

**THE ROLE OF LINGUISTICS IN THE CONTEMPORARY WORLD****Mukhammedova Farangiz Makhmud kizi**

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**Annotation:** The article examines the relevance of linguistics today as a field that touches on communication and technology. Understanding, analyzing, and using linguistic knowledge is crucial in today's increasingly digital and international society. This paper highlights the main ways that linguistics advances society and suggests that its applicability will only grow in response to contemporary issues.

**Key words:** phonology, morphology, syntax, semantics, pragmatics, Natural Language Processing (NLP), roots, prefixes, suffixes.

Language is the key tool for people to communicate with each other. People use languages in both verbal and non-verbal way every day. However, if languages are not studied, they become hard to use, understand. Therefore, we need a language to be studied and analyzed. The study of language is called "Linguistics". Language is the crucial part everyone's life and linguistics languages them structured. As a language remains central to identity, interaction, and knowledge transmission, linguistic inquiry offers valuable insights into both the structure of language and its use in real-world setting (Crystal, 2010). In today's rapid and integrated world, the linguistics not only essential in academia but for technology, technology and artificial intelligence. Modern technologies constitute the core foundation of applications such as speech recognition, machine translation, and conversational agents, which necessitate advanced linguistic modeling to ensure precise interpretation of meaning and context. For instance, artificial intelligence uses linguistics to be able to generate data and interact with human.

Efficacious communication requires more than the base of vocabulary but, understanding of components of linguistics. These components are phonology, morphology, syntax, semantics and pragmatics. Phonology concerns the sound patterns of a language—the permissible phonemes and their combinatory rules. Morphology studies how words are built from morphemes, the smallest meaningful units (such as roots, prefixes, or suffixes). Syntax addresses how words combine to form sentences, specifying word order and grammatical relationships. Semantics focuses on meaning at the level of words, phrases, and sentences. Finally, pragmatics considers how context (social, situational, cultural) shapes how meaning is used and inferred. Language is a social semiotic resource that people apply to accomplish their purposes by expressing meanings in context. These layers of linguistics may not provide efficient communication fully, but applied linguistics connects theory and practice by applying linguistic findings to real-world challenges in areas such as intercultural communication, translation and interpretation, and professional discourse.

Today technology has become an integral part of people's lives. All technology including, computers, phones and artificial intelligence need to have Natural Language Processing (NLP), which makes them capable of interpret, generate and understand language of humankind. In developing Natural Language Processing algorithms linguistics provides the foundational frameworks and theories, which enables technologies to interact naturally with users. Scholars are placing greater emphasis on creating ethical guidelines to reduce these biases, highlighting the necessity of diverse and representative data sources. Additionally, the emergence of

multilingual natural language processing underscores the worldwide aspect of communication in the present day. By utilizing linguistic insights from the structures and cultural contexts of various languages, technology can enhance cross-linguistic understanding and improve accessibility.

In addition, the integration of Natural Language Processing (NLP) into modern technology is essential for fostering seamless interactions between humans and machines. By leveraging linguistic theories and frameworks, developers can create algorithms that not only understand and generate human language but also adapt to the nuances of diverse linguistic and cultural contexts. As the demand for more intuitive AI systems grows, the emphasis on ethical guidelines and the use of representative data becomes increasingly critical to mitigate biases and enhance fairness in technology. Furthermore, the rise of multilingual NLP highlights the importance of inclusivity in communication, ensuring that technological advancements benefit a global audience. Ultimately, the collaboration between linguistics and technology will pave the way for more effective, accessible, and human-centered AI applications, shaping a future where technology truly understands and responds to the complexities of human language.

In conclusion, language is the cornerstone of human interaction, influencing our thoughts, communication styles, and the sharing of knowledge. The field of linguistics, which scientifically examines language, is crucial for comprehending and organizing this intricate communication framework. In today's world, the combination of linguistics and technology—especially through Natural Language Processing (NLP)—has transformed the way humans engage with machines. By utilizing linguistic concepts, developers can create systems capable of better understanding meaning, context, and emotions, facilitating more conversational and lifelike exchanges. Additionally, tackling ethical issues and ensuring the preservation of linguistic diversity are critical to avoiding bias and fostering inclusivity in worldwide communication.

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