

THE INFLUENCE OF AI (CHATGPT) ON THE EVOLUTION OF THE ENGLISH LEXICON: A LINGUISTIC PERSPECTIVE

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Abstract. This paper explores the profound influence of artificial intelligence, specifically ChatGPT, on the English lexicon through the introduction of neologisms, semantic shifts, metaphorical extensions, and discourse-level transformations. As AI-powered conversational agents enter mainstream usage, their linguistic output and the cultural environment they help create foster the emergence of new lexical items and novel usages of existing words. Drawing upon corpus linguistics, semantic field theory, and discourse analysis, the study identifies key lexical innovations associated with ChatGPT and explores their integration into academic, media, and informal communication. The findings shed light on how technology is not only shaping language use but also influencing the conceptual frameworks through which we interpret communication, knowledge, and human-machine interaction.

Key words: AI, ChatGPT, English lexicon, semantic shift, neologism, metaphor, lexical innovation, discourse analysis, digital linguistics.

Introduction. Language, as a dynamic and adaptive system, evolves in response to technological, social, and cultural forces. The advent of artificial intelligence (AI), particularly conversational models like OpenAI's ChatGPT, has sparked one of the most significant linguistic transformations of the 21st century. While the internet introduced global linguistic convergence, AI marks the beginning of real-time language co-construction between humans and machines. ChatGPT is more than a tool – it is a co-participant in dialogue that mimics human conversational logic and creativity.

In this paper, we examine how ChatGPT contributes to the development of the English lexicon by:



1. Facilitating the creation and dissemination of neologisms;
2. Triggering semantic shifts in existing words;
3. Popularizing domain-specific jargon;
4. Altering communicative norms and stylistic conventions.

This research also considers the sociolinguistic consequences of AI-generated language, such as lexical democratization, shifts in digital identity, and the cultural authority of machine-generated discourse. The questions guiding this study are:

What linguistic features characterize the emerging AI-influenced lexicon?

How do new terms enter and circulate within public discourse?

What theoretical frameworks best capture the mechanisms of AI-induced language change?

Methodology. To capture the multi-dimensional impact of ChatGPT on the English lexicon, the research employed a triangulated methodology incorporating corpus linguistics, semantic field mapping, and discourse analysis. Corpus Compilation: A custom corpus was compiled from over 1,000,000 words of digital text produced between 2020-2024. This included:

OpenAI documentation and technical blog posts

Reddit threads on r/LanguageTechnology and r/ChatGPT

Media articles from BBC, Wired, MIT Technology Review

Educational platforms (Coursera, edX, Khan Academy)

YouTube transcript data from AI explainers

English language textbooks referencing AI concepts

Lexical Analysis. Using AntConc and Sketch Engine, lexical frequency, collocation, and co-occurrence patterns were analyzed. Word clusters and bigrams were identified to detect emerging terminologies.

Semantic Field Theory. The study mapped emerging AI terms onto semantic fields to understand conceptual shifts. For instance, traditional terms from psychology (e.g., “hallucination,” “memory,” “alignment”) were tracked in their AI recontextualizations.

Discourse Analysis. A sample of 300 discourse events was analyzed using Fairclough’s critical discourse model to evaluate how AI-related terminology is framed in media, education, and online forums. Focus was placed on metaphorical framing, agentivity, and narrative positioning.

Results. The findings reveal three primary vectors of lexical evolution influenced by ChatGPT:

Emergence of New Lexical Items: ChatGPT has introduced dozens of neologisms that encapsulate novel technical processes or user experiences. Examples include:

Prompt engineering: The strategic design of inputs to manipulate AI responses.

Hallucination (AI): The generation of false or misleading content.

Token limit: A constraint on text length in AI processing.

Prompt injection: A method to override AI model instructions.

Zero-shot/few-shot learning: Model training modes described metaphorically.

These terms appear increasingly in non-technical contexts such as business meetings, online education, and casual discourse.

Semantic Shift and Polysemy. Many existing English words have developed new AI-specific meanings. For example:

Alignment: From moral or ideological conformity → ensuring AI goals match human intentions.

Training: From physical or human cognitive skill acquisition → machine learning process.

Bias: From social prejudice → statistical irregularity in data.

These shifts represent not just lexical change but conceptual reframing, where AI discourse reshapes how speakers understand familiar words.

Metaphorical Innovation and Reframing. AI-related language heavily relies on metaphor to explain abstract processes. For example: “ChatGPT hallucinates” anthropomorphizes the model, attributing cognitive behavior. “We must align AI” evokes political or moral alignment. “A model's memory is limited” humanizes a technical limitation.

These metaphors influence public perception and ethical debates by framing machines as agents capable of intent, memory, and responsibility.

Discussion. The linguistic impact of ChatGPT can be understood as a convergence of technological acceleration, user creativity, and semantic need. The language around AI is not imposed top-down by engineers; rather, it emerges through collective interaction with the technology. Three key implications arise.

Lexical Democratization and Global Circulation. AI discourse breaks traditional barriers between technical jargon and general language. ChatGPT users without coding backgrounds now routinely use terms like “fine-tune,” “language model,” and “inference.” This democratization fosters wider tech literacy but also creates barriers for those outside digital cultures.

Discourse Authority and Machine Agency. The use of authoritative or anthropomorphic language grants ChatGPT perceived agency in communication. Phrases like “ChatGPT said” or “it knows” suggest subjectivity, despite the tool’s lack of consciousness. This has implications for education, misinformation, and human-machine trust dynamics.

Theoretical Implications for Linguistics: Traditional models of lexical change emphasize slow, community-driven innovation. ChatGPT demonstrates a hybrid model, where lexical items are simultaneously generated by centralized AI development and decentralized user interaction. This challenges the dichotomy between prescriptive and descriptive language evolution.

Furthermore, the process echoes Wittgenstein’s language games, where meaning arises through use. As users interact with ChatGPT, new language forms are tested, adopted, or rejected in real time, forming a new kind of socio-linguistic feedback loop.

Conclusion. AI technologies, particularly ChatGPT, are actively shaping the evolution of the English lexicon. This influence extends beyond jargon into core semantics and cultural frames of reference. The interaction between human creativity and AI response has become a catalyst for rapid lexical innovation.

Understanding this phenomenon requires an interdisciplinary approach – combining linguistics, cognitive science, discourse theory, and AI ethics. Educators, policymakers, and language technologists must engage with the implications of AI-mediated language change, ensuring that linguistic inclusivity, accuracy, and critical thinking remain central in an era of machine-influenced communication.

Future studies should explore cross-linguistic impacts, examine diachronic stability of new terms, and assess how AI lexicons evolve in multilingual and multicultural contexts.

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