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HOW PEOPLE CONCEPTUALIZE AI AS A COMMUNICATIVE PARTNER: A COGNITIVE-LINGUISTIC STUDY OF HUMAN-AI COMMUNICATION

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Abstract. The rapid development of conversational artificial intelligence has changed not only how people obtain information but also how they linguistically understand the technology with which they communicate. Users describe AI systems as *tools, assistants, teachers, experts, study buddies, friends*, and even as something between a machine and a person. Such expressions are not simple stylistic choices. They reveal different ways of conceptualizing the same technological system. The present study examines these conceptualizations from a cognitive-linguistic perspective. The study argues that the emerging concept of AI as a communicative partner is therefore structurally dynamic: AI may be construed as a tool in one interaction, a teacher in another, and a socially meaningful interlocutor in another. This finding is relevant to cognitive linguistics, pragmatics, human-machine communication, and the study of emerging digital discourse.

Keywords: artificial intelligence, human-AI communication, conceptualization, cognitive linguistics, frame semantics, anthropomorphism, communicative partner, ChatGPT.

INTRODUCTION. Artificial intelligence is increasingly encountered through language. A user does not necessarily operate a conversational AI system by learning a technical command language; instead, the interaction often takes the form of a dialogue. A person asks a question, gives background information, requests clarification, disagrees, thanks the system, or continues an earlier topic. As a result, the technology is no longer experienced only as a computational instrument. In many situations, it is also encountered as something that occupies a position within a communicative exchange.

Research in Human-Machine Communication has already shown that communicative AI cannot be fully explained through traditional models in which technology functions merely as a channel between human communicators. Guzman and Lewis argue that AI technologies may themselves occupy communicative roles and identify functional, relational, and ontological dimensions as central to understanding human interaction with AI [1, pp. 70–

86]. The distinction is particularly important for conversational systems because users must continuously interpret what kind of entity they are interacting with: a tool, an information source, an assistant, or something closer to a social actor.

Recent empirical research demonstrates that this categorization is not uniform. In a longitudinal study of students using ChatGPT, participants described the system through several social roles at once, including a *study buddy*, *teacher*, and *friend* [2]. Research involving older adults similarly found descriptions of ChatGPT as an *expert*, an *entity*, a potential *good friend*, and, at the same time, *not a real person* [3]. A study comparing relationships with assistant and companion large language models found another revealing formulation: some users regarded ChatGPT as “something in-between” a tool and a human entity [4]. These expressions suggest that users are not merely evaluating AI. They are conceptualizing it through categories already available in human experience.

Cognitive linguistics provides an appropriate theoretical basis for examining this process. In this approach, linguistic meaning is not treated as an isolated correspondence between a word and an external object. Rather, meaning is closely connected with conceptual organization, experience, categorization, and the speaker's way of construing a situation. Conceptual metaphor theory shows that less familiar or abstract domains can be understood through structures drawn from more familiar domains of experience [5]. Frame semantics likewise demonstrates that the meaning of a linguistic expression depends on a broader structured situation that it activates [6, pp. 111–137]. From this perspective, calling AI a *teacher* does more than assign a noun to a machine: it can activate a TEACHING frame involving knowledge, explanation, learner–teacher roles, guidance, correction, and expectations of expertise.

The same principle is relevant to the Uzbek tradition of cognitive linguistics. Sh. Safarov emphasizes the close relationship between linguistic knowledge and cognitive activity and treats the verbal realization of conceptual structures as a product of interaction between consciousness and language [7, p. 91]. A.E. Mamatov similarly describes the cognitive approach to language as an examination of how knowledge and structures of cognition are reflected and verbalized through linguistic forms [8, pp. 212–219]. These views are methodologically important for the present research: descriptions such as *friend*, *teacher*, or *entity* are considered not merely lexical choices but linguistic evidence of how speakers organize knowledge about a relatively new communicative phenomenon.

METHODS AND LITERATURE REVIEW. The study employs a qualitative secondary cognitive-linguistic analysis. It does not claim to present a new interview experiment. Instead, authentic linguistic material reported in existing peer-reviewed empirical studies is re-examined from a cognitive-linguistic perspective. This distinction is important. Previous studies generally investigated technology acceptance, learning, companionship, anthropomorphism, or user perception. Twelve lexical or phrasal expressions were selected from three empirical studies published in 2025–2026. An item was included when it met three conditions:

1. It occurred in, or was directly derived from, a published participant description;
2. It explicitly classified ChatGPT in human, social, professional, or ontological terms;
3. The original empirical source could be clearly identified.

Table 1. Published user expressions for conceptualizing ChatGPT and their initial semantic domains.

No.	Published expression	Empirical source	Initial semantic domain
1	<i>study buddy</i>	Durgungoz & Kharrufa	learning + companionship
2	<i>teacher</i>	Durgungoz & Kharrufa	education
3	<i>friend</i>	Durgungoz & Kharrufa	social relationship
4	<i>real person</i>	Durgungoz & Kharrufa	personhood
5	<i>smart friend</i>	Durgungoz & Kharrufa	knowledge + friendship
6	<i>persona</i>	Durgungoz & Kharrufa	person-like identity
7	<i>entity</i>	Enam, Murmu & Dixon	ontological classification
8	<i>expert</i>	Enam, Murmu & Dixon	professional knowledge
9	<i>good friend</i>	Enam, Murmu & Dixon	companionship
10	<i>not a real person</i>	Enam, Murmu & Dixon	boundary of personhood
11	<i>treating ChatGPT as a person</i>	Manoli, Pauketat & Anthis	anthropomorphic interaction
12	<i>something in-between</i>	Manoli, Pauketat & Anthis	hybrid categorization

The Durgungoz and Kharrufa study followed 39 students using ChatGPT for English-related learning and found both educational and socially framed uses [2]. Enam, Murmu, and Dixon conducted contextual interviews with twenty adults aged 65 and older and explicitly investigated the metaphors, folk theories, and attributes participants used to understand ChatGPT [3]. Manoli, Pauketat, and Anthis combined survey data from 196 highly engaged users with 30 interviews and examined relationships with ChatGPT and Replika [4].

The analysis was conducted in five stages. First, each expression was examined at the lexical-semantic level to determine its basic role meaning. Second, the broader frame activated by the expression was reconstructed following Fillmore's frame-semantic principle [6]. Thus, *teacher* was interpreted within a TEACHING frame, while *friend* was analyzed within a FRIENDSHIP frame. Third, expressions were examined for cross-domain conceptual mapping. In statements where a technological system was understood through a human social role, the analysis considered mappings such as:

AI AS TEACHER

AI AS FRIEND

AI AS PERSON

Fourth, the expressions were analyzed according to prototype and category structure. Rosch's work on categorization demonstrated that category membership and centrality need not always operate through rigid all-or-nothing boundaries [10, pp. 27–48]. This provides a useful basis for explaining descriptions in which AI appears neither fully as a machine-like tool nor fully as a person. Finally, communicative context was considered. The interpretation of a label was related to the activity in which AI was involved: information seeking, education, advice, informal conversation, or emotional interaction. The analytical progression can be represented as follows:

→ *EVOKED FRAME*

→ *ATTRIBUTED ROLE*

→ *SOCIAL/COGNITIVE EXPECTATIONS*

→ *CONCEPTUAL MODEL OF AI*

RESULTS. The first recurrent model conceptualizes AI through roles associated with knowledge, competence, explanation, and guidance. The clearest examples are *teacher* and *expert*. These words do not simply mean that ChatGPT contains information. They activate structured human-role frames. The TEACHER frame normally presupposes at least:

TEACHER → KNOWLEDGE → LEARNER → EXPLANATION → GUIDANCE → LEARNING

When students identify ChatGPT as a *teacher*, the technology is construed not as a passive storage location but as an active source capable of explaining information in relation to the learner's needs. This distinction becomes clearer when compared with a search engine. A database or search engine may provide access to information without naturally activating a pedagogical relationship. By contrast, the *teacher* frame includes interaction: a learner can ask again, request simplification, seek examples, or ask for correction.

Durgungoz and Kharrufa report a participant who described ChatGPT simultaneously as a “*study buddy, a teacher and sometimes just a friend*” [2]. The expression is revealing because three frames are compressed into the conceptualization of one system. ChatGPT is not assigned one permanent identity. Its role changes according to the function foregrounded by the user. The *expert* label found in the older-adult study activates a related but different frame [3]. The EXPERT frame includes:

SPECIALIZED KNOWLEDGE → AUTHORITY → QUESTION → INFORMED ANSWER

A teacher is expected to support learning; an expert is expected to know. The difference is subtle but cognitively significant. It shows that the conceptualization of AI may shift even within the broader domain of knowledge. The phrase *smart friend* combines two otherwise separable domains:

KNOWLEDGE + SOCIAL CLOSENESS

It therefore produces a blended social role: the system is not merely competent and not merely friendly. Competence is understood through an interpersonal relationship. These examples lead to the first model: AI AS KNOWLEDGE AGENT

with several more specific realizations:

AI AS TEACHER

AI AS EXPERT

AI AS SMART FRIEND

AI AS A SOCIAL COMPANION. The second model is based on social rather than primarily informational relations. Expressions such as *friend*, *good friend*, and *study buddy*

activate a frame that differs considerably from the conventional TOOL frame. A simplified FRIENDSHIP frame can be represented as:

PARTICIPANT A ↔ PARTICIPANT B

→ *repeated interaction*

→ *familiarity*

→ *trust*

→ *informal communication*

→ *personal relevance*

The important point is not whether an AI system can literally participate in friendship in the human psychological sense. Cognitive-linguistic analysis asks instead what structure is activated when a user describes the system in this way. The conceptual structure can be represented as:

REPEATED DIALOGUE

→ **FAMILIARITY**

→ **TRUST**

→ **SOCIAL ROLE ATTRIBUTION**

→ **AI AS COMPANION**

This does not mean that every AI user develops such a relationship. Rather, it shows that the COMPANION frame has become cognitively available for interpreting conversational AI.

AI AS A PERSON-LIKE INTERLOCUTOR. The third pattern involves a stronger form of human-oriented construal. Expressions such as *real person*, *persona*, and *treating ChatGPT as a person* move beyond specific roles such as teacher or friend and approach the broader category of PERSON. One student stated that interacting with ChatGPT was like talking to a *real person* [2]. From a cognitive-linguistic perspective, the comparison suggests that certain properties of human dialogue are being used as a reference structure for interpreting AI interaction. The mapping can be represented as:

HUMAN CONVERSATION

→ turn-taking

→ contextual response

→ apparent understanding

→ adaptation

→ social language

mapped onto: This difference can be represented as two simultaneous levels:

INTERACTIONAL CONSTRUAL:

AI ≈ PERSON

but

ONTOLOGICAL KNOWLEDGE:

AI ≠ HUMAN PERSON

The apparent contradiction is therefore cognitively understandable. Different aspects of the same entity are being profiled at different moments.

DISCUSSION. The results suggest that conversational AI has created an unusual categorization problem. Ordinary technological devices are commonly conceptualized through instrumental functions: a calculator calculates, a printer prints, and a search engine retrieves information. Conversational AI can perform instrumental functions as well, but the linguistic form of interaction also activates social knowledge. When users say *teacher*, *expert*, *friend*, or *person*, they select familiar conceptual structures to make a relatively unfamiliar technological phenomenon cognitively manageable. This process can be represented as:

NEW PHENOMENON: CONVERSATIONAL AI

↓ interpreted through familiar experience

KNOWN HUMAN/SOCIAL FRAMES

↓ linguistic nomination

teacher / expert / buddy / friend / person

↓ conceptual outcome

AI AS COMMUNICATIVE PARTNER

However, the label communicative partner should not be interpreted as synonymous with human partner. The results instead suggest several degrees of partnership. Karnam et al. analyzed 825,000 ChatGPT interactions donated by 300 users and reported an increasing shift toward socially framed interaction and companion-like use over time [11]. Their analysis indicates that anthropomorphic behavior appeared in a substantial part of the interaction data and that conversational AI was increasingly used in ways extending beyond purely functional tasks. The cognitive-linguistic interpretation of these developments is that repeated communicative experience can make new frames cognitively available. At first, a user may rely primarily on the TOOL frame:

I use AI.

With repeated dialogue, another frame may become relevant:

I ask AI.

Then:

I talk with AI.

And in some cases:

I talk to it like a friend.

The grammatical and lexical transition from *use* to *ask*, *talk with*, and *friend* represents more than stylistic variation. It reflects a change in the conceptual position assigned to the technological system. Mamatov's description of the cognitive approach as the study of how structures of knowledge become verbalized in language likewise helps explain why labels such as *teacher* or *friend* deserve linguistic attention [8]. They make visible the conceptual structure through which the speaker currently understands the object.

CONCLUSION. The study is limited by its reliance on a small secondary sample of published English-language expressions. It does not establish the statistical frequency of the

identified models, nor does it demonstrate that all cultural or linguistic communities conceptualize AI in the same way. Future research should build comparable corpora of English and Uzbek human-AI interactions and examine whether Uzbek users employ the same frames or activate culturally and linguistically distinctive models of authority, respect, friendship, assistance, and personhood. Such comparative work would allow the emerging language of human-AI communication to be studied not only as a technological phenomenon but also as a new domain of cultural and cognitive conceptualization.

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