

## Chapter 19

# A Digital Forensic Analysis of Advance Fee Fraud (419 Scams)

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### ABSTRACT

*One of the significant implications of digital communication is the receipt of unsolicited emails. Several such mails share common features which characterize what has now come to be known as Advance Fee Fraud (AFF) mails or 419 mails. In particular, this chapter presents a structural analysis of the content of email correspondences for linguistic clues to help detect scams. Using a qualitative approach, the data comprising several unsolicited emails were analyzed for linguistic features vis a viz standard features of email communication and Standard English (SE). Findings revealed that the language of AFF emails share common linguistic features in aspects such as address, message, content construction, English as Second Language (ESL) errors, and non-native English features. The findings of this study enrich our understanding of language use in digital communication, and equip individuals and investigators with linguistic tools to determine authenticity through digital forensic examination.*

### INTRODUCTION

There is no doubt that digital technology has played a crucial role in the development of AFF. Today, AFF has come to be synonymous with the use of the Internet, hence the nickname of its perpetrators, *yahoo yahoo boys*. The AFF also known as Nigerian Advance Fee fraud or 419 named after the relevant section, Section 419 of the Nigerian Criminal code

that prohibits the fraud. Briefly, AFF refers to the act of deceiving potential clients to part with their money or valuables in exchange for a substantial profit or returns. Based on a statistical report, AFF is referred to as the “world’s most successful scam” (419 Unit, 2007). According to the report, AFF recorded the highest number of organized perpetrators, 300,000 as at 2006 and the number is growing at the rate of 3% annually. AFF also accounts for the highest number of victims, and is responsible for the highest amount of losses globally, over \$28 billion as at 2006.

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AFF, like other fraud related crimes is a type of scam and scamming is a phenomenon which has been around for centuries. AFF is not restricted to cyber crime; rather it is “mainly a confidence fraud using all communication resources available”. AFF is reported to have originated from Nigeria, an English as a Second Language (ESL) context. Yet, most of the studies do not examine AFF emails from an ESL perspective. One of the content clues of AFF emails is the ‘uniqueness of the contact’; that is, how and why someone would single out one victim for contact, and why the victim does not ask him/herself why a widow or son of a slain African leader should contact him/her rather than some more important individual.

The aim of this chapter is to provide a basis for analyzing the language of 419 emails from an ESL perspective. The objectives are 1) to analyze the language of AFF emails for common linguistic features; 2) to compare these features with those of standard authentic emails; 3) to examine the nature of the features with those that characterize ESL and non-native English varieties; and 4) to provide more effective linguistic tools to investigate and detect email scams.

## **BACKGROUND AND LITERATURE REVIEW**

Surprisingly, the 419 scam has not attracted a lot of scholarly attention (Carlson Analytics, 2008) nor has the phenomenon benefited from a comprehensive country specific report (Peel, 2006). Whereas Nigeria is known to be the origin of the phenomenon, most studies do not reflect the contributions of Nigerian literature nor perspective. For example, publications by Nigeria’s Economic and Financial Crimes Commission (EFCC) provide valuable information from Nigerian and West African perspectives. Two other publications written by Charles Tive (2006) and Samuel Ifeagwu (2006) respectively provide general information. An EFCC publication edited by

Ribadu et al (2007) provides the perspectives of Nigeria and neighboring West African states on the current trends of AFF in West Africa. Tanfa (2006), in a doctoral study provides a criminology perspective of AFF.

### **A Brief History of AFF**

The history of AFF mails dates back to 1970 and early 1980 when there was no Internet and the only available means of correspondence was through the postal service. According to reports, the perpetrators shifted from using print to fax messaging in the 1980s and 1990s, and followed it up with an explosion in the use of email by 2000. Tive (2006) traces the origin of AFF back to Nigeria’s unstable political history and stunted socio-economic development. Nigeria, as an independent state in 1966 to 1999 had experienced 2 assassinated heads of states, 10 coups, and 30 years of military rule. Ribadu (2007) confirms the emergence of “a curious interface between crime and technology with the emergence of mobile phones and the Internet in 1997. He noted that by 2002, the unsolicited “Nigerian mail” had become a global menace. The number of perpetrators involved in obtaining by false pretence rose astronomically during this period and is reported to have reached its peak between 1987 and 1991 (Oyakhromen, 1999). The study also noted that the instruments of the fraud include ‘format of authentic official documents’.

That the AFF originated in Nigeria is an undisputed fact. 54% of economic crimes are AFF crimes (Ribadu, 2007). The proliferation of AFF perpetrators is the indirect outcome of a mismanaged oil boom period from 1970, during which the generated revenue meant for effective economic development was squandered by successive corrupt governments, thus encouraging social decadence and high unemployment rates (Tive, 2006). It is in the light of such a history that many to hold the view that AFF is/was a Nigerian issue (Tanfa, 2006). Although much emphasis has been

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