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IDENTIFYING A LINGUISTIC FINGERPRINT

Linguistic Analysis of Ted Kaczynski's Writing

Why the linguist?

The role of forensic linguistics in the legal and criminal justice system

- Linguistics is the scientific study of language.

- Forensic linguists examine and analyze language (spoken, written, digital communication).

- Forensic linguists do not determine a person's guilt or innocence in their work.

- In creating a linguistic fingerprint or profile, a linguist will describe how the suspect's language aligns with social, economic, education level, and other information that has been documented in sociolinguistic research.

- Its purpose is to help law enforcement narrow down its list of existing suspects or suggest pivots for identifying new ones.
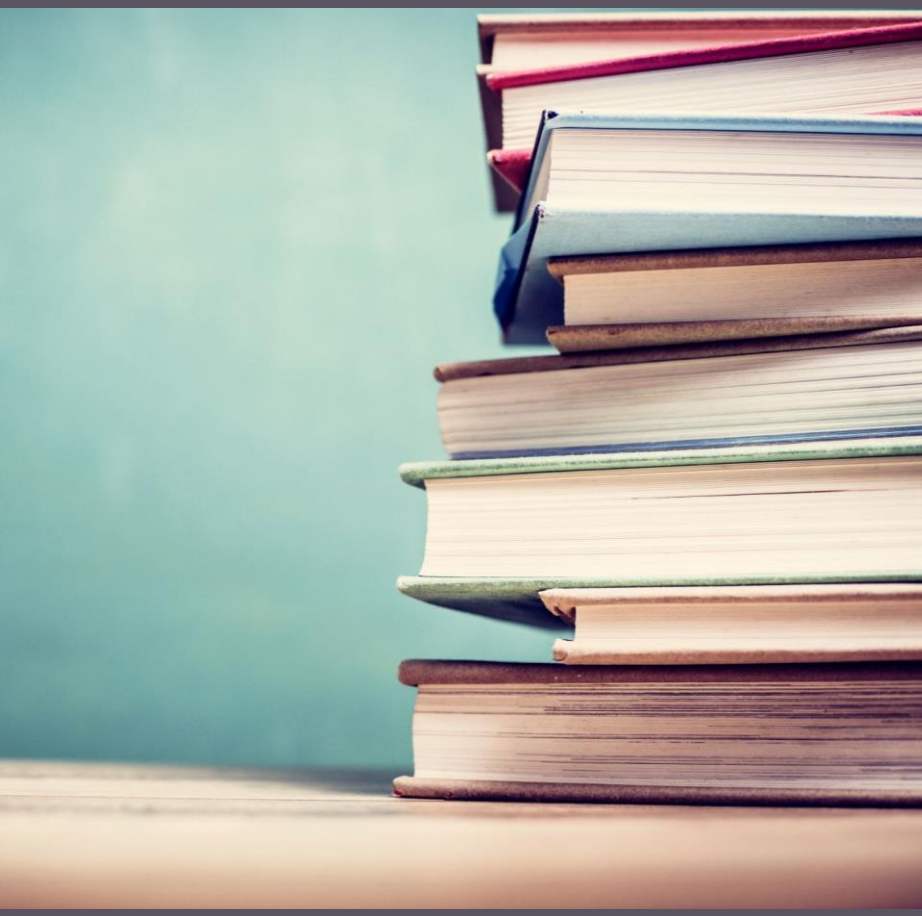
Background

- From 1978-1995, Ted Kaczynski sent bombs to various universities and airlines. 16 of his bombs killed three people and seriously injured nearly two dozen more.

- This led to the moniker, Unabomber (University and Airline Bomber).

- 150 agents with the FBI, Postal Service and Bureau of Alcohol, Tobacco, Firearms and Explosives worked to figure out who he was and why he was killing seemingly random people across the country, through the mail.

- Forensic linguists began analyzing his writing and creating a linguistic fingerprint that identified Kaczynski as the Unabomber

- It was Kaczynski's sister-in-law who recognized his writing when his essay, *Industrial Society and Its Future*, was published in the Washington Post.

FBI Profilers' Findings

Initially, FBI profilers thought that the Unabomber was a young, uneducated laborer, possibly working in the airline industry. Later, forensic linguists got involved and discovered something quite different. They created a linguistic profile by analyzing Kaczynski's linguistic fingerprint.

James Fitzgerald, Forensic Linguist

[How Forensic Linguistics Caught the Unabomber](#)

Linguistic Toolkit

What is a linguistic fingerprint?

Let's look at how to identify someone's linguistic fingerprint. For this case, we'll analyze the following:

1. Lexical: word choice

2. Syntax: phrase and sentence structure

3. Dialectic: linguistic traits that show regional variation

4. Spelling and Stylistics: orthography and punctuation

What is a mental lexicon? Everyone has one. Our brains store information about words, including their meanings, pronunciations, and syntactic traits.

How many words do we know?

The average native English speaker knows about 20,000 words. That goes up to 40,000 words for college-educated people.

Lexical Analysis

Education level: Although initially profilers thought the Unabomber was uneducated, his vocabulary reflected otherwise. He used words like, *surrogate*, *over specialization*, and *tautology*. He also wrote letters referring to himself as "we" supposedly to make readers believe he was part of a collective.

Lexical Analysis

Age: Before linguists began analyzing Kaczynski's writings, profilers thought they came from a young man; however, the linguistic profiler, James Fitzgerald or 'Fitz', noticed he used dated terms to refer to women, e.g. *broad, chick;* and *negro* to refer to African Americans. They were analyzing writing from the early 90's, and these terms weren't used by young people. In his manifesto, Kaczynski used the words and phrases, *holy robots, working stiff,* and *playing footsy.* The usage of these terms was indicative of someone who grew up in the 60s. This helped them to age the author, and they later found this to be true.

Syntactic Analysis

Kaczynski used complex sentence structure, and his prose was organized and showed signs of knowledge of many diverse fields such as mathematics, history, archeology, and linguistics.

Syntax: the study of sentence structure which includes how words go into phrases and phrases into sentences.

The average length of a sentence is between 10 and 20 words.

Excerpt from Kaczynski's manifesto, "Industrial Society and Its Future"

Consider the hypothetical case of a man who can have anything he wants just by wishing for it. Such a man has power, but he will develop serious psychological problems. At first he will have a lot of fun, but by and by he will become acutely bored and demoralized. Eventually he may become clinically depressed. History shows that leisured aristocracies tend to become decadent. This is not true of fighting aristocracies that have to struggle to maintain their power. But leisured, secure aristocracies that have no need to exert themselves usually become bored, hedonistic and demoralized, even though they have power. This shows that power is not enough. One must have goals toward which to exercise one's power.
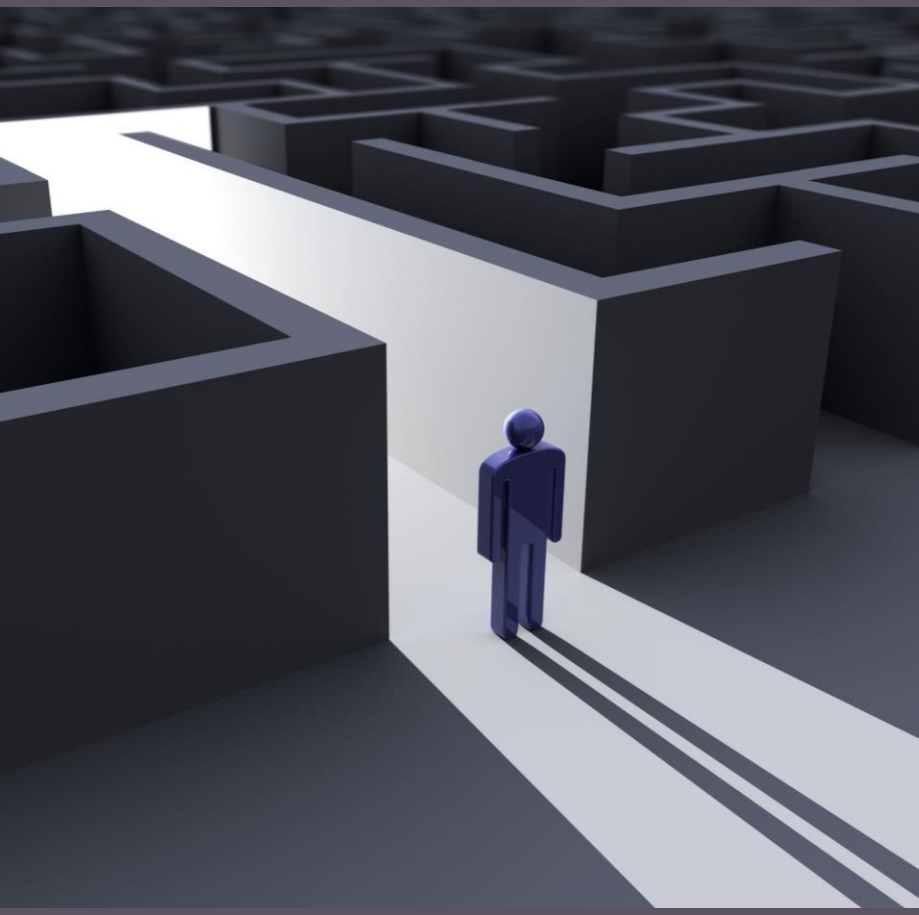
What is Dialect?

- Definition: a social and regional variety spoken within a language; a form of the language that is spoken in a particular part of the country or by a particular group of people.

- Dialect includes vocabulary, grammar, and pronunciation.

- Everyone has one.

- Synonyms: vernacular, patois, language variety

- The terms, *dialect* and *accent*, are not synonymous.

- Accent is one component of dialect and refers to pronunciation.

Dialectical Analysis

Roger Shuy, American linguist known for his work in sociolinguistics and forensic linguists, noticed that the writing in Kaczynski's manifesto had terms that would have been used by someone who read newspapers from the Chicago area during the '30s, 40s, and '50s.

Further, some of the notes and letters included with bombs referred to "going out 'in the sierras' in the evenings to relax and contemplate." Typically, only people from the western part of the U.S., especially northern Californians, would use this term since it referred to the Sierra Nevada Mountain range. The word "sierra" was not used as a proper noun, but as a general term to refer to mountains.

They were right on both counts; Kaczynski grew up in Chicago and later lived in California.

Spelling and Stylistics

In Kaczynski's manifesto, he used odd misspellings for some words; for example, TK spelled "willfully" as "wilfully" and "clue" as "clew." Roger Shuy noticed these misspellings and connected them to spelling reforms that were incorporated by *The Chicago Tribune* during the 1940s and 1950s. This usage suggested that Kaczynski might have spent his early years in or near Chicago. Later, this supposition was proven to be accurate.

Stylistics: punctuation is a component of stylistics and includes commas, apostrophes, semicolons, colons, periods, question marks, exclamation points, dashes, and parentheses. Kaczynski's punctuation reflects his educational background and age. Punctuation rules, like other components of written language, change over time; for example, two spaces between sentences reflects an older style. TK's punctuation style aligns with an older style.

Linguistic Fingerprint Wrap-up

- What kind of evidence do forensic linguists use to analyze crimes?

- What are some examples of Ted Kaczynski's linguistic fingerprint?

- What relevance does forensic linguistics have in the legal and criminal justice system?

- What role did forensic linguistics play in unraveling and solving the Unabomber case?

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