HOW HUMAN LANGUAGE ADAPTS TO GENERATIVE AI

Linguistic Changes in Human–AI Communication

Shahnoza Ibragimova
Linguistics, Human–AI Communication and Educational Communication

Abstract. Generative artificial intelligence is becoming a regular participant in written communication, education, and language-related activities. While considerable attention has been given to how AI models generate and adapt language, a complementary question concerns the language of the humans who interact with these systems. This article considers the possibility that repeated communication with generative AI encourages users to modify the way they formulate requests, organize information, clarify intentions, and structure written discourse. The discussion is based on the emerging concept of reciprocal linguistic adaptation: AI systems may adapt their language to conversational partners, while human users may also adapt their communicative strategies to the perceived requirements of AI interaction. Recent studies provide evidence that LLMs can show syntactic convergence toward conversational partners and that people alter communication strategies when interacting with LLMs. The article discusses these developments from a linguistic and educational perspective, focusing on explicitness, reformulation, discourse organization, lexical choice, conversational alignment, and multilingual communication. Particular attention is given to the possibility that repeated AI interaction may turn initially conscious prompt-writing strategies into habitual forms of communication. The article argues that AI should therefore be considered not only a tool that processes language, but also a new communicative environment in which human linguistic behavior may gradually adapt.

Keywords: *generative AI, human–AI communication, linguistic adaptation, language change, conversational alignment, multilingualism, education, LLMs*

Introduction

The emergence of generative artificial intelligence has introduced a new participant into everyday language use. People increasingly write to AI systems as they write to other communicative partners: they ask questions, explain problems, request clarification, negotiate meaning, revise formulations, and continue conversations. This creates a linguistic situation that differs from traditional interaction with digital technologies. Instead of adapting only to a fixed interface, the user communicates through natural language with a system capable of producing context-sensitive responses.

This development raises an important question for linguistics: does regular communication with generative AI influence the way humans themselves communicate? The question is broader than whether people learn to write better prompts. Prompting may represent only the visible part of a deeper process in which users learn which forms of linguistic expression produce more satisfactory interaction.

The central argument of this article is that human–AI communication can be understood as a process of reciprocal linguistic adaptation. AI systems may adjust their responses to users, but users can also adjust their language to the behavior of AI. When such interaction is repeated, temporary communication strategies may become habitual. The result may be changes in the way people formulate questions, provide context, organize information, reformulate unclear ideas, and structure written discourse.

From Human–Human Alignment to Human–AI Alignment

Linguistic alignment is not a completely new phenomenon. Human speakers regularly adapt their language to conversational partners. They may repeat words used by another speaker, simplify

vocabulary, adopt a similar level of formality, or change the complexity of their explanations. Such adaptation contributes to coordination and mutual understanding.

Generative AI introduces a non-human participant into this process. Kandra, Demberg, and Koller (2025) examined whether LLMs adapt their language in conversation and found that LLM agents became more similar in their syntactic choices as conversations progressed. Their findings suggest that model language can exhibit a form of conversational adaptation rather than remaining completely static.

The complementary question concerns human adaptation. Tanguy et al. (2025) studied communication strategies in interactions involving either another person or an LLM. Their results showed that LLMs exerted a measurable influence on human communication strategies and that participants adapted to these differences even when they were not necessarily aware of the identity of their conversational partner.

Together, these findings support a broader conceptualization of human–AI dialogue. The interaction is not simply a process in which a person sends language to a machine and receives language in return. Both sides can display adaptive behavior, although the mechanisms behind human adaptation and model-generated adaptation are fundamentally different. This reciprocal character is particularly important when AI becomes a frequent rather than occasional communication partner.

How Human Language May Adapt to AI

One possible change concerns explicitness. Human conversation often allows speakers to rely on shared context. With AI, users may learn that specifying the goal, audience, format, constraints, and background information produces more useful responses. As a result, a user who initially writes short and ambiguous requests may gradually begin to communicate in a more explicit manner.

A second possible change concerns discourse organization. AI interaction often rewards clearly separated instructions, ordered requirements, examples, and constraints. Users may consequently begin dividing complex ideas into smaller communicative units. In educational settings, this may appear when students formulate requests for explanations, exercises, summaries, translations, or feedback.

A third area is reformulation. When an AI response does not match the user's intention, the user may rewrite the original request rather than simply repeating it. Repeated reformulation can develop into a habitual strategy for clarifying meaning. The user learns to anticipate possible ambiguity and attempts to remove it before or during the next interaction.

Lexical choice may also change. Users may adopt terminology that they have observed producing more precise responses. They may learn to distinguish broad words from more specific ones, to define specialist concepts, or to include contextual vocabulary that reduces ambiguity. Such changes are not necessarily evidence that people are becoming linguistically 'better'. They may instead represent adaptation to the communicative environment created by AI.

These developments suggest that prompt-writing should not be treated as an isolated technical skill. It can be interpreted as an emerging form of mediated discourse competence: the ability to construct language that supports effective interaction with an artificial conversational partner.

The Development of New Communication Habits

The most significant issue is what happens when temporary adaptation becomes habitual. A user may initially learn to give AI more context because the system produces better answers when the

context is explicit. After repeated interaction, however, the same structure may become automatic. The person may begin organizing questions, instructions, and explanations in a more segmented and specification-oriented manner even outside AI interaction.

This possibility should be expressed cautiously. Existing research provides evidence that humans adapt their communication strategies in interaction with LLMs, but it does not establish that every user will develop permanent changes in everyday language. The distinction between short-term conversational adaptation and long-term language change is therefore essential.

Nevertheless, the distinction is theoretically important. Language habits are shaped by repeated communicative environments. If generative AI becomes a routine environment for writing, studying, translating, brainstorming, and problem-solving, its communicative conventions may become part of users' broader linguistic repertoires. The effect may be especially noticeable among students and young users who are developing academic and professional communication practices at the same time as AI becomes widespread.

Multilingual Communication and Code-Switching

The adaptation process becomes more complex in multilingual contexts. A user who communicates in Uzbek, Russian, and English has several linguistic systems available for expressing the same general intention. Interaction with AI may influence not only how the user formulates an idea, but also which language is selected for particular tasks.

A multilingual user may discover that a particular concept is easier to explain in English, that a cultural nuance is better expressed in Uzbek, or that Russian provides a familiar academic formulation. Code-switching may therefore become part of the user's strategy for obtaining an appropriate response. In this context, language choice is not merely a translation decision; it is part of interactional management.

This perspective is especially relevant to education. Students using AI across several languages may develop new patterns of moving between languages, translating concepts, reformulating questions, and comparing alternative expressions. Such practices can potentially enrich linguistic awareness, but they may also encourage dependence on AI-mediated reformulation. For this reason, multilingual AI use should be considered an important part of contemporary language education rather than treated only as a technological convenience.

Educational Implications

The possible adaptation of human language to AI has direct implications for education. First, students need to understand that effective communication with AI requires more than knowing which buttons to press or which prompt templates to copy. They need communicative awareness: the ability to state intentions, supply relevant context, recognize ambiguity, and evaluate whether the response actually addresses the intended meaning.

Second, teachers can make AI interaction an object of linguistic reflection. Students can compare different formulations of the same request, analyze how changes in vocabulary and syntax influence responses, and discuss which linguistic information appears to have affected the interaction. This turns AI into a resource for studying language itself.

Third, educators should distinguish adaptation from dependence. Learning to communicate clearly with AI can be valuable, but students should retain the ability to formulate ideas independently, question generated responses, and communicate effectively with human readers and listeners. The goal should

not be to make human language increasingly similar to machine-preferred patterns. Instead, learners should become conscious of how different communicative environments influence their language choices.

Language, Thinking, and the AI-Mediated Communicative Environment

Changes in language practices may also have implications for thinking because language and cognition are closely connected in educational and professional activity. When people repeatedly organize information through prompts, request structured alternatives, or ask AI to reformulate complex ideas, these practices may influence how they approach communicative tasks.

It would be premature to claim that AI use automatically changes human cognition. A more defensible position is that repeated interaction can modify communicative routines, and communicative routines can influence the way people externalize and organize thought. The significance of AI therefore lies not only in the text it produces but also in the interactional habits that develop around that text.

This perspective provides a useful bridge between linguistics and educational research. Linguistics can examine changes in vocabulary, syntax, discourse structure, alignment, and code-switching, while education can consider how these changes affect learning, writing, explanation, and critical engagement. The two perspectives meet in the study of how people learn to communicate in an environment where an artificial system is increasingly present.

Conclusion

Generative AI is becoming a new communicative environment rather than simply another digital tool. Emerging research indicates that LLMs can adapt aspects of their language to conversational partners, while human users can also alter their communication strategies in response to interaction with LLMs.

The main argument of this article is that repeated human–AI interaction may gradually influence linguistic behavior through processes of adaptation, reformulation, explicitness, discourse organization, lexical choice, and multilingual language selection. These changes should not automatically be interpreted as permanent language change, because long-term effects require further evidence. They can, however, be understood as signs of an emerging communicative practice.

For education, this means that AI literacy should include linguistic awareness. Students need to understand not only how to obtain information from AI, but also how interaction with AI may shape the way they themselves formulate questions, organize ideas, and communicate meaning. Studying this reciprocal relationship can contribute to a broader understanding of how human language develops when artificial intelligence becomes a regular participant in communication.

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