

# CHAPTER I

## INTRODUCTION

### 1.1 Background of the Research

Both spoken and written language can be a tool for someone to commit acts of fraud. Email fraud or scam is one of them. It becomes more advanced, more deceptive, and more common in the era of the Internet today. Email scam is one of internet-based crime or cybercrimes that threat the Internet users by providing fraudulent information. It is a real-world problem as stated by Jones, et al (2019) that “email fraud is a huge real-world problem...whilst computer science approaches have predominantly tried to block malicious attacks before they reach the user, these can often only help in the short term” (p.1).

Anyone can easily get scammed anytime and anywhere on the Internet. Fraudulent emails are still able to reach large numbers of internet users every day. To be able to identify a sort of fraud, prior knowledge about the types of email scams is required. Gil’s article on lifewire.com posted that there are types of email scams, such as phishing email/ fake web, the Nigerian scams, Lottery scams, Advance Fee Fraud for Loan or Credit Card, Job Opportunity Scams and many others (Gil, 2018).

However, just understanding the types of email scams is not enough. A deep analysis of language features used in the email scams is also necessary to conduct. For this reason, a linguist is needed to explain and to analyze language as evidence in the interest of criminal investigations. Analyzing legal or criminal implicated text is concerned with the field of forensic linguistics. Forensic linguistics, McMenamin

(2002) stated that it is “the scientific study of language as applied to forensic purposes and contexts” (p. 22). Therefore, the analysis of language applications can help legal or criminal investigations.

Olson (2008) also stated that Forensic Linguistics is, rather, the application of linguistic knowledge to a particular social setting, particularly legal field (p. 3). Any spoken and written text can be classified as forensic text depending on the legal context, such as suicide letter, regulation, interview, handwriting, recording, and also email scam.

When Halliday (1978) said that “language is as it is because of what it has to do” (p. 19), functional language theory emerges giving a perspective of meaning-making based on social practice in many complex contexts. This is in line with forensic linguistics studies that Coulthard and Johnson (2010) tried to explain that the analysis of language for legal context answers the question of how language has and is being used, who is using it, how they are writing, where they are speaking, why they are interacting in that way and what is being accomplished through that interaction (p. 1).

Moreover, a linguist sees language as data without a one-sided form of justification. Halliday’s theory of the transitivity system is considered to be able to answer those questions by analyzing the process types of clauses in the text. In this case, the transitivity system was used to reveal what process types were used and how fraudulent language was constructed by the chosen grammatical unit in email scams.

Therefore, there are at least four reasons why this research is conducted, they are; first, email fraud is a crime that uses written language to commit the fraud, so the linguistic analysis is needed to reveal the way how deception language is constructed. Second, the researcher personally almost got scammed through email and found out there were still victims who have been fallen to this kind of con.

Third, email fraud is a real threat. Many cybercriminals take advantage of the anonymity of the online world to deceive, hack, and steal from the Internet users. Thousands of people receive email fraud every day through the Internet. Lastly, sharpening the skill in detecting fraudulent language on email messages is important. Because the growing number of victims has fallen into this type of fraud, analyzing these phenomena in linguistics point of view would be interesting to be conducted.

This research more concerned about how to detect the fraudulent language in email scams by analyzing the clauses using the Transitivity system of the processes, participants, and circumstances. The question is whenever someone sends email messages with fraudulent information, how does the writing style reveal traces of deception? How to detect email scams through analyzing its language? What are linguistics forms that commonly used by a scammer? And is it even possible to detect? It was conformable with Shuy who stated that “language leaves useful trace evidence that is perhaps more helpful and convincing than that of many of the crime reconstructions based on contextual visible circumstances” (Shuy, 2016: p.20). Analyzing fraudulent language in email scams can trace evidence of fraud that helps to prevent the same kind of scam in the future.

In this research, the data were gathered from the random anonymous email accounts inside the spam section. There were five different email scams selected randomly. They were sent under the name of Mrs. Lerynne West, Dr. Allen Morrison, Ronald Walh, Mr. Theara Chhoy, and anonymous sender. The first email contained 17 clauses; the second email contained 6 clauses; the third email contained 4 clauses; the fourth email contained 11 clauses, and the last email contained 4 clauses. This research explored the language features employed by scammers in this email message through a qualitative descriptive analysis by using Halliday's theory of the Transitivity system. It is expected to be able to reveal key linguistic rules that gained further insights into the element of the language used in the email scams. The findings are useful to improve our knowledge in detecting Internet-based fraud especially email scams and in helping law enforcement and computer security policy.

## **1.2 Scope of the Research**

To detect and identify fraud in email scams appropriately, the researcher focused on analyzing language through meaning and function without separate the form independently. Halliday had good reasons to believe that function and meaning can help shape form (Bavali and Sadighi, 2008). To analyze this problem comprehensively, the transitivity system analysis was used by identifying the process types, participants, and circumstances of the clauses in the data. Transitivity analysis derived from Systemic Functional Linguistics (SFL) proposed by M.A.K Halliday who is believed giving appropriate explanation to identify email scams by closely analyzing language through meaning.

The limitation of this research is that the data focused on the clauses in the different email scam messages gathered from the spam sections of the anonymous email account. The email scams gathered were limited to five random data which were already considered as scams. Based on the five email scams, there were at least 41 total data found in the form of clauses that represented the analysis of process type of transitivity system. Further, the researcher only focuses on transitivity analysis as an aspect of the Ideational meaning (metafunction) of Systemic Functional Linguistics, any related theory of clause analysis in Systemic Functional Linguistics such as Interpersonal and Textual meaning (metafunction) was not discussed. It was because this research only dealt with the experience which was represented in the email scams to identify the fraudulent language used by the scammers to defraud internet users.

### **1.3 Identification of Problems**

Regarding the objective of the research, Litosseliti (2010) stated that “a set of research questions should be formulated in ways which allow the identification and investigation of further issues that only doing the research can bring to light” (p. 10). Therefore, the analysis presented in this research was gradually guided by the following research questions:

1. What are the process types of transitivity system used in the email scams?
2. How the fraudulent language in email scams is identified by the process types?



These research questions can guide the researcher in analyzing the data in order to identify the fraudulent language in email scams comprehensively. In addition, these research questions also help to present the analysis in the chronological order.

#### **1.4 Objective of the Research**

To ensure this research gains relevant and useful insights for the linguistic field, the objective of the research plays important roles to determine what this research wants to find out. In order to understand the aims of this research comprehensively, two objectives below show the goal achieved in this research:

1. To identify the process types used in the email scams.
2. To explain the fraudulent language in email scams identified by the process types.

Researching without setting objectives is like going on a journey without knowing the destination or how to get there. Therefore, having clear objectives can set the research on the path to achieving the main aims and help the researcher to get useful insight and findings. Both objectives show a clear direction for this research.

#### **1.5 Significance of the Research**

This research aimed to enhance the linguistic studies, particularly in Andalas University, since the linguistic research on fraud, especially email fraud have not adequately been conducted before. As stated by Creswell (2010), the significance of research conveys “the importance of the problem for different audiences that may profit from reading and using the study” (p. 296). It is also

useful as a reference for the other researchers who intend to focus their research under the Systemic Functional Linguistic perspective, especially transitivity analysis.

Hence, this analysis gave a significant contribution to expand the knowledge in detecting fraud through language in general, and also to sharpen the skill to identify the email scams in specific. Also, the study of forensic linguistics is expected to be brighter in the future in case linguists work together with professionals (e.g. police, law enforcement, judge, etc.) to assist various entities involved in related disciplines.

## 1.6 Definition of Key Terms

In presenting the research, there are several key term used related to the theory and general perspective of Systemic Functional Linguistics, especially the transitivity system. These definitions below helps the readers to understand the terms used in this research.

**Transitivity** means one of systems of functional grammar which focus on the process types, the participants involved, and the circumstances.

**Participant** means the subject or object involved in the clause which is usually realized by nominal group and subject/ object pronoun.

**Process** refers to the predicate as the core of the clause. It is realized by the verbal group.

**Intensive** refers to the verbal “be” in traditional grammar.

**Circumstance** means the element in which the process is actualized. It refers to Adjunct or Complement in traditional grammar. It is mostly realized by prepositional phrase.

