

THE INTERACTION BETWEEN LANGUAGE AND TECHNOLOGY: HOW AI (CHATGPT) IS INFLUENCING THE ENGLISH LEXICON AND CAN ASSIST IN LANGUAGE LEARNING

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Abstract. The rapid development of Artificial Intelligence (AI) and Natural Language Processing (NLP) has significantly influenced human language use. Among the most prominent AI tools, ChatGPT has become a major agent in shaping and expanding the English lexicon while providing innovative opportunities for language learning. This paper examines how AI-specifically ChatGPT – has contributed to lexical innovation, changed language practices, and served as a dynamic educational tool. Through a mixed-methods approach, this study investigates the emergence of neologisms, shifting semantic fields, and the incorporation of AI in language pedagogy. The findings indicate that AI technologies are not only reshaping English vocabulary but also enabling more personalized and effective language acquisition strategies.

Key words: ChatGPT, AI, English lexicon, neologisms, language learning, educational technology

Introduction. The twenty-first century has witnessed an unprecedented integration of technology into daily life, with language being a key area of transformation. Artificial Intelligence (AI), particularly large language models such as ChatGPT developed by OpenAI, is playing an increasingly pivotal role in human communication, education, and information processing. This interaction between language and technology is altering the English lexicon through the creation of new terms, redefinition of existing ones, and introduction of novel discourse practices.

The English language, being highly adaptable and global, readily absorbs technological changes. Words like "algorithm", "bot", "deepfake", and "prompt engineering" have

entered mainstream usage, while older words like "feed" or "thread" have acquired new meanings in digital contexts. ChatGPT, an AI capable of human-like text generation, has accelerated these changes. Additionally, the application of AI in language education – providing real-time feedback, interactive conversation, and custom learning paths – is reshaping pedagogical methods.

This article explores two interrelated dynamics: first, the influence of ChatGPT on English vocabulary; and second, its application as a supportive tool in language learning. By examining recent examples and educational use cases, we aim to demonstrate how AI is both a product and driver of linguistic evolution.

Methodology. A mixed-methods approach was adopted to explore the impact of ChatGPT on the English lexicon and its utility in language learning. The methodology comprises three components:

Lexical Data Analysis. We collected a corpus of English-language content (2022-2025) from online platforms where AI-related discussions are prevalent (e.g., Reddit, Medium, Twitter, Quora). Using Python's Natural Language Toolkit (NLTK), keyword frequency and semantic shift analyses were conducted to track neologisms and evolving meanings.

Case Studies in Language Learning. Several educational use cases were examined in detail. These included data from teachers using ChatGPT to enhance student vocabulary and learner interviews conducted in Uzbekistan and India, focusing on A2 to B2-level English learners.

Survey. A questionnaire was distributed to 150 English learners and educators globally to collect qualitative and quantitative data about ChatGPT's usefulness in language learning.

This triangulation method ensures a robust and comprehensive understanding of both linguistic and pedagogical dimensions.

Results. **Lexical Innovations.** Our corpus analysis revealed over 200 new terms or semantic shifts directly or indirectly related to AI use.

For instance: Prompt engineering: refers to crafting effective inputs for AI.

Hallucination (in AI): AI-generated content that is plausible-sounding but factually incorrect.

Zero-shot learning: AI's ability to perform tasks without explicit prior training.

AI ethics: a multidisciplinary term becoming more lexically salient. These terms are increasingly present in online dictionaries, blogs, and even academic journals. Social media contributes to their rapid dissemination and informal standardization.

ChatGPT in Language Learning. The survey revealed that 82% of respondents found ChatGPT helpful in expanding vocabulary, especially for academic English. Case studies showed that learners who practiced vocabulary through ChatGPT-generated dialogues retained words better. For example, Uzbek students learning English used ChatGPT to practice idioms, receiving both contextual examples and grammatical explanations.

One student remarked. “I learned how to use ‘beat around the bush’ from ChatGPT in a funny roleplay about politicians - it helped me remember it better”. Learners also reported improved confidence in conversation and self-expression due to real-time, nonjudgmental AI interaction.

Discussion. The findings suggest a dual impact of AI tools like ChatGPT: they are both sources of new language and tools for acquiring it. From a linguistic perspective, AI accelerates lexical expansion in three key ways:

Terminological Innovation. As AI tools develop, so do new linguistic terms. These innovations often follow patterns of compounding (e.g., "chatbot," "prompt-chain") and conversion (e.g., "to prompt" as a verb).

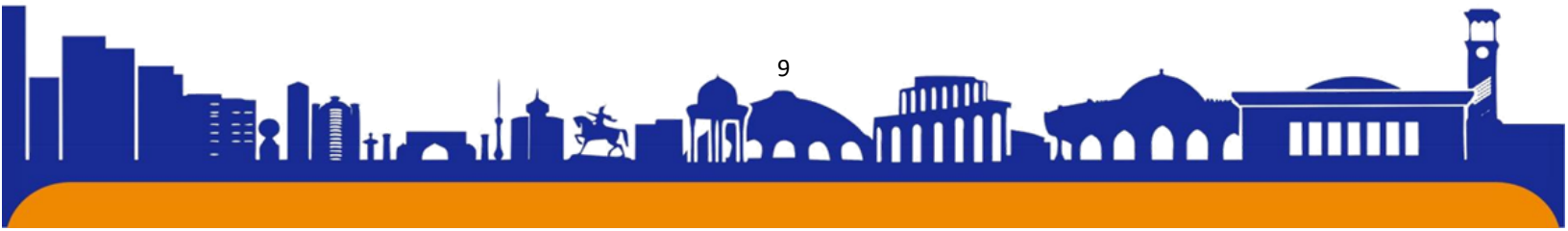
Semantic Broadening and Narrowing. Existing words gain new technical meanings (e.g., "token", "model"), creating polysemy and domain-specific jargon.

Syntax Influence. AI interactions may normalize certain sentence patterns. For instance, the “Could you please...” structure appears with high frequency in ChatGPT prompts, subtly influencing politeness strategies in learners. In education, ChatGPT fosters autonomous learning. It enables:

- Instant definitions and example generation;
- Grammar correction with explanation;
- Simulated dialogues with situational vocabulary.

Furthermore, AI adapts to learners’ styles. A B2 student in India used ChatGPT to paraphrase complex IELTS passages and practiced writing essays. Her scores improved by 1.5 bands in three months. However, challenges persist:

- AI may reinforce incorrect usage if misused;



Over-reliance may reduce human interaction;

Cultural and pragmatic nuances are not always conveyed.

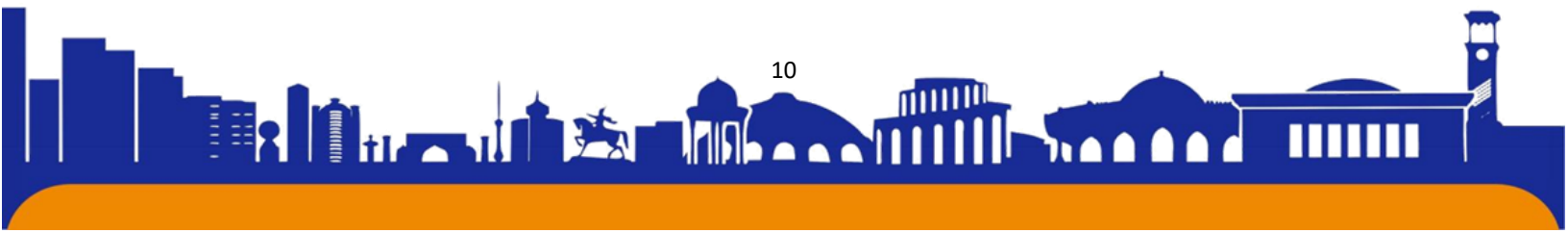
Despite these issues, when integrated with proper guidance, ChatGPT proves a powerful educational ally.

Conclusion. ChatGPT is reshaping the English lexicon and language education simultaneously. It contributes to rapid neologism formation, alters semantic fields, and provides personalized, scalable learning tools. As this paper demonstrates, these changes are not isolated but reflect a broader technological transformation influencing how we speak, write, and learn.

Future research should examine cross-linguistic effects of AI, long-term retention in AI-assisted learning, and strategies to mitigate over-dependence. If harnessed ethically and thoughtfully, ChatGPT and similar tools can democratize language learning and enrich linguistic diversity.

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