Scottish International Conference on

Multidisciplinary research and Innovation (SICMRI 2026)

LINGUISTIC FEATURES OF HUMAN COMMUNICATION WITH ARTIFICIAL INTELLIGENCE

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Abstract. This article examines the linguistic features of communication between humans and conversational artificial intelligence. The study adopts a qualitative approach combining a focused literature review with the analysis of constructed examples. Particular attention is given to lexical precision, syntactic organization, pragmatic meaning, reference, politeness, and conversational repair. The analysis identifies explicit task formulation, clearly defined context, and targeted clarification as important components of interpretable interaction. It also distinguishes linguistic fluency from factual reliability and human-like conversational behaviour from human communicative experience. A framework for analysing human–AI dialogue is proposed, with implications for language teaching and digital communication literacy. The findings represent a theoretical synthesis rather than the results of an experimental evaluation.

Keywords: human–AI communication, linguistics, pragmatics, conversational artificial intelligence, prompt formulation, ambiguity, politeness, conversational repair.

Introduction

Conversational artificial intelligence has created a communication environment in which users address computer systems through natural language. Requests, questions, explanations, corrections, and instructions form sequences that resemble interpersonal dialogue. These interactions require linguistic analysis because their success depends partly on how intentions and contextual information are expressed.

Human conversation frequently relies on shared experience, situational knowledge, indirect meaning, and assumptions about an interlocutor's intentions. Communication with an AI system may require these elements to be stated more explicitly. A request can be grammatically correct but remain unclear because its referent, purpose, audience, or expected output is unspecified.

Research on language models demonstrates both similarities to and differences from human language processing. Cai et al. (2024) observed human-like patterns in several experimental tasks alongside divergences in other aspects of language use. Their findings support examining particular communicative abilities rather than treating resemblance to human dialogue as uniform. ACL Anthology

The aim of this article is to identify linguistic features relevant to human–AI communication and explain their significance for language education. The analysis addresses three questions: how users formulate communicative intentions, which forms of ambiguity affect interpretation, and how clarification and correction can organize subsequent dialogue.

Materials and Methods

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The study uses a qualitative descriptive design. Its materials consist of selected publications on language-model pragmatics, conversational principles, and language processing, together with constructed examples of user requests.

The publications were selected for their direct relevance to communicative interpretation. Miehling et al. (2024) provide a framework for discussing conversational principles in human–AI interaction. Sravanthi et al. (2024) examine pragmatic capabilities through tasks involving implicature, presupposition, reference, and deixis. Cai et al. (2024) investigate similarities and differences between language-model behaviour and human language use.

The constructed examples illustrate linguistic contrasts; they are not transcripts collected from participants or outputs obtained through controlled model testing. Consequently, the study does not measure the effectiveness of particular prompts.

Analysis was conducted at four levels: lexical choice, syntactic organization, pragmatic interpretation, and discourse structure. Each example was examined for task clarity, contextual completeness, reference, and opportunities for conversational repair. The resulting framework is a theoretical synthesis that requires further empirical evaluation.

Results

Lexical Precision and Task Formulation

The analysis distinguishes topic identification from task specification. A request such as Write about language identifies a broad subject but leaves the genre, scope, audience, and purpose undefined. By comparison, Write a 200-word explanation of adjective agreement for first-year Russian-language students specifies several dimensions of the intended response.

The second request is more explicit because it identifies an action, a subject, an approximate length, and an audience. This linguistic difference does not guarantee a correct response, but it makes the user's intention easier to assess.

Task verbs also carry different expectations. Describe, compare, summarize, translate, and evaluate request distinct operations. Their accurate selection is therefore an important component of communication literacy.

Syntactic Organization

Requests may combine several instructions within one sentence. Coordination, punctuation, and the ordering of clauses determine how these instructions relate to one another.

For example, Translate the paragraph and explain its terminology contains two tasks. If the user expects separate sections, this relationship can be clarified: First translate the paragraph. Then explain the three technical terms listed below.

This reformulation makes the sequence explicit. It also reduces uncertainty about whether the explanation should be incorporated into the translation or presented separately.

The analysis suggests that requests should separate the principal task from supplementary constraints. Excessive detail is not inherently beneficial: instructions can become difficult to interpret when they repeat, conflict, or lack a clear hierarchy.

Reference and Context

Pronouns and demonstratives frequently depend on preceding discourse. Expressions such as change it, use this version, and make that shorter require an identifiable referent.

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Where several texts have been discussed, a more specific formulation is preferable: Shorten the introduction in the second draft to approximately 120 words. The request identifies both the target and the intended operation.

Research on pragmatic understanding reinforces the importance of contextual interpretation. Sravanthi et al. (2024) report variation across different pragmatic phenomena and a performance gap between the evaluated models and humans. These findings concern the models and tasks studied and should not be generalized to every AI system. ACL Anthology

Indirect Meaning and Politeness

Human requests may be expressed indirectly. Could you make this clearer? conventionally functions as a request, although its grammatical form is a question about ability.

Politeness and task clarity are separate dimensions. A courteous request can remain vague, while a direct instruction can be precise. Compare Please improve this with Please replace the informal expressions in the conclusion with neutral academic wording.

The second formulation identifies the relevant linguistic problem without removing politeness. This distinction is useful in teaching students to formulate instructions appropriately for different communication settings.

An AI response containing polite expressions or first-person pronouns should be analysed as linguistic output. Such features alone do not establish human emotions, personal experience, or conscious intentions.

Conversational Repair

Communication develops through follow-up turns. Users may correct a misunderstanding, narrow a topic, change the required register, or supply missing information.

A general response such as That is wrong signals dissatisfaction but does not identify its cause. A targeted correction provides a more interpretable basis for revision: The second paragraph confuses grammatical gender with biological sex. Revise that distinction and retain the remaining paragraphs.

This example demonstrates three components of repair: identifying the problem, locating it, and specifying the requested change. Conversational repair is therefore a central analytical category rather than a minor addition to initial prompt formulation.

Fluency and Reliability

A response may be grammatically fluent while containing an unsupported claim or an inaccurate reference. Linguistic quality and factual reliability consequently require separate evaluation.

Miehling et al. (2024) propose conversational principles concerning information quantity, quality, relevance, manner, benevolence, and transparency. Their framework makes it possible to assess more than the grammatical acceptability of an AI response. ACL Anthology

For educational purposes, a coherent explanation should therefore be checked for relevance, evidence, and appropriate acknowledgement of uncertainty.

Discussion

The analysis presents human–AI communication as an interaction requiring both linguistic formulation and critical interpretation. Users need to express their intentions, identify relevant context, and evaluate whether a response addresses the requested task.

This relationship has implications for Russian-language teaching. Students can compare vague and explicit requests, identify ambiguous pronouns, distinguish description from evaluation, and revise

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instructions containing conflicting requirements. Such activities develop transferable skills in writing and discourse analysis.

A suitable classroom exercise begins with a broad instruction such as Explain adjectives. Students then specify the grammatical topic, audience, examples, and expected length. A second stage asks them to examine a response for agreement errors, unclear terminology, and unsupported statements. The activity assesses linguistic reasoning rather than simply the production of a longer prompt.

Multilingual interaction introduces additional considerations. An instruction should distinguish translation, transliteration, and stylistic editing because these operations have different purposes. Personal names and institutional affiliations require particular care: changing their spelling is not equivalent to translating an explanatory sentence.

Educational use also depends on retaining human judgement. UNESCO's guidance emphasizes a human-centred approach to generative AI and the development of users' capacity. Within language education, this supports treating AI output as material for examination and revision rather than an unquestioned authority. UNESCO

The present study has several limitations. It uses a focused selection of publications and constructed examples, without collecting authentic interaction data. It therefore does not establish causal relationships between particular linguistic forms and response quality. Future research could compare dialogue samples across languages, proficiency levels, and task types using explicit evaluation criteria.

Conclusion

Human communication with artificial intelligence involves lexical precision, syntactic organization, contextual reference, pragmatic interpretation, and conversational repair. Explicit task formulation can make intentions more interpretable, while targeted corrections help define subsequent revisions.

Politeness should be distinguished from clarity, and fluent language should be distinguished from factual reliability. Human-like wording does not by itself establish human communicative experience.

For language education, human–AI dialogue offers material for studying ambiguity, register, reference, and revision. Its pedagogical value depends on combining effective instruction formulation with critical assessment of the resulting text.

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