## KAPITEL 7 / *CHAPTER 7* [7]
## THE IMPACT OF ARTIFICIAL INTELLIGENCE (AI) ON ENGLISH AT DIFFERENT LINGUISTIC LEVELS

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**Introduction.**

In the modern world Artificial Intelligence (AI) is becoming increasingly important in various fields, including linguistics and natural language processing. Its growing role in language transformation leads to gradual changes in sentence structure, word usage, and linguistic patterns of the English language. Currently the linguistic patterns introduced by AI are gradually reshaping English at different levels, influencing its grammar, vocabulary, and syntax.The AI-powered tools, such as chatbots and text generators, often use direct and efficient sentence structures, thus providing a more concise and clearer communication. Human-written texts, in contrast to AI-generated text, often appear more verbose and awkward, lacking refinement and sometimes containing errors. AI has the ability to process large amounts of data and select the most appropriate words to express ideas effectively and without mistakes.

The rapid development of AI-related technologies has also led to the introduction of new terms to the language, such as *machine learning, deep learning*, *neural networks*, etc. which have become part and parcel of everyday language. AI-generated content is now commonly used in various areas of human activities including journalism, content creation, academic writing, and business communication. The purpose of this paper was to investigate the impact of various AI components on the existing language models and how they become integrated into the language today. Additionally, we have studied how these AI models can lead to a gradual evolution of the English language at various linguistic levels.

AI builds language models by training them to recognize and generate text based

[7]***Authors:*** *Shevchenko Olga Mykolaivna, Ogurtsova Olga Leonidivna*
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on patterns found in large datasets. These datasets are compiled from different sources such as books, articles, websites, etc. Then the AI language model processes this data, analyzing linguistic structures to identify frequently used patterns in word usage, phrase and sentence formation. Through this process, the language model learns grammar rules, common word combinations, and contextual meanings of words, thus becoming capable of producing the appropriate text.

Then, by using such technologies as Machine Learning (ML) and Deep Learning, AI adjusts itself to predict the next word or a phrase in a sentence. It repeatedly compares its guesses to the original text, and finally produces the required result .

**Results and discussion.** This paper investigates the **s**tructural and grammatical differences between human-written and AI-generated texts, with a focus on vocabulary, sentence construction, and grammatical structure. AI-generated content is typically characterized by clarity, consistency, and efficiency, while human writing demonstrates a better understanding of context, cultural nuances, and emotional expression. These distinctions show both the advantages and weak sides of AI in the process of text generation.

In future, the growing use of AI language models is expected to influence the development of the English language, as well as other natural languages, in two significant areas: vocabulary and grammar. Today, AI-generated content is widely used in different areas of human activity, leading to the gradual introduction and normalization of new terms, phrases, and expressions, thus contributing to a growing uniformity in language use.

For example, phrases like *"machine learning", "neural network*", *"generative AI"* have already entered everyday vocabulary of many languages due to their association with AI technologies.

In addition to vocabulary, grammar may also evolve under AI's influence. AI language models often demonstrate clarity, brevity, and simplicity in sentence structure. As a result, users who frequently interact with AI tools tend to adopt similar patterns in their own writing — using more direct, simplified, and standardized forms. In the course of time, this could lead to a gradual shift in grammar usage, reducing the

use of complex constructions or outdated forms.

These changes are not necessarily negative. On the contrary, they can reflect the natural evolution of the English language due to the influence of new technological and social environments. However, they can raise interesting questions about the existing language standards and norms and the future role of a man in shaping linguistic norms. Throughout its history the English language has continuously expanded and enriched its word stock in different ways, including borrowings from other languages, creation of neologisms, compounding, blending, etc. Today, AI, particularly large language models like ChatGPT, is significantly influencing English linguistic structures in various ways. For example, it plays an important role in:

**1. Vocabulary Expansion** The rapid development of AI technology is having a significant impact on society, with AI-based innovations introducing new terminology into our everyday language. Words and phrases like *deepfake, chatbot, machine learning*, *generative AI* and others have quickly moved from technical jargon to everyday language becoming common in daily lexicon. These new words not only enrich the vocabulary but also signify how emerging technologies shape the way we think, talk, and interact in the digital age. AI-related advancements have led to the introduction of new words and technical jargon that describe specific concepts in machine learning, natural language processing, and AI applications.

Examples:

- ***Deepfake*** - A highly realistic AI-generated image, video, or voices designed to mimic real people.

  Example: *"Deepfakes: The Threat of AI-Manipulated Videos" (BBC News, February 6, 2020)*

- ***Chatbot*** - An AI-driven conversational agent that interacts with users.

  Example: *"Chatbots are becoming increasingly sophisticated, helping companies answer customer queries, recommend products, and even provide mental health support." (BBC News, July 15, 2020)*

- ***Machine Learning*** – A field of AI where computers learn from data.

  Example: - *"How Machine Learning Is Helping Us Crack Genetic*

*Codes" (The New York Times, April 23, 2021)*

**2. Word Formation**

In linguistics, word formation is the process through which words can change, or the process of creation of new lexemes in the language. Nowadays, AI actively contributes to word formation processes in English , including compounding, blending, and derivation, leading to the extension of vocabulary used in both technical and everyday contexts.

Examples:

1) Derivation:

- *Chatbot (a noun) → "chatbotting" (a gerund), e.g., "For many companies, chatbotting has become an essential part of online marketing strategies."*
- *Deepfake (a noun) → "deepfaking"(a gerund), e.g., "Deepfaking celebrities has become a major ethical issue,"*

2) Compounding and Derivation:

- *Machine + learning (a compound noun) → machine-learned (an adjective) , e.g., "machine-learned patterns".*
- *Artificial + intelligence (a compound noun) → "artificially-intelligent" (an adjective), e.g., "artificially-intelligent assistants."*

**3. AI-Generated Content and Neologisms**

AI-generated text, memes, and social media discussions contribute to the creation of new slang and neologisms, which are rapidly spread by the Internet users across different platforms like Twitter, TikTok, and Instagram, influencing how people communicate in everyday, professional, and even academic contexts.

Examples:

- **"GPT-ify"** – To modify something using AI-generated text.

  Example: *"I didn't have time to write my email, so I GPT-ified it."*
- **"Bot-splaining"** – When an AI explains something in a too detailed or obsessive manner.

  Example: *"I just wanted a simple answer, but the chatbot kept bot-splaining."*

- **"Bot-talk"** – Language that sounds too mechanical or unnatural.

  Example: *"His essay sounded like pure bot-talk, probably written by ChatGPT."*

**4. Domain-Specific AI Terminology**

Different professional fields have begun to develop their own sets of AI-related terms that reflect the unique ways they interact with artificial intelligence technologies. In **healthcare**, for instance, terms like *clinical decision support systems*, *AI-assisted diagnostics*, and *predictive health analytics* have become more common as AI tools are increasingly used to improve patient care and medical research. In the **business sector**, phrases such as *algorithmic trading*, *customer behavior prediction*, and *automated workflow optimization* illustrate how AI is transforming decision-making, marketing, and operations. Meanwhile, in **education**, expressions like *adaptive learning platforms*, *AI tutoring systems*, and *automated grading tools* reflect the integration of AI into teaching and assessment practices. These specialized terms not only describe emerging technologies but also help professionals within each field communicate more effectively about how

Examples:

- **"AI-powered diagnostics"** (Healthcare) – Using AI for medical image analysis.

  Example: *"AI-powered diagnostics improved early cancer detection rates."*

- **"Data-driven decision-making"** (Business) – Using AI-generated predictions for strategic decisions.

  Example: *"Companies now rely on data-driven decision-making for marketing campaigns."*

- **"AI-enhanced learning"** (Education) – Using AI tutors to personalize learning experiences.

  Example: *"AI-enhanced learning tools adapt to each student's pace."*

**5. Direct Borrowings**

As artificial intelligence and digital technologies continue to evolve, they also serve as powerful tools of linguistic exchange across the globe. One of the most noticeable effects

is the widespread adoption of English terminology into various languages, particularly in the tech and AI sectors. This phenomenon often takes the form of direct borrowings, where English terms are integrated into other languages. For example, the word **"bot"**—originally short for "robot"—has become a common term in languages such as French (*bot*), German (*Bot*), and Ukrainian (*бот*), all referring to software agents that perform automated tasks. Another widely borrowed term is **"cloud computing."** Rather than being translated, the word *cloud* is often retained in different languages (e.g., *cloud* in French and German). These examples show how innovations in AI and computing actively reshape global communication, reinforcing English as a lingua franca in science and technology.

**6. Archaic words in AI-generated texts**

AI language models are trained on a huge amount of text written over many years. This includes not just modern books and websites, but also older materials like classical literature, poems, and historical texts. Since AI doesn't have an understanding of time or context, it uses words from all of these sources indiscriminately.

As a result, the language model may sometimes generate text using words or phrases that were once common but are now old-fashioned or rarely used in everyday speech. For example, instead of saying “truly”, an AI might say “verily”, or it might use “thrice” instead of “three times.” We may also use words like “bespoken” instead of “custom-made” or “personalized.”

**7. Language style**

The language style of human-written and AI-generated text can often be distinguished by some key features. Though AI has significantly advanced in its ability to mimic human writing, we can still identify some differences in both language styles. Human-written texts typically reflect individuality, emotion, and creativity. They often include unique writing style, personal opinions, cultural features, and expressive language. Sentence structures may vary in complexity and sometimes authors may break standard rules for stylistic effect. In contrast, AI-generated texts are generally well-structured, grammatically correct, and neutral in tone. They usually avoid strong emotional expression and often use formal or academic language.

**Table 1** - Comparison of Human-Written and AI-Generated Language Styles

| Human-written text | AI-generated text |
|---|---|
| 1. "The report goes into detail about major AI trends and how they are changing different industries." *(Sentence structure is more complex, neutral, conversational)* | "The report outlines key trends in artificial intelligence and their impact on various industries." *(Good grammar with simple and clear sentence structure)* |
| 2. "AI is transforming multiple sectors, from healthcare and finance to manufacturing, where automation plays a growing role." *(Complex but natural and connected sentence structure)* | "AI is widely used in healthcare. Also, AI plays an important role in finance. Besides, AI contributes to automation in manufacturing." *( Repetitive sentence structures and extensive use of connectors)* |
| 3."I am really grateful to you for the opportunity!" *( Colloquial or conversational phrases)* | "I wish to express my sincere gratitude for the opportunity you have provided." *(Formal, precise, or academic language)* |
| "I felt pure joy when I finally reached my goal after all the hard work!" *(More personal and emotional)* | "The feeling of joy is quite common when one achieves a goal." *( Lack of genuine emotional coloring )* |

**Summary and conclusion**.

Artificial Intelligence (AI) will probably remain a driving force in the evolution of the English language in the coming years. As AI language models become more integrated into our daily communication, they will continue to significantly influence grammar, sentence structure, and vocabulary of the English language. The ability of these models to generate text with specific linguistic features will impact and transform the existing linguistic patterns in the English language. AI could help create a standardized form of English for clarity and precision, thus reducing misunderstandings in fields such as science, law, and international communication. However, this standardization also raises questions about the richness and cultural subtleties of the language that might be lost in the process.