РАЗДЕЛ III
ПРОБЛЕМЫ ХУДОЖЕСТВЕННОГО И НАУЧНО-ТЕХНИЧЕСКОГО ПЕРЕВОДА

ANALYSIS OF TRANSLATION OF MODERN LOGISTICS TERMS THROUGH CORPUS LINGUISTICS

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This article provides information about corpus linguistics, related concepts, and analyzes some terms and terms related to logistics. The purpose of the article is to identify problems in the translation of logistics terms through corpus linguistics.

Key words: corpus; corpora; corpus linguistics; language corpus; text corpus; English language corpus; Brown corpus, Zipf's law.

АНАЛИЗ ПЕРЕВОДА СОВРЕМЕННЫХ ЛОГИСТИЧЕСКИХ ТЕРМИНОВ ЧЕРЕЗ КОРПУСНУЮ ЛИНГВИСТИКУ

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В данной статье представлена информация о корпусной лингвистике, связанных с ней понятиях, а также проанализированы некоторые термины и термины, связанные с логистикой. Цель статьи – выявление проблем перевода логистических терминов средствами корпусной лингвистики.

Ключевые слова: корпус; корпуса; корпусная лингвистика; языковой корпус; текстовый корпус; корпус английского языка; корпус Брауна; закон Ципфа.

ZAMONAVIY LOGISTIKA TERMALARINI KORPUS LINGVISTIKASI ORQALI TARJIMA QILISH TAHLILI

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Ushbu maqola korpus lingvistikasi, tegishli tushunchalar haqida ma'lumot beradi va logistika bilan bog'liq ba'zi atamalar va atamalarni tahlil qiladi. Maqolaning maqsadi logistika atamalarini korpus lingvistikasi orqali tarjima qilishdagi muammolarni aniqlashdir.

Kalit so'zlar: korpus; korpus; korpus lingvistikasi; til korpusi; matn korpusi; ingliz tili korpusi; Braun korpus; Zipf qonuni.

Introduction

Reforms in the budget and tax system of Uzbekistan in recent years, in particular, the establishment and strengthening of strict control over the targeted use of budget funds, ensuring openness and transparency of this process has become one of the important issues at the level of public policy . In particular, the prevention of various illegal actions in the use of budget funds, in turn, "... it is necessary to further improve the system of efficient use of budget funds, the quality of any program or project allocated from the budget. and quantitative indicators, which should have results-oriented indicators" [Mirzièev Sh.M. Address of the President of the Republic of Uzbekistan to the Oliy Majlis on the most important priorities for 2019.

Modern information technologies have opened the door of unlimited opportunities for using the functional capabilities of the language. Computer translation, automatic editing and analysis, speech synthesizers that make written text sound, speech recognition programs that convert spoken speech into written text, electronic dictionaries, linguistic mobile applications, thesaurus (language treasure) and language ontology are proof of our opinion. In particular, it has been proven that creating a culture of creating and using modern electronic dictionaries is effective in acquiring language skills. In particular, the role of ***language corpora***, which are being created at a rapid pace around the world, is incomparable in terms of demonstrating and mastering the language's potential. ***Linguistic corpora*** are a necessary tool for language research and solution of practical tasks. It differs from a regular electronic library. The purpose of the electronic library is to cover the artistic and journalistic works reflecting the socio-political, spiritual and economic life of the people. Texts of the electronic library are not processed from the point of view of language, so they are inconvenient for research. Because the electronic library will not be created for the purpose of preparing a base of scientific research material, but will aim to collect the national-spiritual heritage. ***Corpus linguistics*** is an empirical method of studying language through a corpus of text. ***Corpora*** are balanced, often layered collections of authentic, "real-world," spoken or written text intended to represent a particular language variety. Today, corpora are typically machine-readable collections of data. Today, corpora are typically machine-readable collections of data.

Research method. In addition to semantic component analysis, quantitative analysis, observation and interpretation, comparative contextual

analysis, written linguistic interview, and associative experimental methods were also used.

Discussion

Corpus linguistics shows that language analysis is naturally more accurate when using real language data collected without experimental intervention. Large volumes of texts, and even smaller collections, allow linguists to conduct quantitative analyzes of linguistic concepts that are difficult to study qualitatively.

The text-corpus method uses a collection of natural language texts to identify abstract rules that govern that language. These results help to study the relationship between different languages analyzed in the same way. Originally, corpora were created manually from the source texts, but now the process is automated.

The corpus has been used not only for linguistic research, but also for the compilation of dictionaries and reference grammars. This practice began in 1969 with ***"The American Heritage Dictionary of the English Language"*** and continued in 1985 with the publication of "***A Comprehensive Grammar of the English Language"***.

Experts have different opinions about how to annotate a corpus. According to John McHardy Sinclair, texts should have a minimum of footnotes to be understood internally to the Survey of English Usage team (University College, London). On the other hand, the Survey of English Usage research group at University College London believes that detailed annotations help us understand the language better.

Corpus of English: A Computational Analysis of Contemporary American English, published in 1967 by Henry Kuchera and W. Nelson Francis, was a milestone in modern corpus linguistics. This work analyzed the Brown Corpus, a 1961 collection of one million words in American English. The current Standard Corpus of American English at Brown University, known simply as the Brown Corpus. It is an electronic collection of text samples in American English, and is the world's first corpus covering a variety of genres. This corpus provided the first scientific study of the frequency and distribution of word groups in everyday speech. Compiled by Henry Kuchera and W. Nelson Francis at Brown University in Rhode Island, this corpus is a general language corpus containing 500 English language samples totaling one million words from works published in the United States in 1961. In 1967, Kuchera and Francis published their classic work, A Computational Analysis of Modern American English, which provided the basic statistical data for a linguistic model known today simply as the Brown Corpus.

The ***Brown Corpus*** is a carefully curated corpus of contemporary American English, containing nearly a million words collected from a variety

of sources. Kuchera and Francis examined it through a variety of linguistic analyses, creating a rich and varied opus that combines elements of linguistics, psychology, statistics, and sociology. It is widely used in computational linguistics and has been among the most cited sources in the field for many years.

Shortly after the publication of the first lexicostatistical analysis, the Boston publisher Houghton-Mifflin approached Kuchera to provide a million-word, three-line citation database for its new American Heritage Dictionary. First published in 1969, this new dictionary was the first to use corpus linguistics to capture word frequency and other information.

The original Brownian corpus contained only words and a location identifier for each word. Over the next few years, part-of-speech tags were used. The Grine and Rubin tagging software (see section on speech tagging) helped a lot with this, but the high rate of errors meant that extensive manual correction work was required.

The tagged Brown corpus uses a selection of about 80 parts of speech, as well as special indices for compound forms, contractions, derivations, and several other phenomena, and the Lancaster-Oslo-Bergen Corpus, Freiburg-Brown Corpus of American English (FROWN) (1990- has been the model for many later corpora such as American English since the early 1960s. Corpus tagging, programmed by Andrew Mackey and documented in textbooks on English grammar, allowed for more sophisticated statistical analysis.

One interesting point is that, even in large samples, graphing words in decreasing frequency produces a hyperbola: n is the frequency of the most frequent word roughly proportional to 1/n. Thus, "the" accounts for about 7% of the Brown Corpus, "to" and "of" more than 3%; About half of the total vocabulary of about 50,000 words are hapax legomena, that is, words that occur only once in the corpus. This simple degree-of-occurrence relationship was noted by George Kingsley Zipf for an extraordinary variety of phenomena (see, for example, his Psychobiology of Language) and is known as Zipf's Law.

Although Brown's corpus was a precursor to such work in linguistics, typical corpora today (such as the Corpus of Modern American English, the British National Corpus, or the International Corpus of English) are much larger, typically around 100 million words.

Multilingual corpus: In the 1990s, significant advances were made in the use of statistical methods for natural language processing (NLP), especially in machine translation. This was due to the work at IBM Research and the use of multilingual texts that translated all government work of the Canadian Parliament and the European Union into their official languages.

There are also corpora in languages outside of Europe. For example, the National Institute of Japanese Language and Linguistics in Japan has created several corpora of spoken and written Japanese. A sign language corpus was also created using video data.

Methods: Corpus linguistics has developed several research methods to link data with theory. Wallis and Nelson (2001) presented the 3A model: ***Annotation, Abstract and Analysis.***

Annotation involves applying a schema to texts. This includes systematic marking, part-of-speech tagging, parsing, and other similar forms.

Abstract involves translating terms from a schema into terms from a theoretical model or data set. It often includes searches directed at linguists, but may also include rule learning for analysts.

Analysis consists of the statistical examination, manipulation, and summarization of data sets. Analysis may include statistical evaluation, rule base optimization, or knowledge discovery techniques.

In linguistics, ***a corpus (plural corpora) or text corpus*** is a linguistic resource consisting of a large and structured collection of texts (nowadays usually stored and processed electronically). In corpus linguistics, they are used to perform statistical analysis and hypothesis testing within a particular language, to observe linguistic phenomena, or to test theoretical linguistic rules. A corpus can contain textual data in one language (monolingual corpus or monolingual corpus) or in more than one language (multilingual corpus or multilingual corpus).

To make corpora more useful for linguistic research, they are often subjected to a process known as annotation. An example of corpus annotation is tagging or POS-tagging, where information about each word's category and its categories (verbs, nouns, adjectives, etc.) is added to the corpus in the form of tags. Another example is showing the lemma (stem) form of each word. If the language of the corpus is not the working language of the researchers using it, interlinear publishing is used to make the annotation bilingual.

Some corpora have further structured (structured) levels of analysis. In particular, a number of small corpora can also perform a full analysis process. Such corpora are usually called Treebanks or Parsed Corpora. If a corpus is fully structured and fully annotated, it is likely that the corpus will be small—around 1-3 million words. Because it is a very difficult process to fully analyze the corpus and make all the annotations. The corpus, which also includes analysis of morphology, semantics and pragmatics, is a more developed and advanced corpus.

Results

Reforms in the budget and tax system of Uzbekistan in recent years, in particular, the establishment and strengthening of strict control over the

targeted use of budget funds, ensuring openness and transparency of this process has become one of the important issues at the level of public policy . In particular, the prevention of various illegal actions in the use of budget funds, in turn, "... it is necessary to further improve the system of efficient use of budget funds, the quality of any program or project allocated from the budget. and quantitative indicators, which should have results-oriented indicators" [Mirzièev Sh.M. Address of the President of the Republic of Uzbekistan to the Oliy Majlis on the most important priorities for 2019.

A corpora is the main repository of knowledge and information in corpus linguistics. The corpus is also used in the following important areas:

Language Technology, Natural Language Processing, Computational Linguistics: The process of processing and analyzing various corpora, also includes many topics in computational linguistics, speech recognition and machine translation, where it is often used for speech tagging (speech tagging) and other purposes. used to create hidden Markov models. Corpora and frequency lists derived from them are useful for language learning. Corpus can be seen as a type of foreign language writing aid, as corpora of languages that are not the user's native language are a source of contextual grammatical knowledge acquired through original texts. They can be effectively used to compose sentences and form texts using them.

As a new field of knowledge, the field of logistics has significantly improved the long-standing field of transportation. For example, logistics combined transport functions with the functions of other departments - accounting, inventory management, legal support, which led to faster and more efficient customer service.

The impact of globalization can be seen in the fact that English has become a priority language in the field of logistics, and the United States has become a leading country in the field of scientific research and practical application of logistics.

Logistics terms do not have significant regional differences in Europe and the USA, which confirms their unity, internationality and uniformity. Globalization has also led to the absence of national or regional scientific schools - logistics science in English-speaking countries schools have not been formed yet.

They determined that the field of logistics intersects with twelve areas of knowledge: *management, commercial activity, marketing, accounting, price analysis, international relations (included in economics); transport, informatics, technology, mechanical engineering (included in technology); law and mathematics.*

As described by V. M. Leychik, this fact confirms that the terminological system of logistics was formed in accordance with the principle of association, which in turn leads to the formation of a set of terms combining the achievements of complex fields of knowledge.

The selection of terminological areas was also carried out in accordance with the theory of A. I. Smirnitsky, according to which each special thematic area is filled with terms specific to this topic. Then, nine terminological areas were distinguished: *"purchasing management", "logistics support for production", "order management", "transportation", "warehouse and with materials operation "(warehousing and cargo handling), "inventory management" (stock management), "information technologies" (information support), "logistics management" (logistics systems management) and "supply chain management" (supply chain management).*

These terminological fields correspond to the structure of the system of logistics concepts described by *foreign and domestic logistics experts*, which confirms the consistency of English logistics terminology.

A logistics control object is a route. Therefore, the main group of logistics terms are direction terms: *material direction, information direction, financial direction, service direction, main direction, accompanying direction*. It is necessary to clarify the meaning of the term ***"direction"*** in logistics. It is not a *"moving mass", but "a set of objects taken as a whole..."* or *"relatively moving from the source of production to the destination of consumption is a set of homogeneous economic elements."* ." The term *"direction"* in the logistical sense, for example, does not exist in the largest encyclopedic publication on organizational management, in which direction has only a financial interpretation.

A.N. The absence of the term ***"direction"*** in certain dictionaries of Rodnikov. it makes it difficult to correctly understand the content of some types of directions (material, information, financial and service directions).

The object of management allocated by logistics requires the study of the application of various operations and processes to this specific object, which determines the need to distinguish the following group of terms.

Logistics studies the characteristics of the processes related to the route. Therefore, operational terms are directly based on a group of direction terms. If the quality *"logistics"* comes before this or that generally recognized term, it is justified only if a new meaning of this term appears when working with the route. All operational team terms are, in fact, *logistics,* as they refer *to work lines, functions, processes, and cycles.*

it requires a new look at the content and new results of scientific research.

Directional management requires the performance of management functions *(forecasting, planning, organization, control, analysis, regulation, motivation)* that are possible only in certain organizational structures. This requires the formation of a group of ***structural terms*** in logistics.

The terms forming the logistics structure include*: logistics connection, logistics chain, logistics channel, logistics network, logistics system, micrologistics system, macrologistics system, mesological system, logistics element. system*.

Operational and structural terms are the basis of logistics terminology. The rest of the terms used in logistics are based on them. These are groups of generalizing and practical terms.

Although logistics and supply chain management are different scientific fields with independent subjects and research topics, supply chain, supply chain management, supply chain management *"related logistics coordination"* has been included in the logistics dictionary by many authors, currently these two areas of management are closely related to each other in scientific research. Thus, groups of *directional, operational, structural and generalizing* terms form the class of basic logistics terms.

The terms of their application depend on the content of the main terms. Such connections of concepts and terms reflect the integration flow process in modern business.

According to some scientists, the terminological apparatus of logistics has not yet been fully formed. Others, including A.N. According to Sterligov, the terminological system of logistics in English can be considered largely formed, despite the fact that most of the terms come from other fields of knowledge.

I. Forming the terminology of logistics in the Uzbek language is an urgent task today. The study of the problems of forming the English terminology of logistics as a new science is of particular importance for the optimization of Russian logistics terminology. According to the overwhelming majority of experts, words and terms that have entered the Russian language from English today need standardization and unification to prevent the appearance of unnecessary doublets. A term with a complex internal semantic structure is a single, independent named unit.

II. Machine translation: Multilingual corpora specially formatted for side-by-side comparison are called structured parallel corpora. There are two main types of parallel corpora containing texts in two languages. A

translation corpus is a corpus of texts in which texts from one language have been translated into another language. Comparable corpus - texts that are similar in genre and content, but are not translations of each other. Identification of text segments (phrases or sentences) and matching and coordination of text types and genres are the first conditions for using parallel texts. Between Two Languages Machine translation algorithms for translating between two languages are often implemented using parallel parts consisting of a first language corpus and a second language corpus, which is an elemental translation of the first language corpus.

III. Philology: Text corpora are also used in the study of historical documents (historical texts), such as deciphering ancient writings or secretarial science. Some archaeological corpora can live for a short period of time, allowing for timely photography. The 15- to 30-year-old Amarna script (1350 BC) may be one of the shortest corpora. A corpus of an ancient city (such as the "Kultepe Texts" of Turkey) may appear through several corpora, sorted by the date of their discovery.

The issue of choosing the type of transport is solved in connection with the organization and maintenance of the most convenient level of logistics stocks, the choice of the type of packaging and wrapping, and other similar issues. Information about the characteristics of different types of transport serves as a basis for choosing a type of transport for transporting a specific product. The main situation of logistics characteristic for production and consumers of products (customer superiority, high level of service, reduction of execution time, etc.) in the conditions of competition of the market of transport services depending on the enterprises in the transport network, the difference is that enterprises in the transport network work out this issue through complex decision-making. This policy includes all decisions and actions aimed at making the transport process complex.

The analysis of cargo transport companies in logistics activity in the USA showed that the diversification of transport companies gives good results. It attracts customers, increases income, accelerates the introduction of new technologies, strengthens the position in the transport service market. On the other hand, most manufacturing enterprises avoid many logistical tasks.

From the research of 350 enterprises operating in various sectors of the US economy, it was found that 70% of them assigned the task of formalizing and implementing the calculation of cargo transportation to transport companies. Approximately 20-22% of the enterprises transferred the work related to the determination of the price of cargo transportation, warehouse

operations and determining the convenient route for the delivery of goods to the account of transport enterprises.

Methodical instructions for calculating the delivery time of goods in different types of transport

№	Types of transport	Formula for calculating delivery time
1.	Railway	T j tnk LVnj tgonm
2.	Sea	Tm q LVkom VkomqLVsut 2 LPTG‘M t m don
3.	River	Tr q To LG‘VnP tp don
4.	Avtomobile	Ta q TnK LG‘VEK

Bu yerda (in uzbek):
t nk - operatsiyaning boshlanish-tugash vaqti, sutka, soat;
L - tashib keltirish uchun o‘tilgan masofa, km, mil;
Vnj Vnr -1 sutkada vagon yoki kemaning normadagi yo‘lda yurishi;
tj dop t dop t rdop - daryo, dengiz va temir yo‘l transportida qo‘shimcha operatsiyalar uchun vaqt;
Vek - foydalanish tezligi, km soat;
Vkom - tijorat tezligi, mil sutka;
V sut - mazkur liniyada ishlovchi kemadan foydalanish tezligi mil sutka;
α - yuk ko‘tarish mashinasidan foydalanish koeffitsiyenti;
Rt - kemaning yuk ko‘tarish quvvati, t;
M - portda bir sutkadagi o‘rtacha yuk tashish ishlari, t sutka;
To - yuklarni to‘plash, rasmiylashtirish va jo‘natish vaqtlari, sutka.
Here (in English):
t nk - operation start-end time, day, hour;
L - distance covered for transportation, km, miles;
Vnj Vnr - 1 day carriage or ship running on a normal road;
tj dop t dop t rdop - additional in river, sea and railway transport time for operations;
Vek - speed of use, km h;
Vkom - commercial speed, miles per day;
V sut - speed of use of the vessel operating in this line in miles per day;
α - coefficient of use of the forklift;
Rt is the carrying capacity of the ship, t;
M - average daily cargo transportation operations in the port, t day;

To - collection, clearance and shipping times, day.

Conclusion

So, Logistics is the field of transport and goods, which regulates, optimizes and manages the flow of information. Logistics (Greek logistics - the art of calculation, discussion) - 1) a synonym for the concept of mathematical logic; 2) The name of the stage in the development of mathematical logic described in the works of B. Russell and representatives of his school. The "art" of computation and geometric measurements, as opposed to theoretical mathematics, was called Logistics in ancient mathematics. G. V. Leibniz used the terms "logistics" and mathematical logic as synonyms for the calculation he developed. His ideas are hoz. time has found its full expression in mathematical logic. The term "logistics" also refers to the logistic method (the method of expressing formal logic using the theory of formalized languages), the logistics system (formal system), and other meanings. The main goal of logistics is to achieve low costs, high profits and sufficient results. [National Encyclopedia of Uzbekistan UzME. The first volume. Tashkent, 2000].

The practice of transport companies shows that providing additional services gives good results. Manufacturing companies, which have given some of their tasks to transport companies, are now paying attention to ensuring the efficiency of their main activities. The policy of the transport company in the framework of communication includes the goals of conveying information about the offered services to customers and influencing customers to use the services as much as possible. The second goal of this policy is to develop and improve the use of computer technology and electronic data exchange in the interaction between transport and shipping companies.