



THEORETICAL FOUNDATIONS OF LINGUOPRAGMATIC POST- EDITING IN ARTIFICIAL INTELLIGENCE-BASED TRANSLATION

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Abstract

Artificial intelligence (AI) has become one of the most influential technologies in contemporary translation practice. Neural machine translation systems are capable of generating grammatically correct and semantically coherent target texts within a short period of time. Nevertheless, AI-generated translations frequently fail to preserve pragmatic meaning, communicative intention, discourse coherence, and culture-specific elements. These shortcomings reduce translation quality and necessitate human intervention through post-editing. Among different post-editing approaches, linguopragmatic post-editing occupies a special place because it aims not only to eliminate linguistic errors but also to restore the communicative value of the original text. The present study examines the theoretical foundations of linguopragmatic post-editing in artificial intelligence-based translation. It discusses the concepts of linguopragmatics, pragmatic equivalence, communicative intention, speech acts, implicature, and presupposition, as well as their role in improving AI-generated translations. The paper also analyzes the theoretical principles that underlie linguopragmatic post-editing and highlights their significance for contemporary translation studies.



Keywords: artificial intelligence, neural machine translation, post-editing, linguopragmatics, pragmatic equivalence, translation quality.

Introduction

The rapid development of artificial intelligence has significantly transformed translation studies and professional translation practice. In recent years, neural machine translation (NMT) systems such as ChatGPT, Google Translate, DeepL, and Microsoft Translator have demonstrated remarkable progress in producing fluent and grammatically acceptable translations. Their increasing accessibility has expanded the use of machine translation in education, business, healthcare, tourism, diplomacy, and scientific communication.

Despite these technological achievements, artificial intelligence has not yet reached the level of human translators in conveying communicative intention and pragmatic meaning. Machine-generated translations often reproduce lexical meanings accurately while failing to interpret contextual information, implicit meanings, politeness strategies, discourse conventions, and culturally specific expressions. Consequently, readers may receive grammatically correct but pragmatically inappropriate translations. These limitations have increased the importance of post-editing, which has become an integral stage of the translation process. According to ISO 18587:2017, post-editing refers to the process of correcting machine translation output to ensure that it meets the quality standards required for publication or professional communication. Modern post-editing extends beyond correcting grammatical or lexical errors and includes the improvement of pragmatic appropriateness, discourse coherence, stylistic consistency, and communicative effectiveness. Within this context, linguopragmatic post-editing has emerged as one of the most important research areas in contemporary translation studies. Linguopragmatics investigates how



language functions in real communicative situations and how speakers express intentions, attitudes, and implied meanings. Applying linguopragmatic principles to post-editing enables translators to identify and eliminate pragmatic mismatches that artificial intelligence systems frequently fail to recognize. The relevance of this study is determined by the growing use of artificial intelligence in translation and the increasing demand for effective post-editing methodologies capable of ensuring high-quality intercultural communication. Although numerous studies have examined machine translation technologies, considerably less attention has been paid to the theoretical foundations of linguopragmatic post-editing, particularly in the context of English–Uzbek translation.

The aim of this study is to investigate the theoretical foundations of linguopragmatic post-editing in artificial intelligence-based translation and to identify the key linguistic and pragmatic principles that contribute to improving translation quality.

1. Linguopragmatics as a Theoretical basis for Artificial Intelligence-based translation

The rapid development of artificial intelligence (AI) has significantly influenced contemporary translation studies by introducing advanced neural machine translation (NMT) systems capable of producing fluent translations in a relatively short time. Applications such as ChatGPT, Google Translate, DeepL, and Microsoft Translator have become widely used in academic, professional, and everyday communication. Although these systems demonstrate remarkable achievements in lexical selection, grammatical accuracy, and syntactic organization, they still experience considerable difficulties in conveying pragmatic meaning and communicative intention. Consequently, linguistic correctness alone cannot guarantee translation quality. Linguopragmatics provides a theoretical framework for understanding how language functions in communication. Unlike semantics, which examines the literal meaning of words





and sentences, linguopragmatics investigates how meaning is interpreted in relation to context, communicative intention, cultural background, and interaction between interlocutors. According to Levinson (1983), pragmatics studies the relationship between language and context, while Yule (1996) emphasizes that successful communication depends on the speaker's intention and the listener's interpretation. These principles are particularly relevant to translation because translators are expected to reproduce not only the linguistic form of the source text but also its communicative function. Within translation studies, the concept of **pragmatic equivalence** occupies a central position. Baker (2018) argues that equivalence should be achieved beyond lexical and grammatical correspondence by preserving implied meaning, coherence, cohesion, and communicative purpose. Likewise, House (2015) maintains that translation quality should be evaluated according to functional and pragmatic equivalence rather than linguistic similarity alone. Therefore, successful translation requires the reproduction of the same communicative effect on the target audience as intended in the source text. The theoretical foundations of linguopragmatics are closely connected with Speech Act Theory proposed by Austin (1962) and further developed by Searle (1969). According to this theory, language performs actions in addition to transmitting information. Requests, apologies, promises, warnings, and invitations represent different communicative acts whose interpretation depends on context rather than grammar alone. Artificial intelligence systems frequently preserve the propositional content of these utterances while failing to reproduce their illocutionary force, resulting in pragmatically inappropriate translations.

Another important concept is Grice's (1975) Cooperative Principle, which explains that successful communication is based on the maxims of quantity, quality, relation, and manner. Human translators generally recognize conversational implicatures and adapt them appropriately for the target audience. AI systems, however, often translate expressions literally without considering



implied meanings or contextual assumptions. Consequently, machine-generated translations may appear grammatically acceptable while failing to achieve communicative effectiveness.

2. Theoretical principles of Linguopragmatic Post-Editing

The increasing application of artificial intelligence in translation has transformed the role of professional translators. Rather than producing translations entirely from the source text, translators increasingly revise and improve machine-generated output through the process known as **post-editing**. According to ISO 18587:2017, post-editing refers to the revision of machine-translated texts in order to achieve a level of quality appropriate for publication or professional use. Contemporary translation scholars argue that post-editing should not be limited to correcting lexical, grammatical, or orthographic errors. Instead, it should ensure that the translated text accurately conveys communicative intention, pragmatic meaning, stylistic consistency, discourse coherence, and cultural appropriateness. In this respect, linguopragmatic post-editing represents a higher level of translation revision because it focuses on communication rather than language form alone.

One of the primary objectives of linguopragmatic post-editing is the preservation of communicative intention. Artificial intelligence systems frequently misinterpret indirect requests, irony, politeness strategies, emotional expressions, and persuasive language because these elements depend heavily on contextual interpretation. Consequently, post-editors should analyze not only the linguistic structure of the translation but also its communicative purpose before making revisions.

Another essential principle concerns cultural adaptation. Translation always occurs between representatives of different linguistic and cultural communities. Consequently, successful translation requires the adaptation of culture-specific expressions, etiquette formulas, discourse conventions, and forms of address. Neural machine translation systems usually rely on statistical





probability and therefore cannot consistently interpret sociocultural norms. Human post-editors compensate for these limitations by selecting contextually appropriate equivalents that preserve both meaning and communicative function. Discourse coherence also represents a fundamental criterion in linguopragmatic post-editing. Although AI systems often generate grammatically correct sentences, they may fail to establish logical relationships between different parts of a text. Therefore, post-editors should evaluate cohesion, thematic progression, textual consistency, and information flow to ensure that the translated text functions as a coherent communicative unit.

3. The Importance of Linguopragmatic Post-Editing for Translation Quality

Recent developments in artificial intelligence have significantly improved the overall quality of machine translation. Nevertheless, numerous empirical studies indicate that AI-generated translations continue to produce pragmatic inaccuracies that may negatively influence intercultural communication. These inaccuracies include the misinterpretation of communicative intention, inappropriate levels of politeness, incorrect rendering of culture-specific concepts, and failure to convey implied meanings. Such shortcomings cannot always be detected through grammatical or lexical analysis alone. Linguopragmatic post-editing plays a crucial role in overcoming these limitations. By applying the principles of pragmatic equivalence, discourse analysis, and communicative effectiveness, post-editors ensure that the translated text fulfils the same function as the original. This process requires not only bilingual competence but also pragmatic awareness, intercultural competence, and professional translation expertise.

The integration of linguopragmatic principles into post-editing contributes directly to improving translation quality. It enables translators to identify communicative mismatches, restore contextual meaning, and adapt translations





to the expectations of the target audience. Consequently, linguopragmatic post-editing should be regarded as an essential component of modern translation practice rather than a supplementary stage of revision. Considering the continuing development of artificial intelligence technologies, linguopragmatic post-editing is expected to become one of the leading research areas in contemporary translation studies. The combination of advanced AI systems with human pragmatic competence provides the most reliable approach to producing accurate, natural, and communicatively effective translations. Future research should therefore focus on developing linguopragmatic evaluation criteria and practical post-editing models that can be applied across different language pairs, including English and Uzbek.

Conclusion

Artificial intelligence has become an integral part of contemporary translation practice, offering significant advantages in terms of speed, accessibility, and productivity. However, despite continuous technological advancements, AI-generated translations still demonstrate considerable limitations in conveying pragmatic meaning, communicative intention, discourse coherence, and culture-specific elements. These deficiencies confirm that high-quality translation cannot rely solely on automated systems. The present study has demonstrated that linguopragmatics provides an essential theoretical foundation for understanding and improving AI-generated translations. The principles of pragmatic equivalence, speech act theory, conversational implicature, presupposition, and discourse analysis enable translators to identify communicative mismatches that frequently occur in machine translation. Consequently, linguopragmatic post-editing should be regarded as a fundamental stage in achieving accurate and communicatively effective translations.



Furthermore, the study emphasizes that successful post-editing requires not only linguistic competence but also pragmatic awareness, intercultural knowledge, and professional translation skills. The integration of these competencies with artificial intelligence technologies contributes significantly to improving translation quality and ensuring successful intercultural communication.

In conclusion, linguopragmatic post-editing represents one of the most promising directions in contemporary translation studies. Further research should focus on developing comprehensive linguopragmatic evaluation criteria and practical post-editing models applicable to English–Uzbek translation and other language pairs.

REFERENCES

1. Austin, J. L. (1962). *How to Do Things with Words*. Oxford University Press.
2. Baker, M. (2018). *In Other Words: A Coursebook on Translation* (3rd ed.). Routledge.
3. Grice, H. P. (1975). Logic and conversation. In P. Cole & J. L. Morgan (Eds.), *Syntax and Semantics: Vol. 3. Speech Acts* (pp. 41–58). Academic Press.
4. House, J. (2015). *Translation Quality Assessment: Past and Present*. Routledge.
5. International Organization for Standardization. (2017). *ISO 18587:2017. Translation services — Post-editing of machine translation output — Requirements*. ISO.
6. Levinson, S. C. (1983). *Pragmatics*. Cambridge University Press.



7. Nida, E. A., & Taber, C. R. (1982). *The Theory and Practice of Translation*. Brill.
8. Searle, J. R. (1969). *Speech Acts: An Essay in the Philosophy of Language*. Cambridge University Press.
9. Yule, G. (1996). *Pragmatics*. Oxford University Press.
10. Hatim, B., & Mason, I. (1997). *The Translator as Communicator*. Routledge.
11. Nord, C. (1997). *Translating as a Purposeful Activity: Functionalist Approaches Explained*. St. Jerome Publishing.
12. Gutt, E.-A. (2000). *Translation and Relevance: Cognition and Context* (2nd ed.). Routledge.