### O'ZBEKISTON MILLIY UNIVERSITETI XABARLARI, 2024, [1/9/1] ISSN 2181-7324



### **FILOLOGIYA**

http://journals.nuu.uz Social sciences

UDK:519.765

### Zahriddin XAITQULOV,

Uzbekistan State University of World Languages Teacher of the Department of Theoretical, E-mail: haitkulovzakhriddin@gmail.com

Based on the review of E. Avezov PhD Head of Foreign languages Department, University of Science and Technologies.

## THEORETICAL AND PRACTICAL ASPECTS OF AUTOMATIC TEXT TRANSLATION (IN THE EXAMPLE OF ELECTRONIC PROGRAMS IN SOCIAL NETWORKS)

Annotation

Translation theory is the study of the principles of correct translation. Although different languages encode information differently, translation theory provides translators with a solid foundation of linguistic knowledge to determine effective ways of preserving meaning using the most appropriate forms of each language. The practice of translation includes theoretical knowledge in the field of translation and implements its practical translation tasks. Currently, translation automation, machine translation, and electronic corpora are used to provide a wide range of translation possibilities. The prospects for the development of machine translation are related to the further development and in-depth study of the theory and practice of machine and human translation. Currently, the need for translation is provided by several computer-generated translation programs. The quality of translations of daily news and other materials delivered to consumers through the media. Media is one of the urgent issues of today's issues. In addition, translators and linguists should also focus on how bilingual translations on social networks are given correctly or incorrectly. Therefore, this article deals with the analysis of the translated texts in English and Uzbek provided in social networks and the theoretical and practical aspects of the information provided directly to consumers through automated programs.

**Key words:** Automatic text, machine translation, fundamental system, corpus, social network, bilingual translation, text analysis, electronic program, E-translation programs.

# AVTOMATIK MATN TARJIMASINING NAZARIY VA AMALIY ASPEKTLARI (IJTIMOIY TARMOQLARDAGI ELEKTRON DASTURLAR MISOLIDA)

Annotatsiya

Tarjima nazariyasi toʻgʻri tarjima tamoyillarini oʻrganuvchi fandir. Turli tillar ma'lumotni turlicha kodlashiga qaramasdan, tarjima nazariyasi tarjimonlarga lingvistik bilimlarning mustahkam poydevorini ta'minlash orqali har bir tilning eng mos shakllaridan foydalangan holda ma'noni saqlab qolishning samarali usullarini aniqlash imkonini beradi. Tarjima amaliyoti esa tarjima sohasidagi nazariy bilimlarni oʻzida jamlagan holda uning amaliy jihatdan tarjima qilish vazifalarni amalga oshiradi. Hozirgi vaqtda tarjimani avtomatlashtirish, mashina tarjimasi, elektron korpuslardan foydalangannholda tarjimaning keng imkoniyatlari amalga oshirlib kelinmoqda. Mashina tarjimasining rivojlanish istiqbollari mashina va inson tarjima nazariyasi va amaliyotini yanada rivojlantirish va chuqur oʻrganish bilan bogʻliq. Hozirda tarjimaga boʻlgan ehtiyojni komputerda yaratilgan bir nechta tarjimon dasturlari orqali ta'minlanib kelinmoqda. Ijtimoiy tarmoqlarda kunlik yangrayotgan yangiliklar, media orqali istemolchilaga yetqazib berilayotgan materillarning boshqa tiladaghi tarjimalarining sifati ekanligi bugungi kunning dolzarb masalalaridan biri boʻlib kelmoqda. Qolaversa, ijtimoiy tarmoqdagi billingual tarjimalar qay tarzda toʻgʻri yoki notoʻgʻri berilayotgani tarjimon olimlarni qolaversa tilshunos olmilarning ham diqqat markazida boʻlishi kerak, bizninghcha. Shunday ekan, ushbu maqolada ijtimoy tarmoqlarda berilayotgan ingliz va oʻzbek tillaridagi tarjima matnlarining tahlili va istemolchilar uchun taqdim etilayotgan avtomatlashtirilgan dasturlar orqali toʻgʻri yetkazib berilayotgan ma'lumotlarning nazariy va amaliy jihatlari tahlilga tortilgan.

Kirish soʻzlar: Avtomatik matn, mashina tarjimasi, fundamental tizim, korpus, ijtimoiy tarmoq, bilingval tarjima, matn tahlili, elektron dastur, e-tarjimon dasturlari.

# ТЕОРЕТИЧЕСКИЕ И ПРАКТИЧЕСКИЕ АСПЕКТЫ АВТОМАТИЧЕСКОГО ПЕРЕВОДА ТЕКСТА (НА ПРИМЕРЕ ЭЛЕКТРОННЫХ ПРОГРАММ СОЦИАЛЬНЫХ СЕТЕЙ)

Аннотация

Теория перевода это изучение принципов правильного перевода. Хотя разные языки кодируют информацию по-разному, теория перевода дает переводчикам прочную основу лингвистических знаний для определения эффективных способов сохранения смысла с использованием наиболее подходящих форм каждого языка. Практика перевода включает теоретические знания в области перевода и реализует свои практические переводческие задачи. В настоящее время автоматизация перевода, машинный перевод и электронные корпуса используются для предоставления широкого спектра возможностей перевода. Ученые по всему миру предпочли автоматизировать перевод путем его кодирования, и спустя несколько лет мы стали свидетелями того, как это открытие эффективно дает свои результаты. Перспективы развития машинного перевода связаны с дальнейшим развитием и углубленным изучением теории и практики машинного и человеческого перевода. В настоящее время потребность в переводе обеспечивается несколькими программами компьютерного перевода. Качество переводов ежедневных новостей и других материалов, доставляемых потребителям через средства массовой информации. Медиа является одним из актуальных вопросов сегодняшнего дня. Кроме того, переводчики и лингвисты должны также сосредоточиться на том, насколько правильно или неправильно даются двуязычные переводы в социальных сетях. Поэтому в данной статье рассматривается анализ переведенных текстов на английском и узбекском языках, предоставляемых в социальных сетях, а также теоретические и практические аспекты информации, предоставляемой непосредственно потребителям через автоматизированные программы.

**Ключевые слова:** Автоматический текст, машинный перевод, фундаментальная система, корпус, социальная сеть, двуязычный перевод, анализ текста, электронная программа, программы электронного перевода.

**Introduction.** Today, computer technology helps to make people's lives easier in many areas of their activities. It optimizes our work and helps reduce physical and intellectual costs. In addition, the results of the survey show that most users use computers for work and to translate important documents for their professionals. In the present day, the translation of the information needed by the representatives of each field through electronic translation programs has become very popular. As a result, time efficiency, satisfaction with the need for translation, and the ability to translate highly personal documents can be easily translated into electronic translation programs.

It should also be noted that following the development of the Internet, several specialties, fields, and other such professions have their electronic website. In addition, the circulation of information on daily social networks is growing very quickly in pictures. Automatic electronic translator software is the mainstay of information exchange in several languages. These translation programs have several advantages, such as an e-library that includes several databases. In addition, one of the advantages of automatic translation in social networks is that saving time is one of the personal tasks that should be done with the help of the program. When using automatic translation, the task to be performed by consumers is to edit and save the resulting translation data. It follows that one of the main advantages of automatic translation software is that consumers do not pay anything to receive the translation [1]. On the other hand, there are software products and online services that fall into the field of so-called automatic translation. These are all kinds of programs or sites that provide automatic translation services to one degree or another. Automatic translation is an action performed on a computer to transform text in one natural language into text equivalent in content in another language, as well as the result of such an action [2].

Literature review. The invention of machine translation plays an important role in the advantages of automatic translation programs mentioned above. In this regard, from the 1940s to the 20th century, the theory and practice of the invention of natural language processing and machine translation attracted world Diagram 1.

scientists to the center of their research. Especially with the invention of machine translation W. Warren, W. Norbert, A. Booth, R. Richans, A. Turing, J. Hutchins, P. Troyansky, A. Lyapunov, A. Bagrinovskaya, G. Kulagina, O. Melchuk, V. Rozentsweig, A. Reformatsky, P. Kuznetsov, V. Ivanov and other scientists conducted deep scientific research. In addition, TIT (translational Information technology) is one of the crucial areas that continues to have a significant impact on research and society in general in the 21st century. Thus, it is hoped that computer technology will soon increase the number of translators. Many scientists have shared their views on this topic. They are: A. Marchenko, M. Miyayeva, S. Seldean, V. Kuznetsov, T. Nikishikhina, V. Grinshkun, T. Kuznetsova and A. Scientists such as Ushakova and E. Morozkina can be cited as an example [3].

Research methodology. As we mentioned above, As we mentioned above, automatic translation is the process of translating texts from one natural language to another using a special computer program. (Instead of "automatic" the word "automated" is sometimes used, which does not affect the meaning. However, the term automated translation has a completely different meaning - in it, the program simply helps a person translate texts). One of the earliest recorded projects was the Georgetown Experiment in 1954, which involved the successful fully automatic translation of over sixty Russian sentences into English [4]. The Georgetown Experiment researchers believed that automatic translation would be a problem that would be solved within 3-5 years. Consequently, the success of the experiment ushered in an era of massive funding for automatic translation research in the United States. Progress was much slower than expected; In 1966, an ALPAC report found that decades of research had failed to meet the expectations of the Georgetown Experiment, leading to a drastic reduction in funding. Interest in statistical models for automatic translation grew, becoming more common and less expensive as available computing power increased in the 1980s [5].

Thus, the following are examples of the main methods of automated translation. They are as diagram follows:

Diagram 1. Methods of automated translation.



It is also vital to note that, the first generation of machine translation systems, based on word-for-word and phrase-by-phrase algorithms, began to be experimented with. The capabilities of these systems are determined by the available size of dictionaries, which directly depends on the size of the computer memory (CM) [6].

Discussions and Results. With automatic translation, the following forms of interaction between a computer and a person are possible: The advantages of such translation are; a) more efficient use of resources compared to other methods, b) as a rule, statistical automatic translation systems are not adapted for any specific pairs of languages, c) it's easy to add new translation directions, d) with the help of post-editing. the source text is translated by a automatic, and a person edits the resulting result, e) with the help of pre-editing: First, a person processes the text for subsequent processing by a automatic [7].

Abovementioned information, the development of automatic translator programs can be considered a huge and very interesting history. Moreover, we have counted several advantages of AT (automated translation) bringing several examples. Along with the advantages of automatic translation, it also has some disadvantages. First of all, the structure, The structure of sentences in English and other languages may be

different (for example in Uzbek language). This is considered to be one of the main structural problems in translation. The culture practiced by the speakers of each language may also be vastly different. In many languages, certain terms may be completely absent. This is one of the most common challenges faced by a translator on its daily basis, also one of the main reasons why translation is difficult. Furthermore, there are words of special importance in the problems of translation of lexical units and such as words cause problems in the translation process. The problem arises when we translate the sentence. For instance, "they both married their cousins" the problem in translation is the verb "to marry" which has to meanings. The first meaning is "uylan(tir)moq", turmushga chiq(ar)moq" [8].

Above we have clarified some advantages functions and disadvantages functions of using automatic translation without taking into account the target language. We decided to test them in practice. To do this, we will evaluate the quality and compare the translation results of the four most popular online translators: Google Translator, Yandex Translator, PROMT Translator, and Microsoft Translator. The interfaces of these translators are simple and similar: we have two fields, in one of which text is entered, and in the other, the result of the translation is displayed, which can be edited directly there. Translation languages are

selected in drop-down lists. Using the above-mentioned services, we will translate some social network (Instagram) sentences the consumer uses a lot of varying complexity from Uzbek into Table 1

English. The results are comparable to the translation we made. They are as follows:

Suggested text	Bu hafta oxirida teatrga tashrif buyurishni rejalashtirmoqdamiz.	We are planning a visit to the theater this weekend.
Human Translator	Bu hafta oxirida biz teatrga tashrif buyurishni rejalashtirmoqdamiz.	This weekend we are planning a visit to the theater.
Google Translator	Bu hafta oxirida biz teatrga tashrif buyurishni rejalashtirmoqdamiz.	This weekend we are planning to visit the theater.
Yandex Translator	Bu hafta oxirida biz teatrga tashrif buyurishni rejalashtirmoqdamiz.	This weekend we are planning a visit theater.
PROMT Translator	Ushbu hafta oxiri uchun biz teatrga tashrif buyurishni rejalashtirmoqdamiz.	For this weekend we are planning a visit to the theater.
Microsoft Translator	Bu hafta oxirida biz teatrga tashrif buyurishni rejalashtirmoqdamiz	This weekend we are planning to visit the theater

Table 2. The result of complex sentence translation by TP and HT

The text, which is given in table 1, indicates a different viewpoint. The results of translating a simple declarative sentence from Uzbek into English. When we move to analyze the received translations automatically there are some different translation versions we might see. The translation provided by the Yandex Translator service fully conveyed the meaning of the sentence and did not make any grammatical or lexical errors. Moreover, this translation is fully consistent with the translation made by humans. The Microsoft Translator service differs in only one thing: instead of the noun "visit", which corresponds to the original language, the service uses the verb "visit". The meaning of the sentence is not distorted. Moving to Google Translator, also this translator program conveyed the meaning of the text, but the word "weekend" was replaced by the synonym "weekend", which is less appropriate in this context. PROMT Translator showed worse results than others did. PROMT missed "the" article and preposition "to".

**Conclusion.** As we can see above automated translation processes work with different styles in social network texts.

Nowadays, numerous people moving to Instagram to advertise their goods, and some of them share their careers that are doing well, as well as some are proud with their family members by visiting some places with a friend who is from other countries. So, here automated translation tools come to give their hands to multilanguage people. Many scientists claim that the main purpose of automated translation programs is to get the meaning of ideas from one language to another. In my point of view, translation programs can develop their qualities if they address to the corpus. Corpus platforms are benefiting many professions and fields. There are numerous corpora have already created in many countries. Uzbek scientists have also created a parallel corpus they are developing its database. Anyway, automated translation and corpus platforms need to collaborate to get good results in any field. Automated translators and corpora systems are created for humanity, and we believe that it is important that these platforms meet the needs of every consumer.

### REFERNCES

- 1. Grinshkun V. Razvitie integrativnyx podkhodov k sozdaniyu sredstv informati zatsii obrazovaniya. 2004.
- 2. Hutchins J. Automatic translation and human translation: in competition or in complementation? International journal of translation, 13:5-20, 2011 p- 56.
- 3. Hutchins J. Automatic translation and human translation: in competition or in complementation? International journal of translation, №13, 2001 -p 19.
- 4. Homiedan A. "Automatic translation", in Journal of King Saud University, Language & Translation, vol. 10, 1998 p 21.
- 5. Kuznetsova T., Marchenko A, Kuznetsov I. "Theory and practice of teaching English language and technical VUZe". M. 2014
- 6. Молошная Г. Алгоритм перевода с английского языка на русский. Сб. "Проблемы кибернетики", вып. 3, М., Физматгиз, 1960.
- 7. Kudratova S. Premchand's vardaan in uzbekistan. Translation issues of some cultural specific words. "Theoretical & applied science" Учредители. № (12). 2021 pp 374-377.
- $8. \quad https://code.fb.com/mlapplications/expanding-automatic-automatic-translation-to-more-languages/2009. \\$