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PRAGMATIC AND LINGUISTIC ASPECTS OF DEVIATIONS IN MACHINE TRANSLATION

The article analyzes linguistic and pragmatic features of errors in machine translation from English into Ukrainian. The study examines typical linguistic and pragmatic deviations, including grammatical, lexical-semantic, stylistic, and terminological errors that affect translation quality. The paper identifies the main causes of these errors, which stem from the limitations of automated translation systems. The author pays particular attention to the problem of achieving pragmatic adequacy, especially when rendering polysemous units and specialized terminology. Using examples from economic discourse, the article demonstrates typical cases of inadequate translation. The paper highlights the role of post-editing in ensuring the accuracy and pragmatic conformity of the translation with the norms of the Ukrainian language. The results of the study contribute to the systematization of translation deviations and the improvement of approaches to their correction.

Keywords: *machine translation, post-editing, deviations, pragmatic adequacy, terminological accuracy, translation from English.*

Statement of the problem. The rapid development of digital technologies and the expansion of cross-linguistic communication have led to the widespread use of machine translation systems in various professional fields. At the same time, the effectiveness of such systems remains limited by several linguistic factors that make it difficult to accurately reproduce the original text's meaning. In particular, difficulties arise in conveying semantic nuances, pragmatic meaning, and stylistic

features of the text. Therefore, it is necessary to improve approaches to evaluating and correcting machine translation results, which is crucial for ensuring its functional suitability in specialized fields [1; 5].

Analysis of recent research and publications. Current research in machine translation covers a wide range of topics—from general characteristics of translation systems to the analysis of common errors and methods for correcting them [1]. Scientific works outline the functional capabilities of modern online translation tools and identify their limitations in accurately reproducing text content.

Significant attention is devoted to the study of the pragmatic adequacy of translation, particularly in journalistic discourse, where preserving the author's communicative intent is crucial [2; 4]. A separate area of research concerns the typology of translation errors, particularly in the field of scientific and specialized terminology, where there is a tendency toward literal translation and violations of the terminological system [3].

Comparative analyses of the results of various machine translation systems reveal lexical-grammatical and stylistic deviations that require further editing [5]. At the same time, the application of corpus-based methods allows for the systematization of typical errors based on empirical data [6].

Practical aspects of improving translation quality are linked to research on post-editing, particularly in legal and specialized texts [7], as well as to the use of quantitative metrics to assess the degree of intervention in machine translation [8].

Purpose of the article. This study aims to identify patterns in the occurrence of linguistic errors in machine translation and to propose effective strategies for post-editing them in the English-Ukrainian translation process.

Statement of the main points. At the current stage of development of automated translation systems, the complete replacement of human translators by artificial intelligence is unlikely due to algorithms' limitations in handling context and the ambiguity of linguistic units. At the same time, such systems remain an effective tool for quickly producing a preliminary translation, thereby significantly speeding up the workflow. The final quality of the text depends on post-editing, which involves

checking the translation for content, terminological, and stylistic accuracy [3]. A prospective area of research in this field is the use of intralinguistic resources for terminology development, which helps reduce the number of calques and contributes to the development of Ukrainian specialized vocabulary. Finally, the key challenge in machine translation remains the inability to ensure sufficient pragmatic adequacy. Automated systems often fail to account for the communicative context of a statement and do not distinguish between stylistic features of discourse. It is especially noticeable in journalistic and business texts, where linguistic units combine informative and expressive functions. The inability to correctly interpret pragmatic components distorts the communicative effect of the original. In such cases, post-editing plays an important role, taking into account situational and sociocultural factors in translation [4].

An example of a violation of pragmatic adequacy in a translation from English into Ukrainian is the machine translation of the sentence *«The bank decided to mitigate its exposure to currency fluctuations»* as *«Банк вирішив пом'якшити свою експозицію до валютних коливань»*. In this case, the term «exposure»—which in a financial context refers to a risky position—has been rendered literally. The correct options are: *«Банк вирішив мінімізувати валютні ризики»* або *«зменшити валютні ризики»*. Another example involves the translation of the phrase *«to apply for a mortgage»* as *«застосувати для іпотеки»*, which is semantically incorrect. In standard financial discourse, the correct equivalents are *«оформити іпотечний кредит»* or *«подати заявку на іпотеку»*.

A further example demonstrates the translation of the sentence *«The export-import balance showed a decline in the second quarter»* as *«Баланс експорту-імпорту показав спад у другій чверті»*. In this case, the inaccuracy concerns the incorrect rendering of the term «quarter», which in Ukrainian financial reporting corresponds to the concept «квартал». According to established terminology, the more correct formulation is: *«У другому кварталі зафіксовано скорочення торговельного балансу»*, which better reflects the meaning and conforms to business style norms. Alternatively, we could consider the translation of the sentence

«The company launched a new financial product» as *«Компанія запустила новий фінансовий продукт»*. Although this construction is grammatically correct, the phrase *«Компанія вивела на ринок новий фінансовий продукт»* sounds more natural in a business context.

The above indicates the need to develop a comprehensive approach to machine translation revision, one that involves formal text editing and accounts for the functional and pragmatic significance of linguistic units within specialized discourse. In particular, in the field of trade and economic communication, the accuracy of translating terms governing financial transactions, customs regulations, market mechanisms is crucial. The absence of equivalents or the incorrect selection of analogs results in a loss of professional content or legal inaccuracies.

An additional challenge is the rendering of grammatically complex constructions, abbreviations, and proper names. The lack of a unified transcription mechanism leads to variability in the rendering of toponyms and anthroponyms, complicating their identification and violating the orthographic norms of the Ukrainian language [6].

A more in-depth analysis reveals another systemic problem: machine translation's inability to convey the stylistic nuances, punctuation conventions, and current vocabulary of the source language. In particular, automated systems do not account for contextual stylistic markers. They are unable to select the most relevant lexical equivalent for the communicative situation from among the available options. The lack of implementation of translation transformation mechanisms—such as grammatical reformulation, logical restructuring, or antonymic translation—significantly reduces the quality of the final product [1]. Within specialized discourse, this leads to a disconnect between the formally correct rendering of content and its functional and stylistic adequacy, as machine systems tend to reproduce linguistic units literally without regard for target-language norms. As a result, the translation fails to meet the established genre and professional standards governing the choice of lexical and grammatical means in a specific field of communication. It also demonstrates the limited ability of algorithms to perform semantic adaptation and

pragmatic interpretation of utterances, which are critically important for achieving translation equivalence at the level of content and function. Consequently, there is a need to incorporate post-editing as an integral stage of machine translation processing, aimed at correcting stylistic, terminological, and discursive inconsistencies in accordance with the norms of the target language and the rhetorical requirements of the specific text.

When classifying the types of translation errors typical for machine translation output, it is useful to identify five main categories: content-related, terminological, linguistic, stylistic, and culture-specific. Content errors include cases of distortion or loss of information, violations of logical flow, incompleteness or redundancy in the translation, as well as the presence of non-functional or untranslated segments. Such errors are particularly common in the translation of financial reports and analytical reviews. Terminological errors are caused by violations of the norms of the interlingual terminology system, in particular, deviations from generally accepted glossaries, industry dictionaries, or standards [2]. They negatively impact the clarity of professional communication. Stylistic errors arise when the linguistic formulation does not meet the requirements of the functional style of the translated text. Culture-specific errors arise from the incorrect reproduction of ethnocultural realities, allusions, or quotations; within business discourse, they occur with limited but noticeable frequency.

To correct these types of errors, modern practice employs machine translation post-editing, a series of sequential steps. The initial step is to analyze the source text to identify stylistic, terminological, and contextual features. After that, the machine translation output is carefully reviewed, with segments that meet quality requirements highlighted. The post-editor focuses on accurately reproducing the content, taking into account the text's grammatical, lexical, and pragmatic characteristics [7].

Thus, the use of post-editing as a tool to improve the effectiveness of machine translation from English into Ukrainian eliminates various types of errors and creates conditions for bringing automated translation closer to professional standards. It allows for the direct consideration of linguistic parameters and industry-specific

nuances, which is critically important for the translation of commercial and economic texts.

Conclusions and prospects for further research. To summarize the findings of this study, despite the growing technological capabilities of machine translation, its use for translating from English into Ukrainian is associated with several linguistic problems that limit the pragmatic, stylistic, and terminological adequacy of the translation. An analysis of the identified errors showed that automated translation systems are unable to adequately account for the polysemy of lexemes, genre-specific discourse requirements, grammatical features of the target language, and culturally conditioned meanings of linguistic units. Of particular importance are the difficulties in rendering specialized terms, as well as in ensuring the logical and semantic coherence of the translation within the context of financial and business discourse. In this context, the need to develop a comprehensive approach to post-editing machine translation is justified, one that combines formal editing with consideration of the functional-pragmatic, stylistic, and culturally specific aspects of communication.The proposed classification of common errors and the analyzed examples serve as a basis for creating linguistic correction models for machine translation that improve its quality in accordance with the norms of Ukrainian technical language.

Prospects for further research lie in developing adaptive linguistic models for automated detection and correction of pragmatic, stylistic, and terminological errors in machine translation within specialized discourses.

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