

THE ROLE OF AI AND WEB 2.0 TOOLS IN DEVELOPING PRAGMATIC COMPETENCE OF L2 ENGLISH LEARNERS

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Abstract. Artificial Intelligence (AI) and web 2.0 tools has transformed various sectors, like healthcare and finance, by imitating human intelligence and decision-making. However, AI still struggles with understanding and effectively participating in human communication, which is a crucial challenge. Pragmalinguistics, a branch of linguistics focused on the relationship between language and context, addresses this issue. It examines pragmatic aspects such as speaker intention, context, and shared knowledge to grasp the intended meaning behind communication. By integrating pragmalinguistics into AI systems, researchers and developers aim to narrow the gap between machines and human communication. This article explores how AI and web 2.0 tools are helpful in pragmalinguistics collaborate to improve AI capabilities.

Keywords: Artificial Intelligence (AI), web 2.0 tools, communication, pragmalinguistics, pragmatic competence.

Introduction. It is well known that nowadays the development of knowledge and technology has brought people closer together, resulting in the phenomenon of the world as a "global village". This condition forces people of different backgrounds and ethnicities to work and communicate with each other. It may be interesting to know that people of different cultures should interact with each other in the era of globalization. However, in order to be able to communicate seamlessly with people of different backgrounds, interlocutors must be aware of these cultural differences, as well as their pragmatic aspects. Kavar emphasizes that when communicating with people of different customs, interlocutors should be able to determine how to correctly say what can be divided into what cannot, as well as be aware of cultural taboos, since what is accepted in a particular culture may not be approved in other cultures. To begin with, it is necessary to clearly know the broad meaning of culture. There are two different meanings of culture. The first meaning is associated with "civilization", which includes customs, crafts, art and education. Moreover, it is also related to how people act, think and feel, which is the result of considering the dominant values and norms emerging in society.

By the way as a crucial part of technology which is being used efficiently in modern education system is AI and web 2.0 tools. Artificial Intelligence (AI) has brought about significant transformations across various sectors like healthcare and finance by simulating human intelligence and decision-making. However, a notable hurdle that AI encounters is its ability to comprehend and actively participate in human communication. This is where pragmalinguistics, a segment of linguistics that scrutinizes the interplay between language and its context, becomes crucial.

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Pragmalinguistics concentrates on the practical facets of language usage, including speaker intent, context, and shared knowledge, to grasp the intended meaning behind verbal or written exchanges. Through the integration of pragmalinguistics into AI frameworks, scholars and technologists endeavor to bridge the gap between machines and human communication. This paper endeavors to explore the intersection of AI and pragmalinguistics, investigating their collaborative efforts to enhance the capabilities of AI systems. It will analyze the hurdles in constructing AI systems proficient in understanding and responding to human communication in an apt contextual manner. Additionally, it will scrutinize the potential utilities and advantages of amalgamating pragmalinguistics into AI, encompassing enhancements in virtual assistants, chatbots, as well as refining speech recognition and natural language processing capacities.

Materials And Methods

Recent years have witnessed notable progress in the fields of Artificial Intelligence (AI) and Pragmalinguistics. However, comprehending the intricacies of how AI systems engage in human communication necessitates thorough investigation and research. Various methods and approaches are employed in scrutinizing AI and Pragmalinguistics, elucidating the tools, experimental setups, and data analysis techniques utilized to attain a profound comprehension of these intricate domains.

Experimental Design and User Studies hold pivotal roles in exploring the efficacy of AI systems in human communication. Researchers frequently conduct controlled experiments, presenting participants with specific linguistic stimuli or interaction scenarios to assess their responses and interpretations. These studies may entail quantifying objective metrics such as comprehension accuracy or subjective measures like user satisfaction and perceived naturalness of AI-generated responses. Through the analysis of user feedback and behavior, researchers can glean insights into the pragmatics of AI systems and pinpoint areas necessitating enhancement.

Computational Modeling constitutes a significant aspect of investigating AI and Pragmalinguistics. Researchers devise computational models that emulate human-like language processing and production, integrating pragmatic principles and linguistic theories. These models facilitate hypothesis testing, exploration of diverse scenarios, and examination of the influence of various pragmatic factors on AI system performance. Through the development and refinement of these models, researchers can accrue valuable insights into how AI systems can adeptly comprehend and generate contextually appropriate responses.

Results and Discussion

In recent years, Artificial Intelligence (AI) and Pragmalinguistics have gained significant attention, transforming our understanding and interaction with language. Linguists have played a vital role in connecting AI with pragmalinguistics, with notable contributions from scholars such as Noam Chomsky, Dorothy Edith Smith, Deborah Tannen, Alessandro Capone, Michael A. Covington, Julia Hirschberg, McShane M., Sergei Nirenburg, Somers H., Wilks Y., and Yehoshua Bar Hillel. Examining their work offers valuable insights into the challenges, opportunities, and progress at this intersection.

Noam Chomsky's groundbreaking work in generative grammar has been particularly influential, shaping the computational approach to language and inspiring the development of models and algorithms that mimic human language processing. His contributions have laid the groundwork for AI systems to incorporate pragmatic elements and contextual understanding.

While pragmatics was once considered optional in second language (L2) education, it has now become a crucial component, supported by studies showing the benefits of pragmatic instruction. However, pragmatics remains underrepresented in English Language Teaching (ELT) materials and English as a Foreign Language (EFL) classes. Consequently, L2 teachers are encouraged to explore ways to introduce pragmatics into their teaching practices. Civelek and Karatepe (2021a) suggest

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leveraging internet resources to provide learners with pragmatic language input and practice beyond traditional classroom settings.

The problem of determining the place of pragmatic competence in the composition of foreign language communicative competence has been reflected in the works of many researchers in the field of linguodidactics. For a long period of time in the methodology of teaching a foreign language, the attention of teachers has been focused on training grammatical structures and practicing lexical skills. Nevertheless, the last century has brought many innovations in this area, including the arrival of the now popular communicative approach or method in teaching a foreign language. This, in particular, highlighted the importance of forming along with linguistic skills (familiarity with grammatical structures, as well as the assimilation of the lexical content of the language), which was the main purpose of teaching until the current period, the formation of some other skills that form other sub-competencies of foreign language communicative competence.

Alessandro Capone's research focuses on pragmatics and its implications for dialogue systems, including AI chatbots and conversational agents. His work highlights the challenges in understanding and generating pragmatically appropriate responses in machine-human communication. By drawing on pragmatic theories, Capone helps bridge the gap between theoretical pragmatics and the practical implementation of AI systems, enabling them to engage in more meaningful and contextually aware conversations.

Michael A. Covington's research in natural language processing (NLP) delves into the pragmatic dimensions of language comprehension in AI systems. His work amalgamates computational linguistics with pragmatics, aiming to develop algorithms that can better grasp context and generate more authentic responses. Covington's studies offer valuable insights into how AI systems can move beyond literal interpretations by considering pragmatic cues to enrich communication.

In teaching pragmatics within English as a Foreign Language (EFL) contexts, significant challenges persist. Despite the acknowledgment of the importance of pragmatic competence in various communicative competence models, pragmatics continues to be marginalized or neglected in L2 classrooms. This is especially challenging for EFL learners who lack exposure to interaction with native or proficient L2 speakers from diverse cultural backgrounds. Limited and often modified input in classroom settings fails to provide authentic language usage experiences, hindering the development of pragmatic competence. The learning environment significantly influences pragmatic skill acquisition, with opportunities for practicing L2 outside the classroom facilitating awareness of pragmatic language aspects. However, EFL contexts face additional constraints, including inadequacies in textbooks regarding the presentation of pragmatic elements and metapragmatic information, as well as the decontextualized introduction of speech acts. Furthermore, textbooks often fall short in demonstrating authentic language usage scenarios, exacerbating the challenges in pragmatic learning within EFL settings.

These two prominent frameworks underscore the importance of exposure to second language (L2) input and repetitive practice to facilitate noticing and automatization, respectively. However, the limited time allocated to English classes in Uzbekistan poses challenges in achieving either noticing of pragmatic features or automatization of procedural knowledge. Additionally, EFL learners face difficulty in accessing authentic pragmatic language input, leading to a deficiency in pragmatic competence among even advanced Uzbek speakers of English. Thankfully, technology provides various tools that can transcend traditional classroom boundaries and enhance the quality and quantity of input. Arvanitis (2019) contends that information and communication technologies have the potential to offer effective solutions and practices integrated into the learning process, thereby expanding both learner and teacher skills in knowledge acquisition. The advancements in technology have introduced numerous possibilities for educational purposes, leading to the emergence of Computer-Assisted Language Learning (CALL) and Mobile-Assisted Language Learning (MALL) as scholarly fields. These technologies have rapidly transformed L2 learning and teaching practices, with research indicating that established technologies such as the internet and personal computers

facilitate the learning of various language aspects, including pragmatics. CALL technologies enable the presentation of pragmatic materials in contextualized, authentic, and personalized ways, while also addressing other language skills. Moreover, the use of these technologies enables digitally-mediated materials and contexts for pragmatic development, allowing learners to interact with individuals located remotely.

Moreover, natural language processing, a domain heavily influenced by pragmalinguistics, aims to enable machines to comprehend and generate human language text effectively. By incorporating pragmalinguistic principles, systems can analyze discourse structure, discern speaker intent, and consider social context to produce coherent and contextually fitting responses. This advancement leads to significant enhancements in chatbots, virtual assistants, and other language-focused AI systems. The integration of pragmalinguistics into speech recognition and natural language processing fosters more nuanced and meaningful interactions between humans and machines. By addressing the complexities of human communication, these systems can better grasp and respond to user queries, resulting in enhanced user experiences and more dependable outputs. As research in pragmalinguistics progresses, the future of speech recognition and natural language processing appears promising.

Conversational agents and chatbots hold pivotal roles in customer service, virtual assistance, and various AI-driven applications. However, their effectiveness hinges on their capability to engage in meaningful and contextually apt conversations. Pragmalinguistics provides valuable insights for designing and training these systems, ensuring they utilize appropriate speech acts, adhere to speech conventions, and generate responses that consider the speaker's intentions. The release of ChatGPT 3.5 in 2022 sparked many debates and discussions. While previous language models existed, none of them came close to being as good at generating human-like conversations and processing large amounts of information in mere seconds.

However, Edwige Simonthe says that debates surrounding ChatGPT extend beyond its potential impact on industries like content writing or customer services. There are valid concerns regarding the ethical implications and potential risks associated with the use of such advanced language models. These concerns include the propagation of misinformation, the biases present in the training data, and the need for robust safeguards to mitigate these risks.

Academic honesty is another ethical consideration, as the use of ChatGPT to complete assignments or write essays raises concerns about originality and integrity in education. It is important to emphasize that this article does not endorse using ChatGPT to cheat or take shortcuts in academic settings. Instead, it aims to explore ways in which ChatGPT can be a valuable tool to enhance language learning journeys.

When utilized responsibly, ChatGPT can serve as a language-learning companion. It can provide learners with opportunities for practicing conversations, receiving instant feedback on grammar and vocabulary usage, and exploring different linguistic nuances. Interacting with ChatGPT can help learners improve their speaking, writing, and comprehension skills by simulating real-life language scenarios. In combination with other language learning resources, such as textbooks, language exchange programs, and live classes, ChatGPT can offer additional practice and assistance (Edwige Simonthe).

Conclusion

AI and web 2.0 tools utilized in teaching pragmatics are closely linked domains with a shared objective: enabling machines to effectively understand and engage in human communication. By incorporating pragmatic frameworks and principles into AI systems, we can enhance their capacity to interpret contextual cues, grasp meaning, and participate in more natural dialogues. As exploration in this field progresses, we can anticipate AI systems that not only process language but genuinely comprehend and engage in meaningful exchanges with humans. Pragmalinguistics-driven

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AI systems hold the potential to narrow the digital gap by facilitating more accessible and inclusive interactions between humans and machines, accommodating individuals from diverse linguistic and cultural backgrounds. Nevertheless, as AI and pragmalinguistics advance, addressing ethical considerations becomes imperative. Privacy issues, transparency, bias mitigation, and ensuring human control and autonomy are among the ethical challenges that require attention to ensure responsible and trustworthy AI systems. Overcoming these challenges necessitates interdisciplinary collaborations involving linguists, AI researchers, ethicists, and broader society.

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