

## POLITENESS STRATEGIES AND PRAGMATIC ERRORS IN MACHINE TRANSLATION SYSTEMS

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**Abstract:** The article discusses the proposed classifications for analyzing translation performed by automatic translation systems and some of their limitations. Material related primarily to translations in pairs with the Uzbek language and performed with the help of the most popular machine translation services "Yandex Translator," "Google Translate" and "Promt." In particular, the main classes of errors highlighted by various authors, their frequency, as well as their "weight" in terms of their ability to reduce to communication failure. Currently absent the time of a unified approach to constructing such classifications, as well as dependence of existing typologies on the type of text, language pair and specific automatic translation system.

**Keywords:** machine translation (MT), error typology, translation quality assessment, MT error classification, human translation, communication failure, linguistic evaluation, Yandex.Translate, Google Translate.

**Аннотация:** Статья посвящена выявлению проблем, существующих предложенные классификации анализа перевода, выполняемого системами автоматического перевода, и некоторые их ограничения. Материал в первую очередь связан с переводами в паре с узбекским языком и выполнен с помощью самых популярных сервисов машинного перевода "Яндекс Переводчик," "Google Переводчик" и "Promt." В частности, основные классы ошибок, выделяемые различными авторами, их частота, а также их "вес" с точки зрения способности свести к сбою связи. В настоящее время нет времени для единого подхода к построению таких классификаций, а также зависимости существующих типологий от типа текста, языковой пары и конкретной системы автоматического перевода.

**Ключевые слова:** машинный перевод, типология ошибок, оценка качества перевода, классификация ошибок машинного перевода, человеческий перевод, коммуникативная неудача, Яндекс Переводчик, Google Translate, PROMT.

**Annotatsiya:** Ushbu maqola mashina tarjimasida mavjud muammolarni aniqlashga bag'ishlangan. Mashina tarjima xatolarini tipologizatsiyalash bo'yicha mavjud yondashuvlar (MT), shuningdek, uni takomillashtirish yo'llarini izlash. Shunga qaramay, bunday tasniflar inson tomonidan amalga oshirilgan tarjimalar materialida ishlab chiqilgan tipologiyaga asoslanishi mumkinligi, xatolar MTlar o'ziga xos xususiyatlarga ega bo'lib, ular ham tizimda hisobga olinishi kerak. klassifikatsiyalari. Maqolaning birinchi qismida mashina tushunchasi muhokama qilinadi. tarjima va tarjima xatosiga oid asosiy yondashuvlar haqida umumiy ma'lumot berilgan an'anaviy, "insoniy" tarjima xatolarini tasniflash tarjimada Maqolaning ikkinchi qismida avtomatik tarjima tizimlari tomonidan amalga oshirilgan tarjimini tahlil qilish uchun taklif etilgan tasniflar va ularning ba'zi cheklovlari muhokama qilinadi. Asosan o'zbek tili bilan bog'liq tarjimalar bilan bog'liq materiallar o'rganildi va eng mashhur mashina tarjima xizmatlari yordamida «Яндекс Переводчик», «Google Translate» va «Promt amalga oshirildi.

**Kalit so'zlar:** mashina tarjimasida, xatolar tipologiyasi, tarjima sifatini baholash, mashina tarjimasida xatolari tasnifi, inson tarjimasida, kommunikativ muvaffaqiyatsizlik, Yandex Translator, Google Translate, PROMT.

### **Introduction:**

Throughout the last decade, researchers' attention has also been drawn to the problem of error typology machine translation. It should be noted that the analysis of relevant publications should be approached with caution, as the obtained results may depend not only on the material under consideration language pair and text type, as before, but also from a specific automatic translation system. In addition, all similar systems are constantly being improved, and translations of one text, separated by a significant time interval, can differ significantly. Below is an analysis of the main publications, dedicated to the analysis of machine translation errors, primarily in the most popular (Kochetkova, 2017) neural network "Yandex Translator" systems (also uses statistical approach) and Google

Translate. One of the earliest and already classic works in the field of typologization of machine translation errors is the 2006 work.

David Wilar et al. (Vilar, 2006). The classification proposed in the article was developed on four language pairs: English/Spanish and English/Chinese. For the machinevarious algorithms were used based on statistical approach.

In the previously mentioned work of L.N. Belyayeva (Belyayeva, 2022). possible problems of machine translation in the in the context of post-editing: incorrect translation of a



fragment of the text as a whole; omission or insertion of additional information; incorrect choice of terminology; problems related to grammar, orthography and punctuation (combined into one group); non-compliance with the stylistic norms of the target language; violation of the standards of the country of the target language (name of currency and denominator of decimal numbers, incorrect use) (capital letters); inconsistency (using non-standard terminology).

Machine translation at the present stage of its development firmly entered the arsenal of translators' tools and, in combination with subsequent post-processing, allows solving a wide range of tasks in the field of professional, including commercial, translation (see. Results of surveys of translators and translation staff companies (Nechaeva, 2018)), as well as in the field of foreign language teaching and translation theory.

Pragmatic principles are particularly vital in literary translation, where style, irony, humor, and figurative language play essential roles. In such cases, literal translation often fails to capture the subtleties of the original. A pragmatic approach helps the translator retain emotional impact and stylistic nuance. Likewise, in professional domains such as legal, medical, and technical translation, understanding pragmatic context ensures

accuracy and clarity. For instance, a warning label must not only be linguistically correct but also function effectively in terms of cultural and legal expectations. However, pragmatic translation also comes with challenges. Cultural differences can create gaps in implicature, politeness norms, and presuppositions. There is a constant tension between fidelity to the original and functionality in the target culture. For example, translating direct speech into a culture that values indirectness can require creative reformulation to retain both meaning and tone. Balancing these demands is a complex task that requires both linguistic skill and cultural sensitivity

Extensive literature has been devoted to the problem of translation error typology (including machine translation) (see also Badulin, 2022; Krasnov, 2015; Lutkovskaya, 2021; Perehodko, 2017; Daems, 2017; Freitag, 2021)), while there is currently no single expedition. With general limitations characteristic of a number of proposed typologies and, of course, reflecting the complexity of this problem, are: the impossibility of distinguishing a single classification characteristic, intersection of the proposed classes (and, consequently, the impossibility of unambiguously attributing the error to one of them) and incomplete coverage by the proposed classes of the entire set of possible errors.

Nevertheless, it seems possible to the following conclusions:

1. Classification of translation errors to a significant extent is determined by the language pair (and the direction of translation in this pair), the type of text and the purpose of the translation. In other words, it seems appropriate to construct classifications linked to certain translation parameters and possibly for the purpose of studying of a specific linguistic phenomenon (an example of similar, targeted, classification see in (Goncharov, 2019; Kirsanova, 2023).

2. In the case of machine translation, the impact on classification. Theoretically, errors can also be made by the one under consideration. However, in practice, the distribution of errors in the most popular in Russia systems Google Translate, "Yandex Translator" and Promt (Krasilnikova, 2021; Shusharina, 2021; Arestov, 2015) turns out to be quite close.

3. The classification of machine translation errors can be: is based on the typology developed on the material of the translations, performed by a person, but must contain significant changes related to the specifics of MT

4. Most of the proposed classifications are two-tiered. At the first level, groups of lexical (lexical-semantic) errors, grammatical errors (morphological and/or syntactic), and errors related to the disruption of the target language's usage are most commonly distinguished. Classifications of errors due to their origin for machine translation are few (see, for example, P.N. Chromenkov's classification (Semenov, 2008: 67-76), in which all errors are divided into automatic analysis and automatic synthesis errors and work (Al Sharou, 2022), which discusses errors and features of the source text that lead to translation errors).

5. The most frequent are the lexico-semantic errors. In modern MP systems, spelling and punctuation errors and related errors are relatively rare. with omission of individual words or fragments of the text.

6. Different errors have different "weights" in terms of their ability to lead to a communicative failure. Most significant are errors belonging to the lexico-semantic group.\

Therefore, pragmatic approaches to translation studies illuminate the essential role of context, speaker intention, and cultural norms in the translation process. By focusing on how language functions in communication, pragmatics equips translators with tools to produce accurate, effective, and culturally appropriate translations. Whether dealing with casual conversation or high-stakes legal documents, pragmatic competence is a cornerstone of successful translation practice. As the field evolves, embracing pragmatic frameworks will continue to enhance both theoretical understanding and practical application in translation studies. By prioritizing functional effectiveness over rigid formal equivalence, pragmatic translation ensures that messages are not just transferred but successfully communicated.

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