter (one tremble with fear but quivers with excitement).

g) Thematic meaning

According to Leech (1981:19), thematic meaning is conveyed by how a speaker or writer arranges the messages in order, focus, and emphasis. Even if these sentences appear to have the same conceptual substance, it is frequently considered that an active statement, such as (1) "Mrs Adam donated 1 billion dollars," has a different meaning than its passive equivalent, (2) Mrs Adam donated 1 billion dollars. The active statement appears to answer the implicit question, "What did Mrs Adam donate?" while the passive sentence appears to respond to the question, "Who donated 1 billion dollars?" These have different communicative values in that they suggest different contexts. The first statement suggests that we are aware of Mrs Adam's identity, in contrast to the second sentence

(perhaps through a previous mention). However, because both statements are valid under identical conditions, it would be impossible to identify a circumstance in which the first statement was truthful while the second statement was not.

3. Theory of Function of Language

According to Leech (1981:40–41), the following are the five most important communicative functions:

1) The topic determines an informational function. The primary focus of this function is the messages. It offers new information depending on what is valid and worthwhile. It is the most important since it informs the audience of what the speakers are saying. The information of language is heavily dominated by conceptual meaning.
2) An expressive function is described as one that can be utilised to reflect the feelings and attitudes of its source; the most prominent examples are sworn words and exclamations. The affective meaning (what language communicates of the author's attitudes) is significant in the expressive function because the speaker or writer of this function wants to express thoughts. This function could provide a clear image of the speaker's or writer's personality.
3) A directive function affects how others behave or feel. Requests and commands are an element of the directive function. The social control function emphasises the message's recipient more than its creator. However, it is similar to the expressive function in that it places less weight on conceptual meaning than other kinds of meaning, especially affective and connotative meanings.
4) The use of language to enjoy the linguistic artefact is referred to as aesthetic function. Aesthetics can have a role in philosophical meaning equal to that affective meaning.
5) The definition of the phatic function is the communication channel. It serves as a means of maintaining social relationships and channels of communication. In British culture, discussing the weather is a well-known example of this. The phatic function is the furthest distance from the aesthetic function since language's communicating task is least intense here: what is important is not so much what is said but that it is said.

RESULTS AND DISCUSSION

This part focused on analysing verbal and visual signs on the posters and explained their semiotic proses to get the closest meaning of the signs. To support the analysis, the theory of Peirce (Chandler, 2007), which consisted of representamen (qualisign, sinsign, legisign), object (icon, index, symbol), and interpretant (rheme, dicent, argument), was applied. Furthermore, the meaning and function of the sign will be categorised based on the theory proposed by Leech (1981). Below are the further result and discussion of the poster analysis.

“Question the Cloud” Poster

This public advertisement poster successfully won the gold prize in the 5th Annual Information Security Awareness Video and Poster Contest held by HEISC in 2013. The contest aimed

to promote the campaign STOP. THINK. CONNECT. and dedicated to building cybersecurity awareness in higher education. This poster can be found on Facebook and Pinterest.

Figure 3.1 Question the Cloud Poster (A)

The verbal and visual signs identified in the "Question the Cloud" Poster will be shown in Tables 3.1 and 3.2.

Table 3.1 The identification of verbal signs in the "Question the Cloud" Poster

No. Data	Representamen	Object	Interpretant	Type of Meaning	Function
A1.	You can't always trust a cloud not to rain.	There was still a possibility that one dropped your data to a third party, like a cloud that possibly dropped rain.	People should not always trust one to protect their data	Connotative	Informative
A2.	Don't always trust one to protect your data	Even a trusted company could face a data breach.	Asking people always to check the protection of their data because the one responsible for keeping their data still could fail to protect it.	Conceptual	Directive
A3.	Be aware of what you store online. Keep up-to-date antivirus software. Always back up your important files. Use secure passwords on all devices. Find more tips at stopthinkconnect.org.	Tips to safe using the Internet	The advertiser persuaded people to follow several tips to keep their data protected.	Conceptual	Directive

No. Data	Representamen	Object	Interpretant	Type of Meaning	Function
A4.	STOP. THINK. CONNECT.	The name of the campaign	A national public awareness program aimed at boosting understanding of cyber risks and equipping the American public with the knowledge and tools to be safer and more secure online.	Conceptual	Informative

Table 3.2 The identification of visual signs in the "Question the Cloud" Poster

No. Data	Representamen	Object	Interpretant	Type of meaning	Function
A5.	A cloud-coloured grey has a face covered with a mask of a thief coloured in black.	Something that could not always be trusted	A reminder to not always trust one to protect your data	Connotative	Directive
A6.	Twelve numbers 0 and 1 combinations are arranged vertically at the bottom of the cloud sign.	Data breach	A reminder for the readers that even though a trusted party saved their data, it could still fall on the data breach.	Connotative	Informative
A7.	STOP. THINK. CONNECT. Logo	Identity of the campaign	A national public awareness program aimed at boosting understanding of cyber risks and equipping the American public with the knowledge and tools to be safer and more secure online.	Conceptual	Informative

From the table 3.1 and 3.2, it can be found that the "Question the Cloud" Poster contained 4 verbal signs and 3 visual signs. Each sign's type, meaning, and function will be explained below.

Data A1: You can't always trust a cloud not to rain

Data A1 could be known as the headline of the advertisement. According to the online 'Collins Dictionary' (2007), the headline is the largest such heading on the front page, usually at the top. Data A1 was the most prominent line in the poster, with the alphabet typed in Sentence case, using a modern font family called sans serif and written in the biggest font used in the poster. If we look at the sentence structure, data A1 was a denotative sentence. It means that the sign has **an informative function**.

Then, looking at the meaning of the word used in data A1, it could be found that the word "cloud" and "rain" contained **connotative meanings**. According to the online 'Cambridge Dictionary' (1999), a cloud is a grey or white mass in the sky made up of very small floating drops of water, and rain means drops of water from clouds. However, as data A2 stated, "Don't always trust one to protect your data," so the context of the poster is about data and protection. From the data A2 could be known that the cloud was similar with the meaning "one" and "rain" represented "data".

The combination of those words in data A1 represented the object "There was still a possibility that one dropped your data to a third party like a cloud that still possible drop a rain ", therefore it could be interpreted as "people should not always trust one to protect their data". The data belong to ***Rhematic Indexical Sinsign*** as the sign was based on real experience, in which the cloud indicates that one day must drop rain.

Data A2: Don't always trust one to protect your data

Data A2 was written smaller than the headline of the poster. It belonged to an imperative sentence that gives a command or a request to do something (Cambridge Dictionary, 1999). It was marked by the use of 'to infinitive verbs' (omitting the "to") at the beginning of the sentence. As it was used to give a command, it meant that data A2 had a **directive function**. In this sentence, "one" refers to the party responsible for protecting the user's data. Then, the word "data" was understood as electronic information that a computer could store and process (Cambridge Dictionary, 1999). From these explanations, the sign's meaning belonged to **conceptual meaning** as it was understood as its dictionary meaning.

Combining those words in data, A1 represented the object "even a trusted company could face a data breach." It was based on the real experienced of Yahoo, a company's computer network that faced a breach in 2013. Yahoo said, "the 2013 attack on its network had affected one billion accounts" (In New York Times, 2017). The sign could be interpreted as "asking people always to check the protection of their data because one responsible for keeping their data still possibly fail to protect it." The sign was based on experience to be classified into **Rhematic Indexical Sinsign.**

Data A3: Be aware of what you store online. Keep up-to-date antivirus software. Always back up your important files. Use secure passwords on all devices. Find more tips at stopthinkconnect.org.
This sign consists of five sentences with a **directive function**, starting with the imperative verbs. The first sentence suggests to the reader that what they store online is safe. The next sentence asked the

reader to use the newest version of antivirus because it would have better performance and be more effective in preventing the virus broke your data. The third sentence advised readers to back up their important files to ensure they still have another copy of the data if the original is lost. The next sentence persuaded readers to create an impossible password to be known by others so that one could not hack their account. Then, in the last sentence, the creator of the poster suggested that the reader visit stopthinkconnect.org to get more useful information about being safe online.

From the explanation above, the type of meaning conveyed by the sign was **conceptual** because no word differed from its dictionary meaning. Then, if we interpreted these sentences as one sign, we could understand it as representing the "Tips to be safe using the internet". Then, the interpretant of the sign was "the advertiser persuaded people to follow several tips to keep their data protected". The sign could be categorised as **Rhematic Iconic Sinsign** since it was a sign that showed a resemblance.

Data A4: STOP. THINK. CONNECT

STOP. THINK. CONNECT was a sign that resembled the name of the campaign, which was promoted by the poster. Based on the U. S. Department of Homeland Security (Stop.Think.Connect. Campaign Factsheet, 2010), STOP. THINK. CONNECT could be interpreted as "a national public awareness program aimed at boosting understanding of cyber risks and equipping the American public with the knowledge and tools to be safer and more secure online". Based on this definition, it could be known that this sign contained **conceptual meaning** and had an **informative function**. Moreover, the sign could be classified as ***Rhematic Symbol*** **(ic Legisign)** because it connected to its object through general idea associations.

Data A5: a cloud-coloured grey with his face covered with a mask of a thief coloured in black.

All those components were related to helping the reader understand the poster's message. Based on the online 'Cambridge Dictionary' (1999), a cloud was a grey or white mass in the sky, made up of very small floating drops of water. However, in this poster, the cloud differed from the ordinary cloud. It was drawn like it had a face of a thief. That is why the cloud has a **connotative meaning** in this poster. Then, according to Cerrato (2012:15), the colour black usually has a negative connotation, while grey, physiologically, can drain your energy and be depressing or uplifting. It means that the colour indicates that the cloud shares a negative meaning.

Moreover, the verbal sign above the picture of the cloud said, "You can't always trust a cloud not to rain." It was indicated that the picture of the cloud in this poster represented "something that could not always be trusted". Furthermore, the face of the cloud that resembles a thief led to the conclusion that data A5 resembled the object of "one who responsible for protecting the digital data still possibly acted like a thief." It was like what happened in the United States, Javelin Strategy & Research finds reported that "in 2013, the number of identity fraud victims jumped to 13.1 million. About 46% of consumers whose card information was accessed through a data breach became victims of fraud." As a result, the sign could be interpreted as "a reminder not always to trust one to protect your data." As the meaning of the sign asking people to do something, it meant that the sign has a

directive function. Then, the signing class belonged to ***Rhematic Indexical Sinsign*** as it was based on real experience.

Data A6: 12 combinations of numbers 0 and 1, arranged vertically at the bottom of the cloud sign.

Data A6 looked like rain that dropped from a cloud. As in this poster, rain resembled the "data". It meant that the sign represented the object “data breach”. The online 'Cambridge Dictionary' (1999) defines a data breach as a situation when persons who should not be allowed to see private information do so. As a result, the sign could be interpreted as “a reminder for the readers that even though the trusted party saved their data, it still could fall on the data breach.” From the analysis, data A6 could be classified as ***Rhematic Indexical Sinsign***, as it was based on real experience. Then, the sign's meaning could be categorised as **connotative** as it was understood differently from its lexical meaning. Furthermore, as it was used to remind people to do something, data A6 has a **directive function**.

Data A7: STOP. THINK. CONNECT. Logo.

This sign represented the identity of the campaign, and it could be interpreted as "a national public awareness program aimed at boosting understanding of cyber risks and equipping the American public with the knowledge and tools to be safer and more secure online” (Stop.Think.Connect. Campaign Factsheet, 2010). As the sign showed a resemblance, it could be identified as **(Rhematic) *Iconic* Sinsign**. Then, from the analysis, the sign has **conceptual meaning** and an **informative function**.

CONCLUSIONS

After analysing the “Question the Cloud” Poster, it can be concluded that the poster used verbal and visual signs as the language to inform and persuade people to raise awareness of cyber safety. In the poster, 4 verbal and 3 visual signs were identified. Those data showed that verbal signs dominated the poster. Then, based on the analysis poster through the semiotics approach proposed by Charles Sanders Peirce’s theory, three classifications of signs were found in the data. They were 4 signs classified as *Rhematic Indexical* Sinsign, 2 signs were (Rhematic) *Iconic* Sinsign, and a sign categorised as *Rhematic Symbol* (ic Legisign). The result indicated that the cyber safety posters dominantly used *Rhematic Indexical* Sinsign, a sign based on real experience. Meanwhile, based on the theory of types of meaning and function proposed by Leech (1981), there were 2 types of meanings and functions found in the data. Three signs belonged to connotative meaning, 4 were classified as conceptual meaning, 4 had informative functions, and 2 had directive functions. The results showed that conceptual meaning and informative function were the dominant types of meaning and function used in the Cyber Safety poster.

REFERENCES

Ary, D., Jacob, L. C., Sorensen, C. K., & Walker. D. A. 2010. *Introduction to Research in Education.* Eight Edition. Wadsworth: Cengage Learning.

Cerrato, H. 2012. *The Meaning of Colors*. The Graphic Designer.

Chandler, D. 2007. *Semiotics the Basics.* Second Edition. New York: Routledge

Cherry, C. 1966. *On Human Communication*. Los Angeles: University of California.

Danesi, M. 2004. *Third, messages, Signs, and Meanings: A Basic Textbook in Semiotics and Communication*. Toronto: Canadian Scholars' Press

Department of Homeland Security. 2010. Stop.Think.Connect. Campaign Factsheet. Available at: https ://www.dhs.gov/xlibrary/assets/stc/stc-campaign-factsheet.pdf (Accessed: 21 March 2023).

Hidayah, A. G. D., & Bustam, M. R. (2023). ANALYSIS OF DENOTATION AND CONNOTATION MEANINGS IN THE SONG LYRIC "LA LA LOST YOU" BY NICOLE ZEFANYA (NIKI). *MAHADAYA Jurnal Bahasa, Sastra, dan Budaya*, *3*(1), 41-48.

Kadiman, D.S. 2019. Semiotics Analysis of Jonas Blue's Music Video Rise Through Roland Barthes' Theory. Thesis, Buddhi Dharma University, Tangerang.

Leech, G. 1981. *Semantics the Study of Meaning*. Second Edition. Great Britain: Penguin Books

Merriam-Webster Dictionary. 2002. G. & C. Merriam Co. Available at: https://www.merriam-webster.com/ (Accessed: 19 March 2023).

Meta, Lau Yoseph Anggara Putra. 2021. Visual and Verbal Communication in the Music Video Clip Entitled "Millionaires". *Udayana Journal of Social Sciences and Humanities*, 5 (1), 55-63

Nöth, W. 1995. *Handbook of Semiotics*. Bloomington: Indiana University Press.

Nofia, V. S. S., & Bustam, M. R. (2022). ANALISIS SEMIOTIKA ROLAND BARTHES PADA SAMPUL BUKU FIVE LITTLE PIGS KARYA AGATHA CHRISTIE. *MAHADAYA Jurnal Bahasa, Sastra, dan Budaya*, *2*(2), 143-156.

Oxford Learner's Dictionaries. 2000. Oxford University Press. Available at: https://www.oxfordlearnersdictionaries.com/definition/english/safety?q=safety (Accessed: 29 December 2022).

Qurratuain, Hayyundi. 2018. Semiotic Analysis on Twenty One Pilots' Music Video "Heavydirtysoul". Thesis, Universitas Brawijaya, Malang.

Sakinah, R. M. N., & Hanifa, L. N. (2020). Analysis of Icons, Indexes, and Symbols in YouTube Advertisement of Wardah Perfect Bright Creamy Foam Facial Wash. *Apollo Project*, 9 (1), 1-14.

Statista. 2016. Annual number of data compromises and individuals impacted in the United States from 2005 to 2022. Available at: https://www.statista.com/statistics/273550/data-breaches-recorded-in-the-united-states-by-number-of-breaches-and-records-exposed/ (Accessed: 8 April 2023).

Suciyanto, S.E. 2016. Semiotic Analysis of Greenpeace Campaign Posters in Climate Change Series. Thesis, State Islamic University Syarif Hidayatullah, Jakarta.

Sudaryanto. 1993. *Metode dan Aneka Teknik Analisis Bahasa*. Yogyakarta: Duta Wacana University Press

Prasetya, I. G. E. K., Erfiani, N. M. D., & Suari, N. L. D. 2019. The Verbal and Visual Signs of Tourist Attraction Found in Bali Best Adventure Magazine. *LITERA: Jurnal Litera Bahasa Dan Sastra*, 4(1), 22-38.