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Forensic Linguistics in the Light of Crime Investigation

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ABSTRACT

Forensic linguistics is a branch of applied linguistics which deals with the analysis of linguistic evidence to clarify the ambiguities existing in any judicial process, especially in investigation crimes and legal issues. This field investigates legally valuable texts and linguistic evidence such as handwritten texts prior to a suicide, documents and evidence remained from a crime scene and notes of abductors. Discourse analysis is also widely carried out with the following aims to: understand the identity of the writer; identify the speaker with reference to the recording; and provide expert reports for legal authorities and police. The analysis of discourse greatly assists judicial system personnel to find truth. It is necessary for police officers, security experts and judges working in courts to become familiar with the potentials and application of forensics linguistics and its role in the success of legal investigations in order to attain truth in judicial processes.

Keywords: Forensic linguistics, linguistic evidence, law and linguistics, legal discourse analysis, linguistic finger prints

INTRODUCTION

Forensic linguistics is a new approach in applied linguistics using scientific mechanisms which are also derived from other subfields of linguistics such as phonetics, stylistics, pragmatics, dialectology and semantics used in courts during the process of police investigation with the goal of solving crimes and legal issues.

At present, the work of "International Society of Forensic Linguistics" is a typical example of this field. Considering the establishment and spread of international courts, it is extremely important for linguists to become familiar with the legal systems of different countries, especially in the new

century, when concepts such as 'organised crimes' and 'international terrorism' have gained a considerable significance.

This study is an attempt to study the different aspects of forensic linguistics and the application of this field in crime investigation. In the first section of this article, the theoretical concepts of forensic linguistics and its history are explained. The second section explains the role of forensic linguistics in a justice system. The third section deals with the practical description and analysis of forensic linguistics including description phonetics, stylistics and crime discourse analysis in judicial investigations to distinguish between successful investigations from unsuccessful ones. Finally, the article ends with a conclusion of the discussed issues in the field of forensic linguistics.

Forensic linguistics, as a term, could be equivalent to 'court linguistics', 'judicial linguistics' or 'legal linguistics'. At least in the US, the term 'forensic' is mainly about people or methods that are used to perform judgment and mystery solving.

Therefore, in order to define forensic linguistics as new approach to linguistics and law, it can be formulated that this field is like forensic medicine which deals with the applications of medicine in legal issues or forensic psychology, which is about analysing mental disorders from the perspective of Law. As a comparison, forensic linguistics is a field which deals with the application of linguistics and its subfields including phonetics in identification, writing techniques, legal texts, semantics, words or texts analysis with respect to legal and judicial goals. In other words, forensic linguistics is delimited by language science and legal preferences such as those formulated by courts and legal authorities (Groot, 2003).

As a matter of fact, approaches such as forensic linguistics, forensic medicine, forensic psychology and forensic pathology, all form a whole body of knowledge known as forensic sciences.

As previously mentioned, forensic linguistics is a new interdisciplinary approach to Linguistics and Law, whose necessity is on the rise day after day. The importance of this field is so much that one specialised organisation named as "International Society of Forensic Linguistics", together with another international organ called "The International Association for Forensic Phonetics" is now active, whereas an international journal known as "The Journal of Speech, Language and Law" publishes relevant articles and books.

By considering the basic tenets of language theories and thousands of legal cases in American and European judicial system, many law experts and linguists believe that there is a close relationship between Linguistics and Law. They also state that a forensic linguist uses linguistic principles, different techniques such as discourse analysis or conversation analysis, general language theories and speech act theories in order to provide a court with their expert opinions. All the participation from forensic linguistics is to unravel legal mysteries and reach a fair judgment.

A BRIEF ANALYSIS OF THE HISTORY OF FORENSIC LINGUISTICS FROM THE BEGINNING TO NOW

It can be doubtlessly stated that there is no definite starting point for forensic linguistics as a scientific discipline, which is also the case for other disciplines. Challenges of the identification of writers (writer of texts related to crime) play a fundamental role in the establishment of Forensic Linguistics (Olsson, 2008). From the ancient Greece, on certain occasions, Greek play writers accused each other of plagiarism. In 1800s AC, researchers were oriented toward the identification of genuine writers. This was mainly concerned with the most popular works such as those of religious texts and also Shakespeare's plays. In the 19th century, a number of methods were devised to identify writers and the possibility of ascribing a work to a writer, which were mainly concerned with mean word length and mean sentence length.

However, the first use of forensic linguistics in practice was in 1968 as the result of the work of a linguist named Svartvic. He used forensic linguistics in judicial process of a person who was convicted with the murder of his wife and child. Timothy John Evans was executed after his trial in 1953 based on a so-called confessions made by him. His confessions were troublesome, especially for a famous journalist named Ludwig Kennedy. Therefore, Svartic started to analyse the confessions and he quickly found that two different styles were used in the two confessions. Using linguistic evidence, he showed that despite the court's decision, Evans did not make the confessions.

For a long period of time, there were a set of specific regulations in UK Law for confession hearing. Accordingly, convicts used to narrate their stories for police officers, and the officers were responsible to take down or type the hearings without interrupting the convicts; however, what happened in reality was quite diverse. Police officers asked a lot of questions, and then they started to write down the convicts' answers. The problem was that they wrote the answers not so much precisely, but instead they recorded their own perception of the convicts' sayings. Since people talk quickly and not much coherently, it could be possible for the hearers to leave out important details and in some cases, to record their own thoughts and guesses.

Therefore, police officers were indifferent about the rules governing the process of confession hearing, but they had their own way of recording the sayings. Unfortunately, on some occasions, the convicts record their own opinions together with the confession. Consequently, in the start of forensic linguistics, the validity of the confessions received by police was a significant issue, at least in UK. This was especially considered in a number of important legal cases such as "the appeal court of Derek Bentley", where the Birmingham University professor, Malcom Collard, who was also a famous British forensic linguist, played a fundamental role.

The establishment of forensic linguistics in the US was also in correspondence to

the rights of people and convicts during interrogation process. Magistrate court accused Ernesto Miranda of an armed robbery. However, the appeal court refuted the conviction. All police officers are obliged to tell the arrested of their rights; the officers have to tell them that it is not mandatory to answer the questions during interrogations, and all of them are eligible to have a lawyer. However, some doubts remain unsolved, which are mentioned by Roger Shuy. Shuy believes that the nature of interrogation process forces convicts to answer questions.

Therefore, it is hard to accept convicts' confessions as valid and voluntary (Shuy, 1997). In addition, he referred to a special case "the case of a 15-year old boy from Huston, Texas, who accepted the murder charge and signed his confession although the regulation relating to the accused person's rights was read to him" and concluded that the accused person accepted some forensic terminology in the murder charge regulation due to the lack of understanding and signed his confession. In fact, it can be said that no balanced and symmetrical relationship found in the relationship between "the judicial officers and police officers" on the one hand, and "the accused" on the other hand due to various reasons such as illiteracy or low literacy or for example, he speaks in a language, dialect or accent other than the language used in interrogations. Thus, any text, whether written or oral, which results from such an unbalanced relationship will have a significant difference with the accused' intention and what he meant. The

level of language comprehension could play a key role in interrogation process and confession hearing. On some occasions, the convict might get confused over the professional terms that exist in interrogation declaration letter. Helpless in understanding the content of interrogation, he might confess against himself (Olsson, 2008).

The scope of forensic linguistics has expanded since its establishment as a scientific approach. Nowadays, forensic linguists are asked to cooperate with legal authorities in variety of occasions such as the identification of the writer of threatening letters, letters containing explosives and deadly materials, writings related the time of death and suicide telephone messages. Forensic linguists provide legal authorities with their expert opinions (Tiersma & Solan, 2002).

Forensic linguists believe that there is a close relationship between forensic linguistics and law. In fact, the linguists use their theoretical knowledge and professional experiences to help the actors in criminal investigations in reviewing the criminal assumptions and removing ambiguities and doubts arisen in the context of linguistic evidence. Achieving a better understanding of the forensic linguistics in criminal investigations requires having a basic knowledge in the field of language functions in the cultural and social contexts. With the development of forensic linguistics, the study of the impact of variables such as gender, age, ethnicity, geographical region and social class on written and audio findings with judicial and police value

becomes possible. Today, the developed judicial systems are widely using the professional opinions of forensic linguists to analyse linguistic evidence in cases and make judicial decisions.

THE FORENSIC ANALYSIS OF HANDWRITING

A manuscript that is analysed in legal context is referred to as legal document which is deeply probed by forgery document examiners. This practice is known as Forensic Handwriting Analysis.

All human beings have their own specific handwritings, just like their fingerprints. Therefore, the identity of a writer could be revealed by analysing his/her handwriting. For example, handwritings left by those committing suicide with an emotionally depressed state are completely different from handwritings written by scared victims.

With respect to handwriting forgery (i.e., to fake someone else's handwriting), it can be formulated that the forger can never wipe out the interference of his//her own handwritings, and he/she can never duplicate the handwriting of another person. Therefore, forensic linguists can compare the genuine writings with the fake ones to determine whether the handwriting is real or not. This can be also done by using computer software and model recognition tools.

Forensic linguistics was introduced for the first time by a linguist called Svartvic (1968) about 40 years ago in a book entitled "Ivan's remarks: an example for forensic linguistics". In this book, he compared that part of the accused person's statements that had not been referred to at the court and had caused his conviction to the other part of his statements that had not been used and showed that these two parts have many structural differences in terms of linguistic. Subsequent investigations proved the innocence of Ivan and his homeowner was brought to trial as the main accused in the murder of his wife and child. The publication of this book is to be considered as a turning point in the debate on forensic linguistics in criminal matters.

Nowadays, many judges use expert opinions of forensic linguists who have been trained under certain programmes for handwriting analysis. Forensic linguists are at the service of courts and legal societies in order to analyse contracts, exchanged written documents, anonymous letters, threatening letters and wills.

THE POSITION OF FORENSIC LINGUISTICS IN JUDICIAL SYSTEMS

Describing the relationship between two abstract concepts of language and law can help us in reaching a better understanding of the role and position of linguists in legal and judicial systems. Undoubtedly, we need language in order to make and understand the law. In other words, these two abstract notions are inseparable. The increasing attention given by linguists to the relationship between these two concepts, especially in the twentieth century, is the result of this inseparability. From the very beginning,

linguists have opposed the existence of ambiguity and archaic terminology in legal texts, regulations and court decisions. On the other hand, judges have been doubtful about the presence of linguists in courts and legal organisations; they perceived the presence of them as a threat to themselves. This a statement made by a judge about a linguist (a phonetician), "We all know that a linguist is a person who can speak in several languages (Storey-White, 1998, p. 281). These misunderstandings and misconceptions about the role and nature of linguistics caused tensions in the beginning, but soon judges and juries especially in US found that the skills of linguists in discourse analysis and pragmatics are key to a better understanding of the intention of speakers. They also found that linguists can assist them with the goal of the better comprehension of laws, regulations, contracts and evidence given by both parties. Linguists are also useful in dealing with oral documents and hand writings.

FORENSIC PHONETICS

In forensic phonetics, linguists attempt to compare the recorded voice of a convict while doing a crime and the voice of the suspects, and finally to find a relationship between them. They also determine how much similar are the two voices, which may play a pivotal role in courts and among jury members in conviction or acquittal of an individual.

This method was first used in the 1960s. It was as valid as using finger prints in judicial processes. Today, phonetic analysis

(physical and audio) is a method used for the identification of convicts in judicial and legal processes. In this process, the linguist first uses auditory phonetics to transcript one's sayings. This stage is very important for any legal investigation. Missing one letter of a word might change the meaning of that word or even a whole phrase. After carrying out the transcription and analysis of the final transcribed text, the phonetician can determine to what social class and geographical area the speakers belong. Sometimes, besides their pronunciation and dialect, the pronunciation manner of one specific letter in a word can provide officers with valuable information about the identity of the convict.

Carrying out physical phonetics makes the observation of the speaker's voice spectrogram possible. Studying the spectrogram, one becomes able to attain information such as frequency, height, intensity and pitch. By combining and analysing the data derived from physical and auditory phonetics, linguists can understand whether the speaker speaks with his own voice or he imitates another person. For example, in April 2000, one German encoder and decoder, which was made during World War II, was stolen from a museum in UK. Following the robbery, a few request notes for money and a tape were found. The tape included a message with the South African pronunciation of English. After the phonetic analysis of the tape, it was found that the speaker belonged to northern England, but he tried to imitate English-African Dialect. After the investigations were done, a British

antique dealer was arrested. He confessed that all notes and messages belonged to him (Coulthard & Johnson, 2007, p. 148).

However, it should be noted that the information derived from phonetic analysis is not definite and final. This method suffers from a range of limitations. First, people on different social, temporal, and geographical occasions speak with different pronunciations, intensities and pitches. On such occasion, the comparison of spectrograms derived from two voices cannot produce final results.

The use of spectrogram to identify the speaker needs at least two separate spectrograms from the person in question. In both samples, there should be at least one common word so that we can compare the two spectrograms to attain information needed for understanding the speaker's identity.

However, despite the limitations of physical phonetic analysis and its error rate (Hollien, 1990), FBI and other advanced police forces use phonetic analysis to complete their investigations. As had previously been mentioned, however, phonetic analysis by itself could not be accepted in a court of law (Nakasone & Beck, 2001).

PHONETIC STYLISTICS

The use of language, either in oral form or in written form, is one method for the identification of people. Vocabulary and diction of each person grows gradually with him/her and is exclusive to himself/herself. Diction, syntax and the use of grammatical structures are used as linguistic fingerprints, and there is a close relationship between the personality and social identity of individuals. The analysis of linguistic fingerprints is one method for the identification of genuine writers and also for understanding the number of writers of a note. Stylistic techniques could be helpful in revealing the liberty and intention of the writer in writing a specific note or manuscript. It also shows that the present note is or is not affected by people other than the writer.

Researchers have proposed a number of methods for the analysis of linguistic finger prints. For the first time, De Morgan (1882) suggested the average length of words hypothesis. From his point of view, the average number of letters in each word in sentences of a text can work as a criterion for the identification of the genuine writers. The examples of other criteria include mean sentence length (Yule, 2009), lexical variety (Winter & Woolls, 1996), and diction and syntactic structure (Honore, 1979).

The truth is that in practice, many words, phrases and expressions may be similar in the writings of different people. Therefore, the identification of genuine writer by using this method is only possible when the number of suspects is less than five. On the other hand, notes left in a crime scene (e.g., those left by abductors, threatening letters, suicide notes, etc.) are usually short and most often less than 100 words. Therefore, the application of forensic stylistic methods and finding the mentioned features in such short notes are practically impossible.

In addition, the analysis of the writer's notes includes valuable information about the identity of the writer of a note. There is usually a close relationship between one's handwriting and his/her education and social class (Davis, 1986). The analysis of spelling errors and the type of diction in a note or a manuscript determines the level of education. However, it should be noted that on certain occasions, the writer might change his/her handwriting to mislead the investigators.

FORENSIC DISCOURSE ANALYSIS

Forensic discourse analysis is a branch of critical discourse analysis. The important thing about this approach to linguistics is the identification of social context in which the discourse (oral or written) is produced. In text analysis, we should be always cautious about the situation and social context of the production of the discourse. We need to address the socio-cultural backdrop against which a text is born.

Forensic discourse analysis is rarely about the previously existing texts (e.g., threatening letters and suicide notes). On many occasions, the analysis is performed on the transcribed sayings of convicts and suspects. That is why discourse analysis should take into account the features of both written texts and oral productions including conversation cooperative principles, turn taking, the design and distribution of speaking chance between interlocutors, and the length of conversation for each participant. However, there are limitations to discourse analysis. While transcribing oral discourse, intentionally or unintentionally, some verbal features disappear. Slembrouk (1992) believes that even if the transcribed speech is very precise and word by word, certain features such as the tone of message, emphasis on certain letters or words, pauses, unfinished sentences or words, grammatical errors, gambit words and sounds (Aha, hum, let's say), rare expressions and non-standard structures are left out in transcribed texts. However, from the perspective of a discourse analyst, these features may include invaluable information. For example, when a police interrogation is transcribed, it may be possible that a lot of the mentioned features are left out under the influence of organisational language or executive process. In written texts, features such as the complexity and difficulty of sentences syntactic structures, the use of passive structure instead of active voice, using long sentences and the use of many subordinate clauses, conjunctions such as and, or, if and unless, all of which create a logical relationship between sentences. One may also add nominalisation as a method for hiding the subject to this list; the mentioned feature can all cause ambiguities in the precise comprehension of a text.

The existence of coherence and cohesion among sentences could be examined by analysing the criteria such as pronouns and what they refer to, verb tense consistency, ellipsis, omitted or hidden structures (Hunyadi, 2003). Situational context in which a text come into being is of great importance because the socio-cultural context may directly affect the meaning

of words and sometimes even change the meaning all together (Eades, 1996). Hence, while analysing a discourse, one should not only limit himself/herself to the literal meaning of a word, but they must care about the practical meaning of the word according its context of use (Prince, 1981).

CONCLUSION

Forensic linguistics is an interdisciplinary branch of Linguistics and Law, which has become the centre of attention among US scholars of Linguistics and Law in the recent decade especially after 1997. As a matter of fact, forensic linguistics is a new scientific approach to applied linguistics using scientific mechanisms, which are also derived from other subfields of linguistics such as phonetics, stylistics, pragmatics, dialectology and semantics used in courts during police investigations with the goal of solving complex legal cases. The linguistic analysis of correspondence, evidence and documents, recorded sounds, notes left in a crime scene by suspects and convicts, plays a vital role in legal investigations and unveiling the truth. Judges and juries, especially in the US, were first uncomfortable about the presence of linguists in courts and legal organisations, and perceived linguists as a threat to themselves. Soon, however, they found that the skills of linguists in forensic discourse analysis, pragmatics, forensic phonetics, dialectology and semantics are keys to a better understanding of the intention of speakers. Today, considering the establishment of international courts, it is extremely important for linguists to become familiar with the legal systems in different countries and the judicial mechanism of international courts.

In the new millennium, notions such as organised crime, international terrorism and violation of human rights are of great significance. In our present age, the scope of forensic linguistics has been widened in many countries, especially in the US and Europe; thus, it is necessary that scholars of Law and Linguistics attempt to attain a better understanding of this scientific approach. There should be a proper context in which the skills of forensic linguists assist judges and legal authorities.

It is recommended to approve some laws by the countries in order to not only allow but also consider it necessary to use the views of linguists in relation to the case subject in general. These establishing laboratories and departments of forensic linguistics in judicial and police structures of countries, organising specialised meetings and committee of forensic linguistics for police officers and court judges, as well as developing the studies of forensic linguistics as an independent academic discipline.

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